DESCRIPTION

Diamine derivative, process of preparation thereof, and fungicide comprising diamine derivative as an active ingredient

Technical Field

The present invention relates to a novel diamine derivative, a process of preparation thereof, and a fungicide comprising the diamine derivative as an active ingredient.

Background Art

Disease control has played an important role in the cultivation of crops, and various fungicides have been developed and used. However, said fungicides are not always satisfactory in view of the fungicidal activity or the activity against the disease in useful crops. It is recently known that the resistant phytopathogens has appeared due to the frequent use of agricultural and horticultural fungicides, and certain existing agents do not show sufficient activity against such bacteria. In addition, it has been desired to develop a novel fungicide which is safe from the environmental problems and can control harmful microorganisms in a low concentration of said agents. It has been reported that diamine derivatives which differ from

the compound of the invention is described as being useful as controlling agents against harmful organisms in WO03008372. The diamine derivative as described in WO03008372 exhibits a controlling activity against only rice blast disease, whereas the diamine derivatives of the present invention have a wide spectrum of disease control, and have different chemical structures from the compounds as described in the specification of the above-mentioned publication.

Disclosure of the Invention

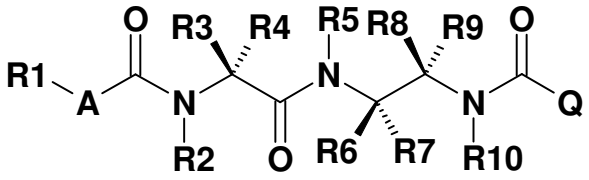
It is an object of the present invention to provide a novel agricultural and horticultural fungicide which exhibits a wide spectrum of disease control against pathogens of various crops, and also solves the resistant phytopathogens problems which have been gradually intensified.

The inventors synthesized various kinds of diamine derivatives, and examined their physiological activities. As a result, they found that the compound of the invention has a wide spectrum of disease control, and possess a very remarkable fungicidal activity, and also do not do harm to useful crops at all, and thus have completed the invention.

The invention relates to the followings:

[1]. A diamine derivative represented by the formula

(1):



(1)

[wherein

R1 is an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an aryl group, a heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties;

R2 and R5 are each independently a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an acyl group, an aryl group, a heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties;

R3 and R4 are each independently a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6

carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an aryl group, a heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or R3 and R4 may be bonded to each other to form a hydrocarbon ring having 3 to 6 carbon atoms;

R6, R7, R8 and R9 are each independently a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, provided that at least one substituent represents an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms;

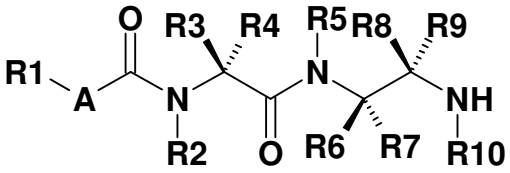
R10 is a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an acyl group;

A is an oxygen atom or a sulfur atom; and

Q is an aryl group or a heterocycle].

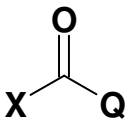
[2]. A fungicide comprising the diamine derivative as described in the above [1] as an active ingredient.

[3]. A process for preparing the diamine derivative as described in [1], comprising reacting a compound represented by the formula (2)



(2)

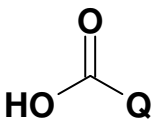
[wherein R1, R2, R3, R4, R5, R6, R7, R8, R9, R10 and A have the same meanings as in [1]] with a compound represented by the formula (3)



(3)

[wherein Q has the same meaning as in [1], and X is a leaving group].

[4]. A process for preparing the diamine derivative as described in [1], comprising reacting the compound represented by the formula (2) with a compound represented by the formula (4)

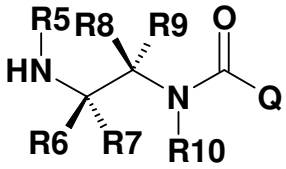


(4)

[wherein Q has the same meaning as in [1]].

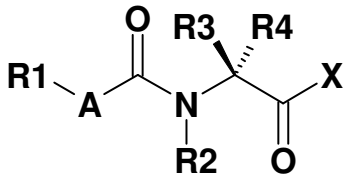
[5]. A process for preparing the diamine derivative as

described in [1], comprising reacting a compound represented by the formula (5)



(5)

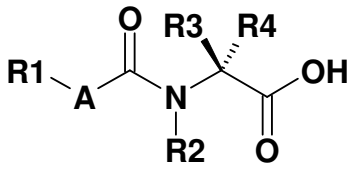
[wherein R5, R6, R7, R8, R9, R10 and Q have the same meanings as in [1]] with a compound represented by the formula (6)



(6)

[wherein R1, R2, R3, R4 and A have the same meanings as in [1], and X is a leaving group].

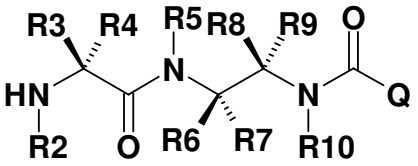
[6]. A process for preparing the diamine derivative as described in [1], comprising reacting the compound represented by the formula (5) with a compound represented by the formula (7)



(7)

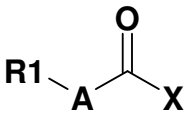
[wherein R1, R2, R3, R4 and A have the same meanings as in [1]].

[7]. A process for preparing the diamine derivative as described in [1], comprising reacting a compound represented by the formula (8)



(8)

[wherein R2, R3, R4, R5, R6, R7, R8, R9, R10 and Q have the same meanings as in [1]] with a compound represented by the formula (9)



(9)

[wherein R1 and A have the same meanings as in [1], and X is a leaving group].

Best Mode for Carrying Out the Invention

The present invention is illustrated in detail as follows.

For the diamine derivative as represented by the formula (1) and the process for the preparation thereof, examples of representative substituents of said derivatives may be mentioned as follows, but not limited thereto. The alkyl group having 1 to 6 carbon atoms includes, for example, a methyl group, an ethyl group, a propyl group, a butyl group, a pentyl group, a hexyl group and the like, each of which may be substituted. The cycloalkyl group having 3 to 6 carbon atoms includes, for example, a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group and the like, each of which may be substituted. The alkenyl

group having 2 to 6 carbon atoms includes, for example, vinyl group, a propenyl group, a butenyl group, a pentenyl group, a hexenyl group and the like, each of which may be substituted. The cycloalkenyl group having 3 to 6 carbon atoms includes, for example, a cyclopropenyl group, a cyclobutenyl group, a cyclopentenyl group, a cyclohexenyl group and the like, each of which may be substituted. The alkynyl group having 2 to 6 carbon atoms includes, for example, an ethynyl group, a propynyl group, a butynyl group, a pentynyl group, a hexynyl group and the like, each of which may be substituted. The aryl group includes, for example, a phenyl group, a naphthyl group and the like, each of which may be substituted. The heterocycle represets a heterocycle having 1 to 15 carbon atoms and at least one selected from a nitrogen atom, an oxygen atom and a sulfur atom, and includes, for example, furan, thiophene, oxazole, pyrrole, 1H-pyrazole, 3H-pyrazole, imidazole, thiazole, oxazole, isoxazole, isothiazole, [1,2,3]oxadiazole, [1,2,4]oxadiazole, [1,3,4] oxadiazole, furazane, [1,2,3]thiadiazole, [1,2,4]thiadiazole, [1,2,5] thiadiazole, [1,3,4]thiadiazole, 1H-[1,2,3]triazole, 2H-[1,2,3]triazole, 1H-[1,2,4]triazole, 2H-[1,2,4]triazole, 1H-tetrazole, 5H-tetrazole, 2,3-dihydro-1H-pyrrole, 2,5-dihydro-1H-pyrrole, 3,4-dihydro-2H-pyrrole, pyrrolidine, 2,3-dihydrofuran, 2,5-dihydrofuran, tetrahydrofuran, 2,3-dihydrothiophene, 2,5-

dihydrothiophene, tetrahydrothiophen, pyrazolidine, pyridine, pyrane, thiopyrane, pyridazine, pyrimidine, pyrazine, [1,2,3]triazine, [1,2,4]triazine, [1,3,5]triazine, 2H-[1,2,3]oxadiazine, 2H-[1,2,4]oxadiazine, 2H-[1,2,5]oxadiazine, 2H-[1,2,6]oxadiazine, 4H-[1,2,3]oxadiazine, 4H-[1,2,4]oxadiazine, 4H-[1,2,5]oxadiazine, 4H-[1,2,6]oxadiazine, 4H-[1,3,4]oxadiazine, 4H-[1,3,5]oxadiazine, 2H-[1,2,3]thiadiazine, 2H-[1,2,4]thiadiazine, 2H-[1,2,5]thiadiazine, 2H-[1,2,6]thiadiazine, 4H-[1,2,3]thiadiazine, 4H-[1,2,4]thiadiazine, 4H-[1,2,5]thiadiazine, 4H-[1,2,6]thiadiazine, 4H-[1,3,4]thiadiazine, 4H-[1,3,5]thiadiazine, 2,3-dihydropyridine, 3,4-dihydropyridine, 1,3-dioxane, 1,4-dioxane, piperidine, 3,4-dihydro-2H-pyran, 3,6-dihydro-2H-pyran, tetrahydropyran, 3,4-dihydro-2H-thiopyran, 3,6-dihydro-2H-thiopyran, tetrahydrothiopyran, morpholine, piperazine, cromane, cromene, isobenzofuran, indolidine, indole, 3H-indole, dihydroindole, isoindole, 1H-indazole, 2H-indazole, purine, quinoline, isoquinoline, 4H-quinolidine, phthalazine, naphthyridine, quinoxaline, quinazoline, cinnoline, carbazole, acridine, phenazine, phenanthroline, phenothiazine, phenoxazine, indoline, isoindoline, benzofuran, dihydrobenzofuran, benzothiophene, benzo[c]thiophene, benzo[c]isothiazole, benzo[c]isoxazole,

dihydrobenzothiophene, benzoxazole, benzoisoxazole, benzimidazole, benzothiazole, benzisothiazole, 1H-benzotriazole, 2H-benzotriazole, benzo[1,4]dioxane, 2,3-dihydrobenzo[1,4]dioxane, benzo[1,3]dioxol, β-carboline, benzo[1,2,5]oxadiazole, benzo[1,2,5]thiadiazole, pteridine, imidazo[1,2-a]pyridine, imidazo[1,2-a]pyridine, pyrazolo[1,5-a]pyrimidine, [1,2,4]triazo[1,5-a]pyrimidine and the like, each of which may be substituted. The acyl group includes, for example, an alkylcarbonyl group such as an acetyl group and the like, and an arylcarbonyl group such as a benzoyl group and the like, each of which may be substituted. The substituents of an alkyl group having 1 to 6 carbon atoms include, for example, an alkyl group such as a methyl group, an ethyl group, a propyl group, a butyl group and the like; a cycloalkyl group such as a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group and the like; a halogen-substituted alkyl group such as a trifluoromethyl group, a difluoromethyl group, a bromodifluoromethyl group, a trifluoroethyl group and the like; an alkoxy group such as a methoxy group, an ethoxy group, a propoxy group, a butoxy group and the like; a halogen-substituted alkoxy group such as a trifluoromethoxy group, a difluoromethoxy group, a trifluoroethoxy group and the like; an alkylthio group such as a methylthio group, an ethylthio group, a propylthio group, a butylthio group and

the like; a halogen-substituted alkylthio group such as a trifluoromethylthio group, a difluoromethylthio group, a trifluoroethylthio group and the like; an alkylsulfinyl group such as a methanesulfinyl group, an ethanesulfinyl group, a propanesulfinyl group, a butanesulfinyl group and the like; a halogen-substituted alkylsulfinyl group such as a trifluormethanesulfinyl group, a difluormethanesulfinyl group, a trifluorethanesulfinyl group and the like; an alkylsulfonyl group such as a methansulfonyl group, an ethanesulfonyl group, a propanesulfonyl group, a butanesulfonyl group and the like; a halogen-substituted alkylsulfonyl group such as a trifluormethanesulfonyl group, a difluoromethanesulfonyl group, a trifluoroethanesulfonyl and the like; an alkylsulfoneamide group such as a methanesulfoneamide group, an ethanesulfoneamide, a propanesulfoneamide, butanesulfoneamide and the like; a halogen-substitued alkylsulfoneamide group such as a trifluoromethanesulfoneamide group, a difluoromethanesulfoneamide group, a trifluoroethanesulfoneamide group and the like; an aminomethyl group such as a methylamino group, a phenylaminomethyl group, an aminomethyl group and the like; an amide group such as an acetylamino group, a benzoylamino group and the like; a halogen atom such as a fluorine atom, a chlorine atom, bromine atom, an iodine atom and the like;

and an acyl group such as an acetyl group, a benzoyl group and the like, provided that the case where the alkyl group having 1 to 6 carbon atoms is substituted by an aryl group or a heterocycle is excluded. The substituents of the cycloalkyl group having 3 to 6 carbon atoms, the alkenyl group having 2 to 6 carbon atoms, the cycloalkeny group having 3 to 6 carbon atoms, the alkynyl group having 2 to 6 carbon atoms, the aryl group, the heterocycle, the arylalkyl group having 1 to 6 carbon atom in the alkyl moiety, or the heteroarylalkyl group having 1 to 6 carbon atom in the alkyl moiety, include, for example, an alkyl group such as a methyl group, an ethyl group, a propyl group, a butyl group and the like; a cycloalkyl group such as a cyclopropyl group, a cyclobutyl group, a cyclopentyl group or a cyclohexyl group and the like; a halogen-substituted alkyl group such as a trifluoromethyl group, a difluoromethyl group,a bromodifluoromethyl group, a trifluoroethyl group and the like; an alkoxy group such as a methoxy group, an ethoxy group, a propoxy group, a butoxy group and the like; a halogen-substituted alkoxy group such as a trifluoromethoxy group, a difluoromethoxy group, a trifluoroethoxy group and the like; an alkylthio group such as a methylthio group, an ethylthio group, a propylthio group, a butylthio group and the like; a halogen-substituted alkylthio group such as a trifluoromethylthio group, a difluoromethylthio group, a

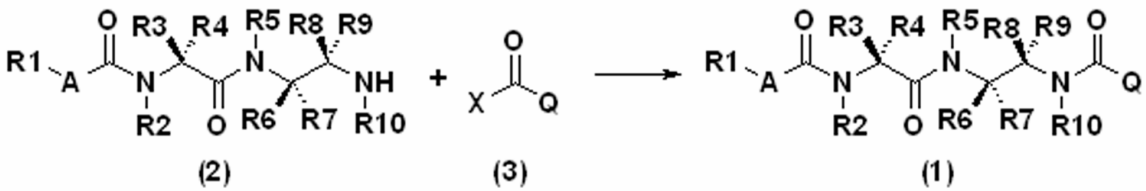
trifluoroethylthio group and the like; an alkylsulfinyl group such as a methanesulfinyl group, ethanesulfinyl group, propanesulfinyl group or butanesulfinyl group and the like; a halogen-substituted alkylsulfinyl group such as a trifluormethanesulfinyl group, a difluormethanesulfinyl group or a trifluorethanesulfinyl group and the like; an alkylsulfonyl group such as a methansulfonyl group, an ethanesulfonyl group, a propanesulfonyl group, a butanesulfonyl group and the like; a halogen-substituted alkylsulfonyl group such as a trifluormethanesulfonyl group, a difluoromethanesulfonyl group or trifluoroethanesulfonyl and the like; an alkylsulfoneamide group such as a methanesulfoneamide group, ethanesulfoneamide, propanesulfoneamide or butanesulfoneamide and the like; a halogen-substitued alkylsulfoneamide group such as a trifluoromethanesulfoneamide group, a difluoromethanesulfoneamide group or a trifluoroethanesulfoneamide group and the like; an aryl group such as a phenyl group or a naphthal group and the like; a heterocycle such as furan, thiophene, oxazole, pyrrole, 1H-pyrazole, 3H-pyrazole, imidazole, thiazole, isoxazole, isothiazole, tetrahydrofuran, pyrazolidine, pyridine, pyrane, pyrimidine, pyridine and the like; an aminomethyl group such as a methylamino group, a phenylaminomethyl group, an aminomethyl group and the like;

an amide group such as an acetylamino group, a benzoylamino group and the like; a halogen atom such as a fluorine atom, a chlorine atom, a bromine atom, an iodine atom and the like; an acyl group such as an acetyl group, a benzoyl group and the like, respectively.

X in the compounds represented by the formulae (3), (6) and (9) is a leaving group such as, for example, a halogen atom, typically such as a chlorine atom, an alkoxy group, typically such as a methoxy group and an ethoxy group, an aryloxy group, typically such as a phenoxy group, an acyloxy group, typically such as an acetyloxy group and a benzoyloxy group, an alkoxycarbonyloxy group, typically such as a methoxycarbonyloxy group, an arylcarbonyloxy group, typically such as a phenylcarbonyloxy group, N-hydroxy succinimide, 1-hydroxybenzotriazole and an imidazole group and the like, respectively.

The compound represented by the formula (1) according to the invention is a novel compound and the compound represented by the formula (1) can be prepared by the method as shown in the Reaction scheme (1):

Reaction scheme (1)



(2) (3) (1)

[wherein, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10 and A have the same meanings as in the formula (2), Q and X have the same meanings as in the formula (3)].

In the reaction scheme (1), the diamine derivative represented by the formula (1) can be prepared by reacting the amine derivative represented by the formula (2) and a salt thereof with a known carbonyl compound represented by the formula (3) with or without a base and a metal reagent such as trialkylaluminum and the like, without a solvent or in a solvent.

Examples of bases used for the reaction as shown in the reaction scheme (1) include alkaline metal hydroxides such as sodium hydroxide, potassium hydroxide and the like; alkaline earth metal hydroxides such as magnesium hydroxide, calcium hydroxide and the like; alkaline metal hydrides such as sodium hydride, potassium hydride and the like; alkaline metal alcoholates such as sodium methoxide, sodium ethoxide and the like; alkaline metal oxides such as sodium oxide and the like; carbonates such as potassium carbonate, sodium carbonate and the like; phosphates such as tripotassium phosphate, trisodium phosphate, dipotassium monohydrogen phosphate, disodium monohydrogen phosphate and the like; acetates such as sodium acetate, potassium acetate and the like; organic bases such as pyridine, 4-(dimethylamino)pyridine, triethylamine, imdazole,

diazabicycloundecene and the like.

The amounts of these bases are not particularly limited, and the bases can be used as a solvent when said organic bases had been used.

When these bases are used, the solvents used in the reaction, include for example water, alcohols such as methanol, ethanol, propanol, butanol and the like; halogenated hydrocarbons such as dichloromethane, chloroform and the like; aromatic hydrocarbons such as benzene, toluene, xylene and the like; aliphatic hydrocarbons such as hexane, heptane and the like; non-protonic polaric solvents such as dimethylformamide(DMF), dimethylacetamide(DMA), dimethylsulfoxide(DMSO), 1,3-dimethyl-2-imiazolidinone(DMI), 1-methyl-2-pyrrolidone(NMP) and the like; ethers such as ethylether, isopropylether, 1,2-dimethoxyethane(DME), tetrahydrofuran(THF), dioxane and the like; nitriles such as acetonitrile, propionitrile and the like.

The metal reagents used in the reaction represented by the reaction scheme (1) include for example halogenated alkylamino magnesium (Bodroux reaction) obtained by a Grignard reagent and alkylamine, aluminum lithium hydride, trimethylaluminum, triethylaluminum and the like. The amounts of these metal reagents used are not particularly limited.

When these metal reagents are used, solvents used in

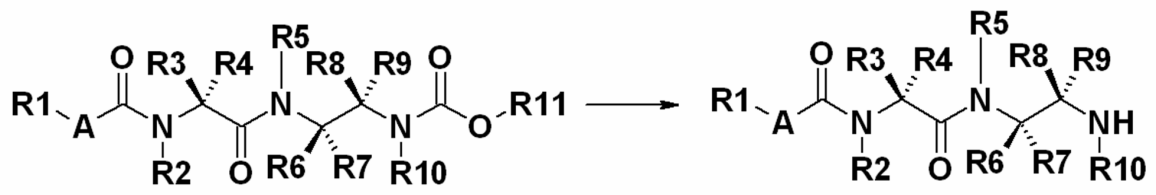
the reaction, include for example halogenated hydrocarbons such as dichloromethane, chloroform and the like; aromatic hydrocarbons such as benzene, toluene, xylene and the like; aliphatic hydrocarbons such as hexane, heptane and the like; ethers such as ethylether, isopropylether, 1,2-dimethoxyethane(DME), tetrahydrofuran(THF), dioxane and the like; and the like.

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature is preferably -78 to 200°C, more preferably -78 to 100°C, and the reaction time is preferably 0.01 to 50 hours, more preferably 0.1 to 15 hours.

The equivalent amounts of the carbonyl compound represented by the formula (3) are preferably 1 to 2 equivalents, more preferably 1 to 1.2 equivalents, based on the amine derivative represented by the formula (2).

The amine derivative compound represented by the formula (2) in the reaction scheme (1) and a salt thereof can be prepared by the method as shown in the reaction scheme (2):

Reaction scheme (2)



(10) (2)

[wherein, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10 and A have the same meanings as in the formula (2), R11 is a t-butyl group or a benzyl group which may be substituted].

In the reaction scheme (2), the diamine derivative represented by the formula (2) can be prepared by reacting the diamine derivative represented by the formula (10) with an acid, or by hydrogenation.

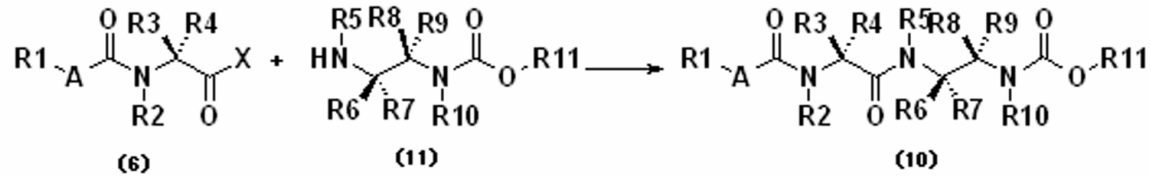
As the acid in this case, hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, acetic acid, trifluoroacetic acid and the like can be used. The amount of these acids is not particularly limited, and can be also used as a solvent.

Hydrogenation can be carried out in a suitable solvent in the presence of a catalyst under hydrogen atmosphere at normal pressure or elevated pressure. The catalyst includes, for example, a palladium catalyst such as palladium-carbon, a nickel catalyst such as Raney-nickel and the like, a cobalt catalyst, a ruthenium catalyst, a rhodium catalyst, a platinum catalyst and the like. The solvent includes, for example, water, alcohols such as methanol, ethanol and the

like; an aromatic hydrocarbon such as benzene, toluene, and the like; branched or cyclic ethers such as ether, dioxane, tetrahydrofuran and the like; ester such as ethyl acetate and the like. The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature may be appropriately selected within the range of -20°C to a reflux temperature of the used solvents, and the reaction time within the range of from several minutes to 96 hours, respectively.

The diamine derivative represented by the formula (10) in the reaction scheme (2) and a salt thereof can be prepared by the method as shown in the reaction scheme (3):

Reaction scheme (3)



[wherein, R1, R2, R3, R4, A and X have the same meanings as in the formula (6), and R5, R6, R7, R8, R9, R10 and R11 have the same meanings as in the formula (10)].

In the reaction scheme (3), the diamine derivative represented by the formula (10) can be prepared by reacting the amine derivative represented by the formula (11) and a salt thereof with a known amino acid derivative represented by the formula (6) with or without a base, and in the presence of a metal reagent such as trialkylaluminum and the

like without a solvent or in a solvent.

As the base in this reaction, the same bases as used in the reaction scheme (1) can be used. The amount of these bases is not particularly limited, and the bases can be used as a solvent when said organic bases had been used.

As the metal reagent in this reaction, the same reagents as used in the reaction scheme (1) can be used. The amounts of these metal reagents are not particularly limited.

As the organic solvent in this reaction, the same solvents as used in the reaction scheme (1) can be used.

The amount of the compound represented by the formula (6) is 1 to 4 equivalents, and preferably 1 to 2 equivalents, based on the amine derivative represented by the formula (11).

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature is -20 to 200°C, and preferably 0 to 100°C, and the reaction time is 0.01 to 50 hours, and preferably 0.1 to 15 hours.

The compound represented by the formula (6) in the reaction scheme (3) can be prepared by a conventional method wherein amino acid derivative represented by the formula (7) is reacted with thionyl chloride, oxalyl chloride, phosgene, phosphorus oxychloride, phosphorus trichloride, phosphorus

pentachloride, thionyl bromide, phoshorus tribromide, diethylaminosulfur trifluoride, 1,1'-carbonylbis-1H-imidazole and the like.

The compound represented by the formula (6) in the reaction scheme (3) can be also prepared by a conventional method wherein amino acid derivative represented by the formula (7) is reacted with alcohols such as methylalcohol, ethylalcohol and the like or phenols such as phenol or nitrophenol and the like.

The compound represented by the formula (6) in the reaction scheme (3) can be prepared by a conventional method wherein amino acid derivative represented by the formula (7) is reacted with chloroformic esters such as methyl chloroformate, phenyl chloroformate and the like.

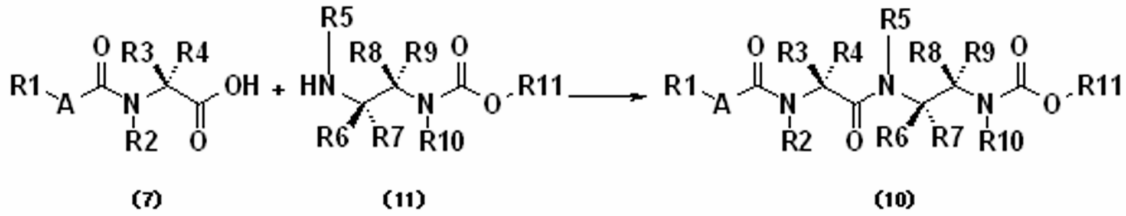
The compound represented by the formula (6) in the reaction scheme (3) can be prepared by a conventional method wherein amino acid derivative represented by the formula (7) is reacted with N-hydroxysuccinimide, 1-hydroxybenzotriazol and the like.

The amine derivative represented by the formula (11) in the reaction scheme (3) and a salt thereof are commercially available and can be easily prepared by a Gabriel method, a Delphine method, a known amine synthesizing method such as reduction of a cyano group, amide, imine, oxime and the like, and the method as described in Tetrahedron Asymmetry, Volume

11, page 1907 (2000).

The diamine derivative compound represented by the formula (10) can be prepared by the method as shown in the reaction scheme (4):

Reaction scheme (4)



[wherein, R1, R2, R3, R4, and A have the same meanings as in the formula (7), and R5, R6, R7, R8, R9, R10 and R11 have the same meanings as in the formula (10)].

In the reaction scheme (4), the amine derivative represented by the formula (10) can be prepared as by reacting the amine derivative represented by the formula (11) and a salt thereof with a known amino acid derivative represented by the formula (7), without a solvent or in a solvent.

As the condensing agent in this reaction, N,N'-dicyclohexylcarbodiimide, 1,1'-carbonylbis-1H-imidazole, 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide·hydrochloride, 2-chloro-1,3-dimethylimidazolium chloride and the like can be used.

The amount of condensing agent is 1 to 3 equivalents, and preferably 1 to 1.5 equivalents, based on the compound

represented by the formula (7).

As the organic solvents in this reaction, the same solvents as used in the reaction scheme (1) can be used.

The amount of carboxylic acid derivative represented by the formula (7) is 1 to 2 equivalents, and preferably 1 to 1.2 equivalents, based on the amine derivative represented by the formula (11).

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature is -20 to 200°C, preferably 0 to 100°C, and the reaction time is 0.01 to 50 hours, preferably 0.1 to 15 hours.

The compound represented by the formula (7) in the reaction scheme (4) can be prepared by a conventional method wherein the corresponding amino acids are reacted with chloroformic esters, carbonates such as O-methyl-O-(p-nitrophenyl)carbonate and the like; and the like.

The compound represented by the formula (3) in the reaction scheme (1) can be prepared by a conventional method in which a known carboxylic acid derivative represented by the formula (4) is reacted with thionyl chloride, oxalyl chloride, phosgene, phosphorus oxychloride, phosphorus trichloride, phosphorus pentachloride,thionyl bromide, phoshorus tribromide, diethylaminosulfur trifluoride, 1,1'-carbonylbis-1H-imidazole and the like.

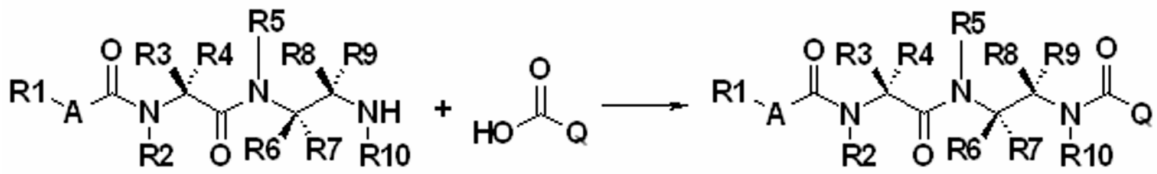
The compound represented by the formula (3) in the reaction scheme (1) can be also prepared by a conventional method wherein a known carboxylic acid derivative represented by the formula (4) is reacted with alcohols such as methylalcohol, ethylalcohol and the like or phenols such as phenol or nitrophenol and the like.

The compound represented by the formula (3) in the reaction scheme (1) can be also prepared by a conventional method wherein a known carboxylic acid derivative represented by the formula (4) is reacted with chloroformic esters such as methyl chloroformate, phenyl chloroformate and the like.

The compound represented by the formula (3) in the reaction scheme (1) can be also prepared by a conventional method wherein a known carboxylic acid derivative represented by the formula (4) is reacted with N-hydroxysuccinimide, 1-hydroxybenzotriazole and the like.

The compound represented by the formula (1) according to the invention can be also prepared by the method as shown in the reaction scheme (5):

Reaction scheme (5)



(2) (4) (1)

[wherein, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10 and A have the same meanings as in the formula (2), and Q has the same meanings as in the formula (3)].

In the reaction scheme (5), the diamine derivative represented by the formula (1) can be prepared by reacting the amine derivative represented by the formula (2) and a salt thereof with a known carboxylic acid derivative represented by the formula (4) without a solvent or in a solvent.

As condensing agents in this reaction, N,N'-dicyclohexylcarbodiimide, 1,1'-carbonylbis-1H-imidazole, 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide·hydrochloride, 2-chloro-1,3-dimethylimidazolium chloride and the like can be used.

The amount of condensing agents are 1 to 3 equivalents, and preferably 1 to 1.5 equivalents, based on the compound represented by the formula (4).

As the organic solvents in this reaction, the same solvents as used in the reaction scheme (1) can be used.

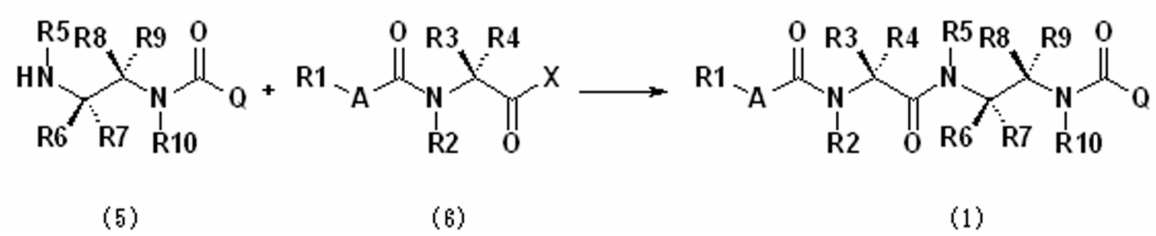
The amount of the carboxylic acid derivative represented by the formula (4) is 1 to 2 equivalents, and preferably 1 to 1.2 equivalents, based on the amine derivative represented by the formula (2).

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally,

the reaction temperature is -20 to 200°C, preferably 0 to 100°C, and the reaction time is 0.01 to 50 hours, preferably 0.1 to 15 hours.

The compound represented by the formula (1) according to the invention can be also prepared by the method as shown in the reaction scheme (6):

Reaction scheme (6)



(5) (6) (1)

[wherein, R5, R6, R7, R8, R9, R10 and Q have the same meanings as in the formula (5) and R1, R2, R3, R4, A and X have the same meanings as in the formula (6)].

In the reaction scheme (6), the diamine derivative represented by the formula (1) can be prepared as by reacting the amine derivative represented by the formula (5) and a salt thereof with the known compound represented by the formula (6) with or without a base in the presence of a metal reagent such as trialkylaluminum and the like without a solvent or in a solvent.

As the base in this reaction, the same bases as used in the reaction scheme (1) can be used. The amount of these bases is not particularly limited. They can be used as a solvent when said organic bases had been used.

As the metal reagent in this reaction, the same reagents as used in the reaction scheme (1) can be used. The amounts of these metal reagents are not particularly limited.

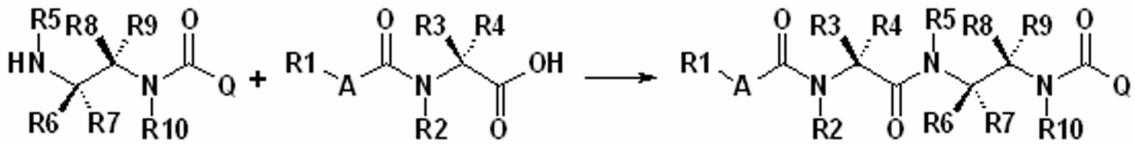
As the organic solvent in this reaction, the same solvents as used in the reaction scheme (1) can be used.

The amount of compound represented by the formula (6) is 1 to 4 equivalents, and preferably 1 to 2 equivalents, based on the amine derivative represented by the formula (5).

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature is -20 to 200°C, preferably 0 to 100°C, and the reaction time is 0.01 to 50 hours, preferably 0.1 to 15 hours.

The compound represented by the formula (1) according to the invention can be also prepared by the method as shown in the reaction scheme (7):

Reaction scheme (7)



(5) (7) (1)

[wherein, R5, R6, R7, R8, R9, R10 and Q have the same meanings as in the formula (5) and R1, R2, R3, R4 and A have the same meanings as in the formula (7)].

In the reaction scheme (7), the diamine derivative represented by the formula (1) can be prepared by reacting the amine derivative represented by the formula (5) and a salt thereof with a known carboxylic acid derivative represented by the formula (7) without a solvent or in a solvent.

As the condensing agent in this reaction, N,N'-dicyclohexylcarbodiimide, 1,1'-carbonylbis-1H-imidazole, 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide·hydrochloride, 2-chloro-1,3-dimethylimidazolium chloride and the like can be used.

The amount of the condensing agent is 1 to 3 equivalents, and preferably 1 to 1.5 equivalents, based on the compound represented by the formula (7).

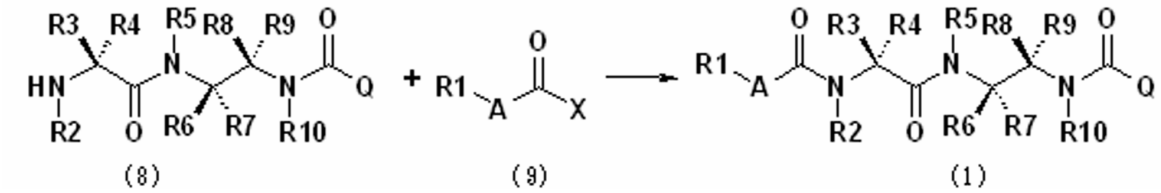
As the organic solvent in this reaction, the same solvents as used in the reaction scheme (1) can be used.

The amount of carboxylic acid derivative represented by the formula (7) is 1 to 2 equivalents, and preferably 1 to 1.2 equivalents, based on the amine derivative represented by the formula (5).

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature is -20 to 200°C, preferably 0 to 100°C, and the reaction time is 0.01 to 50 hours, preferably 0.1 to 15 hours.

The compound represented by the formula (1) according to the invention can be also prepared by the method as shown in the reaction scheme (8):

Reaction scheme (8)



[wherein, R2, R3, R4, R5, R6, R7, R8, R9, R10 and Q have the same meanings as in the formula (8) and R1 and A have the same meanings as in the formula (9)].

In the reaction scheme (8), the diamine derivative represented by the formula (1) can be prepared as by reacting the amine derivative represented by the formula (8) and a salt thereof with the known compounds represented by the formula (9) with or without a base without a solvent or in a solvent.

As the bases in this reaction, the same bases as used in the reaction scheme (1) can be used. The amount of these bases is not particularly limited, and the bases can be used as a solvent when said organic bases had been used.

As the organic solvents in this reaction, the same solvents as used in the reaction scheme (1) can be used.

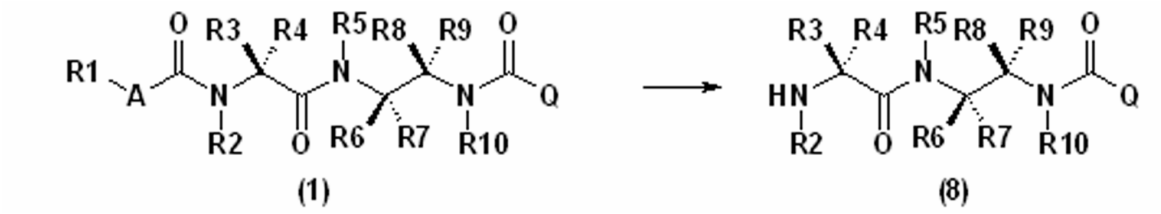
The amount of the compound represented by the formula (9) is 1 to 4 equivalents, and preferably 1 to 2 equivalents,

based on diamine derivative represented by the formula (8).

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature is -20 to 200°C, preferably 0 to 100°C, and the reaction time is 0.01 to 50 hours, preferably 0.1 to 15 hours.

The diamine derivative represented by the formula (8) in the reaction scheme (8) and a salt thereof can be prepared by the method as shown in the reaction scheme (9):

Reaction scheme (9)



[wherein, R2, R3, R4, R5, R6, R7, R8, R9, R10 and Q have the same meanings as in the formula (8), A has the same meaning as in the formula (9), and R1 is a t-butyl group or a benzyl group which may be substituted].

In the reaction scheme (9), the diamine derivative represented by the formula (8) can be prepared by reacting the diamine derivative represented by the formula (1) with acids, or by hydrogenation.

As the acids in this case, hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, acetic acid,trifluoroacetic acid and the like can be used. The

amount of these acids is not particularly limited, and the acids can be also used as a solvent.

As the catalysts in the hydrogenation, the same catalysts as used in the process in the reaction scheme (2) can be used.

As the solvents in the reaction as shown in the reaction scheme (9) the same solvents as used in the process in the reaction scheme (1) can be used.

The reaction temperature and the reaction time of the above-described reaction can be widely varied. Generally, the reaction temperature may be appropriately selected within the range of -20°C to a reflux temperature of the used solvents, and the reaction time within the range of from several minutes to 96 hours, respectively.

The compound represented by the formula (9) in the reaction scheme (8) can be prepared by a conventional method wherein the corresponding alcohols were reacted with phosgenes such as phosgene, triphosgene and the like, and chloroformic esters such as phenylchloroformate and the like; and the like.

The diamine derivative represented by the formula (1) contains asymmetric carbon depending on the kinds of substituents, and may exist as an optical isomer, a diastereoisomer, a racemate or a mixture thereof in any proportions. The invention embraces such isomers and

mixtures thereof in arbitrary proportion.

The term "fungicide" as used herein refers to an agent which combats microorganisms (pathogens) such as bacteria, fungi, viruses and the like, which are pathogens, including for example, industrial fungicides for the asepsis·the control of fungi, agricultural and horticultural fungicides, medical·disinfecting fungicides and the like. The diamine derivatives of the invention have very remarkable control effect as agricultural and horticultural fungicides.

The agricultural and horticultural fungicide comprising the diamine derivative represented by the formula (1) of the invention as an active ingredient refers to an agent which is used to protect crops from the attack of plant pathogens, and can be used against disease on various plants including vegetables, fruit trees, rice, cereals, flowering plants, turf, caused by fungi belonging to Oomycetes, Ascomycetes, Deuteromycetes, Basidiomycetes, Plasmodiophoromycete, and other pathogens. Disease names (pathogen names) are specifically illustrated by the following non-limiting examples. For example, rice blast disease (Pyricularia oryzae), Heliminthosporium blight (Cochliobolus miyabeanus), damping-off (Rhizoctonia solani), Bakanae disease (Gibberella fujikuroi), Seedling damping-off caused by the genus Pythium (Pythium graminicola, etc.), Barley powdery mildew (Erysiphe graminis f.sp.hordei; f.sp.tritici), Leaf

stripe (Pyrenophora graminea), net blotch of barley (Pyrenophora teres), scab (Gibberella zeae), cereal rusts (Puccinia striiformis; P. graminis; P. recondita; P. hordei), snow rot (Typhula sp.; Micronectriella nivalis), smut (Ustilago tritici; U. nuda), eyespot disease (Pseudocercosporella herpotrichoides), scald (Rhynchosporium secalis), Septoria tritici blotch (Septoria tritici),Glum blotch (Leptosphaeria nodorum), snow mold caused by the genus Pythium (Pythium iwayamai, etc.), grape downy mildew (Plasmopara viticola), powdery mildew (Uncinula necator), anthracnose (Elsinoe ampelina), ripe rot (Glomerella cingulata), rust (Phakopsora ampelopsidis), powdery mildew on apple-tree (Podosphaera leucotricha), apple scab (Venturia inaequalis), apple leaf spot (Alternaria mali), Japanese apple rust (Gymnosporangium yamadae), blossom blight (Sclerotinia mali), apple canker (Valsa mali), black spot on pear (Alternaria kikuchiana), pear scab (Venturia nashicola), pear rust (Gymnosporangium haraeanum), rust on western pear (Phytophthora cactorum), brown rot of peach (Sclerotinia cinerea), peach scab (Cladosporium carpophilum), phomopsis leaf blight (Phomopsis sp.), root rot (Phytophthora sp.), anthracnose on persimmon (Gloeosporium kaki), angular leaf spot (Cercospora kaki; Mycosphaerella nawae), downy mildew in cucurbits (Pseudoperonospora cubensis), rot (Phytophthora melonis, Phytophthora

nicotianae, Phytophthora drechsleri), powdery mildew (Sphaerotheca fuliginea), anthracnose (Colletotrichum lagenarium), gummy stem blight (Mycosphaerella melonis), tomato late blight (Phytophthora infestans), seedling damping-off (Pythium vezans, Rhizoctonia solani), early blight (Alternaria solani), leaf mold (Cladosporium fulvam), root rot (Pythium myriotylum, Pythium dissotocum), eggplant powdery mildew (Erysiphe cichoracoarum), late blight (Phytophthora infestans), brown rot (Phytophthora capsici), leaf spot(Alternaria japonica), white spot (Cerocosporella barassicae), clubroot (Plasmodiophora brassicae), downy mildew (Peronospora brassicae), white tip on a stone-leek (Phytophthora porri), leek rust (Puccinia allii), root spot of soybean (Phytophthora megasperma), downy mildew (Peronospora manshurica), purple seed stain (Cercospora kikuchii), anthracdose (Elsinoe glycines), pod and stem blight (Diaporthe phaseololum), bean anthracnose (Colletotrichum lindemuthianum), leaf spot on peanut (Mycosphaerella personatum), leaf spot (Cercospora arachidicola), powdery mildew on pea (Erysiphe pisi), downy mildew (Peronospora pisi), potato late blight (Phytophthora infestans), Early blight lesion on tuber (Alternaria solani), Japanese net blotch on tea (Exobasidium reticulatum), white scab (Elsinoe leucospila), brown spot on tobacco (Alternaria longipes), powdery mildew (Erysiphe cichoracearum),

anthracdose (Colletotrichum tabacum), leaf spot on sugar beet(Cercospora beticola), downy mildew (Peronospora schachtii), rose black spot (Diplocarpon rosae), downy mildew (Peronospora sparsa), root rot (Phytophthora megasperma), powdery mildew (Sphaerotheca pannosa), leaf blotch on Chrysanthemum (Septoria chrysanthemi-indici), white rust (Puccinia horiana), root rot (Phytophthora cactorum), powdery mildew of strawberry (Sphaerotheca humuli), rot (Phytophthora nicotianae), fruit spot(Pythium ultimum), grey-mold rot (Botrytis cinerea) on cucumber, tomato, strawberry, grape and the like, scleorotinum disease (white mold) (Sclerotinia sclerotiorum), brawn patch on turf (Rhizoctonia solani), dollar-spot (Sclerotinia homoeocarpa), curvularia leaf speckle (Curvularia geniculata), rust on grass (Puccinia zoysiae), Helimintohosporium blight (Cochiliobolus sp.), scald (Rhynchosporium secalis) ,rice blast disease (Pyricularia oryzae), root rot (Gaeumannomyces graminis), anthracdose (Colletotrichum graminicola), gray snow mold (Typhula incarnate), black snow mold (Typhula ishikariensis), snow scald (Sclerotinia borealis), fairy ring (Marasmius oreades, etc.) and the genus Pythium (Pythium aphanidermatum, etc.), may be mentioned.

The diamine derivative represented by the formula (1) shows a strong fungicidal activity against a number of the Oomycete class such as pathogens of grape downy mildew

(Plasmopara viticola), downy mildew in cucurbits (Pseudoperonospora cubensis), late blight in potato and tomato (Phytophthora infestans), Pythium disease in tea (Pythium aphanidermatum, etc,) and the like. The present derivative also exhibits a very remarkably good controlling effect against many kinds of the plant blights caused by the pathogenes of the genus Plasmopara, the genus Pseudoperonospora, the genus Peronospora and the genus Pythium, downy mildew, seedling damping-off, Pythium diseases and the like. The present compounds also show a very strong fungicidal activity against rice blast disease pathogen (Pyricularia oryzae), and thus also have a good controlling effect againt rice blast disease.

The active compound represented by the formula (1) has a good compatibility with plants in a concentration of the active compound to be required to control plant pathogens. Therefore, applications by treatment using an agent for the above-ground of plants, by treatment using an agent for the understock and seeds, by soil treatment and the like, can be made.

The compound of the invention, that is, the diamine derivative represented by the formula (1), can be used together with agricultural chemicals such as other fungicides or insecticides, herbicides, plant growth regulating agents and the like, soil-modifying agents or

fertilizer substances, as well as as a combined formulation with other agricultural chemicals.

The compound of the invention may be used as it is, but it is preferred that it is used in a composition form wherein the compound is mixed with a carrier including a solid or liquid diluent. As used herein, the term "carriers" refers to a synthetic or natural, inorganic or organic substance which is combined to aid the active components to reach the site to be treated and to ease the storage, tranfer and handling of the active component compound.

The suitable solid carrier includes, for example, an inorganic substance such as clays, such as montmorillonite, kaolinite and bentonite and the like, diatomaceous earth, white clay, talc, vermiculite, quartz, calcium carbonate, silica gel, ammonium sulfate and the like; vegetable organic substances including soybean powder, saw dust, wheat flour and the like, and urea; and the like.

The suitable liquid carrier includes, for example, aromatic hydrocarbons such as toluene, xylene, cumene and the like; paraffin-based hydrocarbons such as kerosene, mineral oil and the like; halogen-based hydrocarbons such as carbon tetrachloride, chloroform, dichloroethane and the like; ketones such as acetone, methylethylketone and the like; ethers such as dioxane, tetrahydrofuran,

diethyleneglycol dimethylether and the like; alcohols such as methanol, ethanol, propanol, ethyleneglycol and the like; dimethylformamide, dimethylsulfoxide, and water; and the like.

To further increase the effect of the compound according to the invention, the compound may be used alone or in combination with the auxiliary agents as describd below, depending on the purpose, considering the formulation of the preparations and the surface to be applied and the like.

The adjuvants, for the purpose of emulsifying, dispersing, spreading, wetting, binding, stabilization and the like, include, for example, an anionic surfactant such as lignin sulfonate, alkylbenzenesulfonate, alkyl sulfate, polyoxyalkylenealkyl sulfonate, polyoxyalkylene alkyl phosphate and the like; a non-ionic surfactant such as polyoxyalkylenealkyl ether, polyoxyalkylenealkylaryl ether, polyoxyalkylenealkylamine, polyoxyalkylenealkylamide, polyoxyalkylenealkylthioether, polyoxyalkylene aliphatic ester, glycerin fatty acid ester, sorbitan fatty acid ester, polyoxyalkylenesorbitan fatty acid ester, polyoxypropylenepolyoxyethylene block polymer and the like; a lubricant such as calcium stearate, wax and the like; a stabilizer such as isopropyl hydrodiene phosphate and the like; methylcellulose, carboxymethyl cellulose, casein and

arabic gum; and the like. However, the components are not limited to those as mentioned above.

The active components of the compounds according to the invention are generally used in an amount of 0.5 to 20% by weight as powders, 5 to 50% by weight as emulsions, 10 to 90% by weight as wettable powders, 0.1 to 20% by weight as granules, and 10 to 90% by weight as flowable formulations. The carriers for each formulation are generally used in an amount of 60 to 99% by weight as powders, 40 to 95% by weight as emulsions, 10 to 90% by weight as wettable powders, 80 to 99% by weight as granules, and 10 to 90% by weight as flowable formulations. The auxiliary agents are generally used in an amount of 0.1 to 20% by weight as powders, 1 to 20% by weight as emulsions, 0.1 to 20% by weight as wettable powders, 0.1 to 20% by weight as granules, and 0.1 to 20% by weight as flowable formulations.

When the compounds of the invention are used with at least one selected from other fungicides and/or pesticides, the compounds of the invention and at least one selected from other fungicides and/or pesticides may be in the combined composition form, or both the compounds of the invention and at least one selected from other fungicides and/or pesticides are mixed to use simultaneously upon treatment of the agricultural agents.

EXAMPLES

Hereinbelow, the invention will be illustrated with reference to the following Examples and Test Examples.

Example 1

N-[1,1-dimethyl-2-[(4-methylbenzoyl)amino]ethyl][(1-methylethyloxycarbonyl)amino]acetamide [compound No. 14]

To a solution of 2-[(1-methylethyloxycarbonyl)amino]acetic acid (0.24 g, 1.49 mmol) in THF (3 ml) was added 1,1'-carbonylbis-1H-imidazole (0.25 g, 1.54 mmol) at room temperature, and the mixture was stirred for 1 hour. To the reaction solution was added N-(2-amino-2-methyl propyl)4-methylbenzamide (0.25 g, 1.21 mmol) at room temperature, and the mixture was stirred at room temperature for 12 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a saturated aqueous sodium bicarbonate solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered, then the filtrate was concentrated under reduced pressure, and the resulting residue was purified by silica gel column chromatography (n-hexane:ethyl acetate = 1:1) to give 0.29 g of the desired product as a white solid (yield 69%).

Example 2

N-[2-methyl-1-(S)-[[(4-methylbenzoyl)amino]methyl]propyl]2-(S)-[(1,1-dimethylethyloxycarbonyl)amino] valeramide (compound No. 40)

To a solution of 2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]valeric acid (2.54 g, 11.69 mmol) in dichloromethane (50 ml) was added 1,1'-carbonylbis-1H-imidazole (1.90 g, 11.72 mmol) at room temperature and the mixture was stirred for 1 hour. To the reaction solution were added N-[2-(S)-amino-3-methylbutyl] 4-methylbenzamide hydrochloride (2.00 g, 7.79 mmol) and triethylamine (0.87 g, 8.60 mmol) at room temperature and then the mixture was stirred at room temperature for 12 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a saturated aqueous sodium bicarbonate solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 2.86g of the desired product as a white solid (yield 88%).

Example 3

N-[2-methyl-1-(S)-[[(4-

methylbenzoly)amino]methyl]propyl]2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]-2-phenyl acetamide (compound No. 60)

To a solution of 2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]2-phenyl acetamide (2.93 g, 11.66 mmol) in dichloromethane (50 ml) was added 1,1'-carbonhylbis-1H-imidazole (1.90 g, 11.72 mmol) at room temperature and the mixture was stirred for 1 hour. To the reaction solution were added N-[2-(S)-amino-3-methylbutyl] 4-methylbenzamide hydrochloride (2.00 g, 7.79 mmol) and triethylamine (0.87 g, 8.60 mmol) at room temperature and then the mixture was stirred at room temperature for 12 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a saturated aqueous sodium bicarbonate solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 3.06 g of the desired product as a white solid (yield 87%).

Example 4

N-[2-methyl-1-(S)-[[(4-methylbenzoyl)amino]methyl]propyl] 2-(RS)-[(1,1-

dimethylethyloxycarbonyl)amino]-2-(tetrahydrofuran-3-yl)acetamide (Compound No. 69)

To a solution of 2-(RS)-[(1,1-dimethylethyloxycarbonyl)amino]-2-(tetrahydrofuran-3-yl)acetic acid (1.44 g, 5.87 mmol), N-[2-(S)-amino-3-methylbutyl] 4-methylbenzamide hydrochloride (1.26 g, 4.89 mmol), N-hydroxysuccinimide (0.64 g, 6.36 mmol), dicyclohexylcarbodiimide (1.30 g, 6.36 mol) in dichloromethane (50 ml) was added triethylamine (0.59 g, 5.87 mmol) at room temperature and the mixture was stirred at room temperature for 5 hours. The resulting crystal of dicyclohexylurea was removed by filtration, and the filtrate was concentrated under reduced pressure. The resulting residue was purified by silica gel column chromatography (n-hexane:ethyl acetate = 1:1) to give 1.23 g of the desired product as a white solid (yield 56%).

Example 5

N-[2-methyl-1-(S)-[[(4-methylbenzoyl)amino]methyl]propyl] 2-(S)-[(2-methylpropyloxycarbonyl)amino]-4-pentynamide (Compound No. 76)

To a solution of 2-(S)-[(2-methylpropyloxycarbonyl)amino]-4-pentynoic acid (0.50 g, 2.30 mmol) in dichloromethane (10 ml) was added 1,1'-

carbonylbis-1H-imidazole (0.41 g, 2.50 mmol) at room temperature and the mixture was stirred for 2 hours. To the reaction solution were added N-[2-(S)-amino-3-methylbutyl] 4-methylbenzoic acid (0.27 g, 1.10 mmol) and then imidazole (0.22 g, 3.20 mmol), the reaction solution was stirred at room temperature overnight. To the reaction solution was added ethyl acetate. Then, the mixture was washed sequentially with a 5% aqueous citric acid solution, water, a 2 N aqueous sodium hydroxide solution and water and dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.20 g of the desired product as a white solid (yield 43%).

Example 6

N-[2-methyl-1-(S)-[[(2-methylbenzoyl)amino]methyl]propyl] 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyramide (Compound No. 143)

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (0.51 g, 2.49 mmol) in tetrahydrofuran (5 ml) was added 1,1'-carbonylbis-1H-imidazole (0.40 g, 2.49 mmol), and the mixture was stirred at room temperature for 30 minutes. To the reaction solution were added a solution of N-[2-(S)-amino-3-

methylbutyl] 2-methylbenzamide hydrochloride (0.58 g, 2.27 mmol) and triethylamine (0.34 g, 3.41 mmol) in tetrahydrofuran (10 ml) and the mixture was stirred overnight. The solvent was concentrated under reduced pressure and the residue was dissolved in ethyl acetate (20 ml) and washed sequentially with a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution and a saturated saline solution and then dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.55 g of the desired product as a white solid (yield 60%).

Example 7

N-[2-methyl-1-(RS)-[[(4-methylbenzoyl)amino]methyl]propyl] 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyramide (Compound No. 151)

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (0.50 g, 2.46 mmol) in THF (5 ml) was added 1,1'-carbonylbis-1H-imidazole (0.41 g, 2.53 mmol) at room temperature and the mixture was stirred for 1.5 hours. To the reaction solution were added N-[2-(RS)-amino-3-methylbutyl] 4-methylbenzamide hydrochloride (0.64 g, 2.49 mmol) and triethylamine (0.29 g,

2.87 mmol) at room temperature, and the mixture was stirred at room temperature for 12 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 1 N aqueous sodium hydroxide solution and a saturated saline solution and dried over anhydrous magnesium sulfate. The inorganic salt was filtered, then the filtrate was concentrated under reduced pressure, and the resulting residue was purified by silica gel column chromatography (n-hexane:ethyl acetate = 1:1) to give 0.62 g of the desired product as a white solid (yield 62%).

Example 8

N-[1-(S)-[[(2-chlorobenzoyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyramide (Compound No. 196)

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (0.30 g, 1.58 mmol) in dichloromethane (10 ml) was added N-methylmorpholine (0.17 ml,1.58 mmol) at -15°C, and to the mixture was added 2-methylpropyloxycarbonylchloride (0.22 ml, 1.73 mmol) at the same temperature. After stirring for 5 minutes, to the reaction solution were added a solution of N-[2-(S)-amino-3-methylbutyl] 2-chlorobenzamide hydrochloride (0.40 g, 1.44 mmol) and triethylamine (0.29 g,

2.88 mmol) in dichloromethane (5 ml) at the same temperature and the mixture was stirred for 20 minutes and then allowed to a room temperature. The reaction solution was washed with water, a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution and a saturated saline solution and then dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.56 g of the desired product as a white solid (yield 91%).

Example 9

N-[1-(S)-[[(4-chlorobenzoyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(2-methylpropyloxycarbonyl)amino]butyramide (Compound No. 205)

To a solution of N-[2-(S)-amino-3-methylbutyl] 4-chlorobenzamide hydrochloride (0.50 g, 1.80 mmol), 3-methyl-2-(S)-[(2-methylpropyloxycarbonyl)amino]butyric acid (0.59 g, 2.70 mmol), N-hydroxysuccinimide (0.33 g, 2.88 mmol), dicyclohexylcarbodiimide (0.60 g, 2.88 mmol) in dichloromethane (20 ml) was added triethylamine (0.27 g, 2.70 mmol) at room temperature and the mixture was stirred at room temperature overnight. The resulting precipitate of dicyclohexylurea was filtered, and concentrated under reduced pressure, and the resulting residue was purified by

silica gel column chromatography (n-hexane:ethyl acetate = 1:1). The resulting crude product was washed with diisopropyl ether to give 0.36 g of the desired product as a white solid (yield 46%).

Example 10

N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 3-methyl-2-(S)-[(2-methylpropyloxycarbonyl)amino]butyramide (Compound No. 274)

(a) N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 2-(S)-amino-3-methylbutyramide

A solution of N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 276, 0.93 g, 2.05 mmol), 10% palladium on carbon (0.14 g, 15% by weight), concentrated hydrochloric acid (3 ml) in methanol (50 ml) was stirred under hydrogen atmosphere at 40°C for 5 hours. The reactor was purged with nitrogen and the catalyst was removed by Celite filtration. The filtrate was concentrated under reduced pressure, and the resulting residue was dissolved in a 2 N hydrochloric acid solution and washed with dichloromethane. The aqueous layer was adjusted to pH12 with sodium hydroxide and then extracted with dichloromethane. The organic layer was washed with a 2 N aqueous sodium hydroxide solution and then dried over

anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure to give 0.67 g of the desired product as a yellow oily substance (yield 87%).

(b) N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 3-methyl-2-(S)-[(2-methylpropyloxycarbonyl)amino]butyramide (Compound No. 274)

To a solution of N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 2-(S)-amino-3-methylbutyramide (0.27 g, 0.76 mmol) and triethylamine (0.09 g, 0.91 mmol) in dichloromethane (30 ml) was added dropwise 2-methylpropyloxycarbonylchloride (0.12 g, 0.84 mmol) under ice-cooling, and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure. The resulting crude product was washed with n-hexane and diisopropyl ether to give 0.08 g of the desired product as a white solid (yield 25%).

Example 11

N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 2-(S)-

[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 276)

(a) N-[3-methyl-2-(R)-[(1,1-dimethylethyloxycarbonyl)amino]butyl]2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide

To a solution of 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyric acid (4.66 g, 18.54 mmol) in dichloromethane (100 ml) was added 1,1'-carbonylbis-1H-imidazole (3.01 g, 18.54 mmol) at room temperature and the mixture was stirred for 1 hour. To the reaction solution was added 1,1-dimethylethyl N-[1-(R)-(aminomethyl)-2-methylpropyl]carbamate (2.50 g, 12.36 mmol) at room temperature and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 2.51 g of the desired product as a white solid (yield 47%).

(b) N-[2-(R)-amino-3-methylbutyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide

To a solution of N-[3-methyl-2-(R)-[(1,1-

dimethylethyloxycarbonyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (2.50 g, 5.74 mmol) in ethyl acetate (30 ml) was added a 4 N hydrochloric acid ethyl acetate solution (30 ml) at room temperature and the mixture was stirred for 5 hours. The reaction solution was extracted with water, and aqueous layer was washed with ethyl acetate. An aqueous layer was adjusted to pH 12 with sodium hydroxide and extracted with dichloromethane. The organic layer was washed with a 2 N aqueous sodium hydroxide solution and dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure to give 1.83 g of the desired product as a yellow solid (yield 86%).

(c) N-[3-methyl-2-(R)-[(4-methylbenzoyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 276)

To a solution of N-[2-(R)-amino-3-methylbutyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (1.80 g, 5.37 mmol) and triethylamine (0.61 g, 5.91 mmol) in dichloromethane (50 ml) was added dropwise a solution of 4-methylbenzoylchloride (0.91 g, 5.91 mmol) in dichloromethane (10 ml) under ice-cooling. The reaction solution was stirred at room temperature for 2 hours and then washed with water. The organic layer was dried over saturated magnesium sulfate and then inorganic salt was removed by filtration,

and the filtrate was concentrated under reduced pressure and the resulting crude product was crystallized from n-hexane to give 1.16 g of the desired product as a white solid (yield 48%).

Example 12

N-[3-methyl-2-(S)-[(4-methylbenzoyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 281)

(a) N-[3-methyl-2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]butyl]2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide

To a solution of 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyric acid (4.51 g, 17.94 mmol) in dichloromethane (100 ml) was added 1,1'-carbonylbis-1H-imidazole (2.91 g, 17.94 mmol) at room temperature, and the mixture was stirred for 1 hour. To the reaction solution was added 1,1-dimethylethyl N-[1-(S)-(aminomethyl)-2-methylpropyl]carbamate (2.42 g, 11.96 mmol) at room temperature, and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the

filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 2.96 g of the desired product as a white solid (yield 57%).

(b) N-[2-(S)-amino-3-methylbutyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide

To a solution of N-[3-methyl-2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (2.73 g, 6.27 mmol) in ethyl acetate (30 ml) was added 4 N hydrochloric acid ethyl acetate (30 ml) at room temperature, and the mixture was stirred for 5 hours. The reaction solution was extracted with water and the aqueous layer was washed with ethyl acetate. The aqueous layer was adjusted to pH12 with sodium hydroxide, and then extracted with dichloromethane. The organic layer was washed with a 2 N aqueous sodium hydroxide solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure to give 1.89g of the desired product as a light yellow solid (yield 90%).

(c) N-[3-methyl-2-(S)-[(4-methylbenzoyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 281)

To a solution of 4-methylbenzoic acid (1.00 g, 7.33 mmol) in dichloromethane (50 ml) was added 1,1'-carbonylbis-

1H-imidazole (1.19 g, 7.33 mmol) at room temperature, and the mixture was stirred for 2 hours. To the reaction solution was added N-[2-(S)-amino-3-methylbutyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (1.89 g, 5.64 mmol), and the reaction solution was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 1.25 g of the desired product as a white solid (yield 44%).

Example 13

N-[2-(S)-methyl-1-(S)-[[(4-methylbenzoyl)amino]methyl]butyl] 3-methyl-2-(S)-[(methyloxycarbonyl)amino]butyramide (Compound No. 306)

To a solution of N-[2-(S)-methyl-1-(S)-[[(4-methylbenzoyl)amino]methyl]butyl] 2-(S)-amino-3-methylbutyramide hydrochloride (0.50 g, 1.35 mmol) in dichloromethane (10 ml)was added methyloxycarbonylchloride (0.15 g, 1.59 mmol) and triethylamine (0.36 g, 3.56 mmol) at room temperature, and the mixture was stirred at room

temperature for 12 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 1 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.35 g of the desired product as a white solid (yield 66%).

Example 14

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]propionamide (Compound No. 601)

To a solution of 2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]propionic acid (0.46 g, 2.44 mmol) in dichloromethane (20 ml) was added 1,1'-carbonylbis-1H-imidazole (0.40 g, 2.44 mmol), and the mixture was stirred at room temperature for 30 minutes. To the reaction solution was added N-[2-(S)-amino-3-methylbutyl]benzofuran-2-carboxamide (0.50 g, 2.02 mmol) was stirred overnight. The solvent was concentrated under reduced pressure, and the resulting residue was dissolved in ethyl acetate (20 ml), washed sequentially with a 5% aqueous citric acid solution,

a saturated aqueous sodium bicarbonate solution, water and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.59 g of the desired product as a white solid (yield 70%).

Example 15

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 2-(S)-[(1-methylethyloxycarbonyl)amino]propionamide (Compound No. 599)

(a) N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl 2-(S)-aminopropionamide

To a solution of N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]propionamide (Compound No. 12, 1.71 g, 4.10 mmol) in ethyl acetate (5 ml) was added a 4 N hydrochloric acid/ethyl acetate solution (11 ml) at room temperature, and the mixture was stirred overnight. The reaction solution was extracted with water and the resulting aqueous layer was washed with ethyl acetate. The aqueous layer was adjusted to pH12 with sodium hydroxide and extracted with dichloromethane and then the resulting organic layer was dried over anhydrous magnesium sulfate.

The inorganic salt was filtrated, and the filtrate was concentrated under reduced pressure to give 1.24 g of the desired product as a white solid (yield 95%).

(b) N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 2-(S)-[(1-methylethyloxycarbonyl)amino]propionamide (Compound No. 599)

To a solution of N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl 2-(S)-aminopropionamide (0.23 g, 0.72 mmol) in dichloromethane (5 ml) was added 1-methylethyloxycarbonylchloride (0.10 g, 0.79 mmol). To the reaction solution was added dropwise a solution of triethylamine (0.08 g, 0.79 mmol) in dichloromethane (1 ml), and the mixture was stirred at room temperature for 2 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution and water and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure. The resulting crude product was purified by silica gel column chromatography (n-hexane:ethyl acetate = 1:1) to give 0.28g of the desired product as a white solid (yield 96%).

Example 16

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 2-[(1,1-dimethylethyloxycarbonyl)amino]-2-

methylpropionamide (Compound No. 605)

To a solution of 2-[(1,1-dimethylethyloxycarbonyl)amino]-2-methylpropionic acid (2.80 g, 13.78 mmol), N-[2-(S)-amino-3-methylbutyl]benzofuran-2-carboxamide (2.26 g, 9.18 mmol) and N-hydroxysuccinimide (1.69 g, 14.69 mmol) in dichloromethane (50 ml)was added dicyclohexylcarbodiimide (DCC: 3.03 g, 14.69 mmol) and triethylamine (1.39 g, 13.78 mmol). The mixture was stirred overnight. The resulting crystal of dicyclohexylurea was removed by filtration and then the filtrate was washed sequentially with a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution and water and dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure. The resulting crude product was purified by silica gel column chromatography (n-hexane:ethyl acetate = 1:1) to give 3.39 g of the desired product as a white solid (yield 86%).

Example 17

N-[2-(RS)-[[(benzofuran-2-carbonyl)amino]-1-methyl]ethyl] [3-methyl-2-(S)-[N-(1,1-dimethylethyloxycarbonyl)amino]]butyramide (Compound No. 652)

To a solution of 3-methyl-2-(S)-[(1,1-

dimethylethyloxycarbonyl)amino]butyric acid (0.55 g, 2.55 mmol) in dichloromethane (50 ml) was added 1,1'-carbonylbis-1H-imidazole (0.41 g, 2.55 mmol), and the mixture was stirred at room temperature for 1 hour. To the reaction solution was added N-[2-(RS)-aminopropyl]benzofuran-2-carboxamide hydrochloride (0.50 g, 1.96 mmol), imidazole (0.44 g, 6.47 mmol), and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a saturated aqueous sodium bicarbonate solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure. The resulting crude product was washed with a mixed solution of diisopropyl ether and n-hexane to give 0.60 g of the desired product as a white crystal (yield 73%).

Example 18

N-[3-methyl-2-(S)-[(benzofuran-2-carbonyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 678)

To a solution of benzofuran-2-carboxylic acid (1.73 g, 10.68 mmol) in dichloromethane (50 ml) was added 1,1'-carbonylbis-1H-imidazole (1.76 g, 10.68 mmol) at room

temperature, and the mixture was stirred at room temperature for 1 hour. To the reaction solution was added N-[2-(S)-amino-3-methylbutyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (3.41 g, 10.17 mmol), and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure. The resulting crude product was washed with a mixed solution of diisopropyl ether and n-hexane to give 3.60 g of the desired product as a light yellow crystal (yield 74%).

Example 19

N-[[2-(S)-[(benzofuran-2-carbonyl)amino]-3-methyl]butyl][2-(S)-[(1-methylethyloxycarbonyl)amino]-3-methyl]butyramide (Compound No. 675)

(a) N-[3-methyl-2-(S)-[(benzofuran-2-carbonyl)amino]butyl] 2-(S)-amino-3-methylbutyramide

A solution of N-[3-methyl-2-(S)-[(benzofuran-2-carbonyl)amino]butyl] 2-(S)-[(benzyloxycarbonyl)amino]-3-methylbutyramide (Compound No. 86, 3.40 g, 7.09 mmol), 10% palladium on carbon (0.51 g, 15% by weight) and concentrated

hydrochloric acid (3 ml) in methanol (50 ml) was stirred under hydrogen atmosphere at 40°C for 5 hours. The reactor was purged with nitrogen and then the catalyst was removed by Celite filtration. The filtrate was concentrated under reduced pressure and the resulting residue was dissolved in a 2 N hydrochloric acid solution, and washed with dichloromethane. An aqueous layer was adjusted to pH 12 with sodium hydroxide and extracted with dichloromethane. The organic layer was washed with a 2 N aqueous sodium hydroxide solution and dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure to give 1.82 g of the desired product as a white solid (yield 74%).

(b) N-[[2-(S)-[(benzofuran-2-carbonyl)amino]-3-methyl]butyl][2-(S)-[(1-methylethyloxycarbonyl)amino]-3-methyl]butyramide (Compound No. 675)

To a solution of N-[3-methyl-2-(S)-[(benzofuran-2-carbonyl)amino]butyl] 2-(S)-amino-3-methylbutyramide (0.80 g, 2.32 mmol) and triethylamine (0.26 g, 2.55 mmol) in dichloromethane (50 ml) was added 1-methylethyloxycarbonylchloride (0.31 g, 2.55 mmol) under ice-cooling and the mixture was stirred at room temperature for 2 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a

saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.58g of the desired product as a white crystal (yield 58%).

Example 20

N-[1-(S)-[[(quinoline-2-carbonyl)amino]methyl]-2-(S)-methylbutyl] 2-(S)-(methyloxycarbonylamino)-3-methylbutyramide (Compound No. 698)

To a solution of 3-methyl-2-[(methyloxycarbonyl)amino]butyric acid (0.30 g, 1.71 mmol), N-[2-(S)-amino-3-methylpenthyl] quinoline-2-carboxamide (0.46 g, 1.70 mmol) in dichloromethane (10 ml) was added 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride (EDC: 0.33 g, 1.72 mmol) at room temperature, and the mixture was stirred for 5 hours and then allowed to stand overnight. The reaction solution was washed with water and then the organic layer was dried over anhydrous sodium sulfate. The inorganic salt was separated by filtration and then concentrated under reduced pressure, and the resulting crude product was washed with diisopropyl ether to give 0.51 g of the desired product as a white solid (yield 70%).

Example 21

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2,2-dimethylpropyl] [3-methyl-2-(S)-[N-(ethyloxycarbonyl)amino]]butyramide (Compound No. 714)

To a solution of 3-methyl-2-(S)-[(ethyloxycarbonyl)amino]butyric acid (0.47 g, 2.50 mmol) in dichloromethane (50 ml) was added 1,1'-carbonylbis-1H-imidazole (0.38 g, 2.50 mmol) at room temperature and the mixture was stirred for 1 hour. To the reaction solution was added N-[2-(S)-amino-3-3,3-dimethylbutyl]benzofuran-2-carboxamide (0.50 g, 1.92 mmol) and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.74 g of the desired product as a white crystal (yield 89%).

Example 22

N-[2-methyl-1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]propyl] [3-methyl-2-(S)-[N-(ethyloxycarbonyl)amino]]butyramide (Compound No. 772)

To a solution of 3-methyl-2-(S)-[(ethyloxycarbonyl)amino]butyric acid (0.40 g, 2.11 mmol) in dichloromethane (50 ml) was added 1,1'-carbonylbis-1H-imidazole (0.32 g, 1.94 mmol), and the mixture was stirred at room temperature for 2 hours. To the reaction solution was added N-[2-(S)-amino-3-methylbutyl]benzofuran-2-carboxamide (0.40 g, 1.62 mmol), and the mixture was stirred at room temperature for 5 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated saline solution, a 2 N aqueous sodium hydroxide solution and a saturated saline solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.33 g of the desired product as a white crystal (yield 49%).

Example 23

N-[2-methyl-1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]propyl][3-methyl-2-(S)-[N-(1-methylethyloxycarbonyl)amino]]butyramide (Compound No. 775)

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (0.39 g, 1.92 mmol), N-[2-(S)-amino-3-methylbutyl]benzofuran-2-carboxamide hydrochloride (0.50 g, 1.77 mmol), N-hydroxysuccinimide

(0.21 g, 2.12 mmol) and dicyclohexylcarbodiimide (0.44 g, 2.12 mmol) in dichloromethane (50 ml) was added triethylamine (0.35 g, 3.54 mmol) at room temperature and the mixture was stirred at room temperature overnight. The resulting precipitation of dicyclohexylurea was filtrated, and the filtrate was concentrated under reduced pressure. The resulting residue was purified by silica gel column chromatography (n-hexane:ethyl acetate = 4:1). The resulting crude product was washed with diisopropyl ether to give 0.38 g of the desired product as a white crystal (yield 50%).

Example 24

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(vinyloxycarbonyl)amino]butyramide (Compound No. 782)

(a) N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl [3-methyl-2-(S)-amino]butyramide

To a solution of N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]butyramide (19.53 g, 43.83 mmol) in ethyl acetate (100 ml) was added a 4 N hydrochloric acid/ethyl acetate solution (117 ml) at room temperature, and the mixture was stirred overnight. The reaction solution was extracted with water and the aqueous layer was

washed with ethyl acetate. The aqueous layer was adjusted to pH12 with sodium hydroxide, and extracted with dichloromethane, and dried over anhydrous magnesium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure to give 12.63 g of the desired product as a white solid (yield 83%).

(b) N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(vinyloxycarbonyl)amino]butyramide (Compound No. 782)

To a solution of N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl [3-methyl-2-(S)-amino]butyramide (0.46 g, 1.34 mmol) in dichloromethane (10 ml) was added triethylamine (0.41 g, 4.02 mmol). To the reaction solution was added dropwise a solution of vinyloxycarbonylchloride (0.17 g, 1.61 mmol) in dichloromethane (10 ml) under ice-cooling, and the mixture was stirred at room temperature for 2 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution and water and dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.46g of the desired product as a white solid (yield 83%).

Example 25

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[[(tetrahydrofuran-2-methyl)oxycarbonyl]amino]butyramide (Compound No. 786)

To a solution of N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl 3-methyl-2-(S)-aminobutyramide (0.46 g, 1.34 mmol) in dichloromethane (10 ml) was added dropwise a solution of O-[tetrahydrofuran-2-methyl] O-[4-nitrophenyl]carbonate (0.43 g, 1.61 mmol) in dichloromethane (10 ml) under ice-cooling, and the mixture was stirred at room temperature for 5 days. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution and water and dried over anhydrous sodium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.52 g of the desired product as a white solid (yield 82%).

Example 26

N-[1-(S)-[[(benzofuran-2-carbonyl)amino]methyl]-2-methylpropyl] [3-methyl-2-(S)-(ethylthiocarbonylamino)]butyramide (Compound No. 793)

To a solution of N-[1-(S)-[(benzoxazol-2-yl)carbonylaminomethyl]-2-methylpropyl] 3-methyl-2-(S)-

aminobutyramide hydrochloride (0.30 g, 0.79 mmol), ethylthiocarbonylchloride (0.10 g, 0.80 mmol) in dichloromethane (15 ml) was added a solution of triethylamine (0.24 g, 2.37 mmol) in dichloromethane (5 ml) at 5°C, and the mixture was stirred at room temperature for 5 hours and allowed to stand overnight. To the reaction solution was added ethyl acetate, and the mixture was washed with water and dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.21 g of the desired product as a white solid (yield 60%).

Example 27

N-[2-methyl-1-(S)-[[[(1,4-benzodioxane)-2-(RS)-carbonyl]amino]methyl]propyl] [3-methyl-2-(S)-[N-(1-methylethyloxycarbonyl)amino]]butyramide (Compound No. 899)

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (0.37 g, 1.83 mmol), N-[2-(S)-amino-3-methylbutyl] 1,3-benzodioxane-2-(RS)-carboxamide hydrochloride (0.50 g, 1.66 mmol), N-hydroxysuccinimide (0.20 g, 1.99 mmol) and dicyclohexylcarbodiimide (0.41 g, 1.99 mmol) in dichloromethane (50 ml) was added triethylamine (0.33 g, 3.32 mmol) at room temperature, and the mixture was stirred

at room temperature overnight. The resulting precipitate of dicyclohexylurea was filtered, and the filtrate was concentrated under reduced pressure. The resulting residue was purified by silica gel column chromatography (n-hexane:ethyl acetate = 4:1). The resulting crude product was washed with diisopropyl ether to give 0.71g of the desired product as white semi-solid (yield 95%).

Example 28

N-[1-(S)-[(benzoxadiazol-4-yl)carbonylaminomethyl]-2-methylpropyl] 3-methyl-2-(S)-[(1-methylethyl)oxycarbonylamino]butyramide (Compound No. 929)

(a) N-[2-(S)-(2,2-dimethylethyloxycarbonyl)amino-3-methyl]butyl phthalimide

To solution of 1,1-dimethylethyl N-[(1-hydroxymethyl-2-methyl)propyl]carbamate (30.00 g, 147.58 mmol), phthalimide (21.72 g, 147.58 mmol) and triphenylphosphine (42.36 g, 162.34 mmol) in tetrahydrofuran (300 ml) was added dropwise a solution of diethyl azodicarboxylate (DEAD) (28.32 g, 162.34 mmol) in tetrahydrofuran (50 ml) under ice-cooling. The temperature of the reaction solution was slowly elevated, and the mixture was stirred at room temperature for 5 hours. The reaction solution was concentrated under reduced pressure to give 45.91 g of a white solid. The obtained white solid was purified by silica gel column chromatography

to give 34.40 g of the desired product as a white crystal (yield 70%).

(b) N-[2-(S)-amino-3-methyl]butyl phthalimidehydrochloride

To a suspension of N-[2-(S)-(2,2-dimethylethyloxycarbonyl)amino-3-methyl]butyl phthalimide (23.05 g, 69.34 mmol) in ethyl acetate (50 ml) was added a 4 N hydrochloric acid/ethyl acetate solution (150 ml, 600 mmol as hydrochloric acid) at room temperature, and the mixture was stirred at room temperature for 5 hours. The precipitated white crystal was collected by filtration, and the obtained crystal was washed with ethyl acetate (100 ml). The resulting crystal was dried under reduced pressure to give 16.74 g of the desired product as a white crystal.

(c) N-[2-methyl-1-(S)-[(phthalimide-1-yl)methyl]propyl [3-methyl-2-(S)-[N-(1-methylethyloxycarbonyl)amino]]butyramide

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (17.06 g, 83.95 mmol) in dichloromethane (350 ml) was added 1,1'-carbonylbis-1H-imidazole (11.62 g, 83.95 mmol) at room temperature, and the mixture was stirred at room temperature for 2 hours. To the reaction solution were added N-[2-(S)-amino-3-methyl]butyl phthalimidehydrochloride (15.00 g, 64.58 mmol) and imidazole (14.42 g, 213.11 mmol) at room

temperature and the mixture was stirred at room temperature for 7 hours. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, water and a saturated aqueous bicarbonate solution and then dried over anhydrous magnesium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting white crystal was washed with diisopropyl ether to give 18.67 g of the desired product as a white crystal (yield 69%, melting point 240.9°C).

(d) N-[1-(S)-aminomethyl-2-methylpropyl] 3-methyl-2-(S)-[(1-methylethyl)oxycarbonylamino]butyramide

To a solution of N-[2-methyl-1-(S)-[(phthalimide-1-yl)methyl]propyl [3-methyl-2-(S)-[N-(1-methylethyloxycarbonyl)amino]]butyramide (10.00 g, 23.95 mmol) in ethanol (250 ml) was added hydrazine monohydrate (2.52 g, 50.30 mmol) at room temperature, and the mixture was stirred under heating and reflux for 5 hours. The reaction solution was returned to room temperature, and the precipitated crystal was removed by filtration and washed with ethanol. The washed filtrate was concentrated under reduced pressure, and the resulting residue was dissolved in dichloromethane and washed with a 2 N aqueous sodium hydroxide solution. The insoluble white precipitate was removed by Celite filtration. It was extracted with a 5%

aqueous citric acid solution and the extract was washed with dichloromethane. The pH of the aqueous layer was adjusted to 12 or higher with a 2 N aqueous sodium hydroxide solution under ice-cooling and then the aqueous layer was extracted with dichloromethane. The organic layer was washed with a 2 N aqueous sodium hydroxide solution and dried over anhydrous magnesium sulfate. The inorganic salt was filtrated, and the filtrate was concentrated under reduced pressure to give 5.88 g of the desired product as a white crystal (yield 85%, melting point 106.3 °C).

(e) N-[1-(S)-[(benzoxadiazol-4-yl)carbonylaminomethyl]-2-methylpropyl]3-methyl-2-(S)-[(1-methylethyl)oxycarbonylamino]butyramide (Compound No. 929)

To a solution of N-[1-(S)-aminomethyl-2-methylpropyl] 3-methyl-2-(S)-[(1-methylethyl)oxycarbonylamino]butyramide (0.50 g, 1.99 mmol) and triethylamine (0.26 g, 2.57 mmol) in dichloromethane (10 ml) was added a solution of benzoxadiazole-4-carbonylchloride (0.37 g, 2.03 mmol) in dichloromethane (10 ml) at 5°C. The mixture was returned to room temperature, stirred for 5 hours and then allowed to stand overnight. To the reaction solution was added ethyl acetate, and the mixture was washed with water and dried over anhydrous sodium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure, and the resulting crude product was washed with

diisopropyl ether to give 0.60 g of the desired product as a white solid (yield 88%).

Example 29

N-[1-(S)-[[(6-chloropyridine-2-carbonyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyramide (Compound No. 953)

To a solution of 3-methyl-2-(S)-[(1-methylethyloxycarbonyl)amino]butyric acid (0.20 g, 0.99 mmol) in dichloromethane (5 ml) was added 1,1'-carbonylbis-1H-imidazole (0.16 g, 0.99 mmol), and the mixture was stirred at room temperature for 30 minutes. To the reaction solution was added N-[2-(S)-amino-3-methylbutyl] 6-chloropyridine-2-carboxamide (0.20 g, 0.83 mmol), and the mixture was stirred overnight. The solvent was concentrated under reduced pressure, and the resulting residue was dissolved in ethyl acetate (20 ml), washed sequentially with a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution, water and a saturated saline solution and then dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.20 g of the desired product as a white solid (yield 56%).

Example 30

N-[1-(S)-[[(thiophene-2-carbonyl)amino]methyl]-2-methylpropyl] 3-methyl-2-(S)-[(2-methylpropyloxycarbonyl)amino]butyramide (Compound No. 1020)

To a solution of 3-methyl-2-(S)-[(2-methylpropyloxycarbonyl)amino]butyric acid (0.52 g, 2.42 mmol) in dichloromethane (10 ml) was added N-methylmorpholine (0.27 ml, 2.42 mmol) at -15°C. To the mixture was added dropwise 2-methylpropyloxycarbonylchloride (0.33 ml, 2.58 mmol) and then the mixture was stirred at -15°C for 5 minutes. To the reaction solution was added a solution of N-[2-(S)-amino-3-methylbutyl] thiophene-2-carboxamide hydrochloride (0.40 g, 1.61 mmol) and triethylamine (0.33 g, 3.22 mmol) in dichloromethane (5 ml) at -15°C and stirred for 20 minutes. The reaction solution was concentrated under reduced pressure, and the resulting residue was dissolved in ethyl acetate (20 ml), washed sequentially with water, a 5% aqueous citric acid solution, a saturated aqueous sodium bicarbonate solution, and a saturated saline solution and then dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was washed with diisopropyl ether to give 0.54 g of the desired product as a white solid (yield 82%).

Hereinbelow, the preparation methods of the intermediates are illustrated with reference to the following Reference Examples.

Reference Example 1

1,1-dimethylethyl N-[1-(S)-(aminomethyl)-2-methylpropyl]carbamate

To a solution of 1,1-dimethylethyl N-[1-(S)-(hydroxymethyl)-2-methylpropyl]carbamate (25.00 g, 122.98 mmol) in tetrahydrofuran (250 ml) was added phthalimide (18.10 g, 123.02 mmol) and triphenylphosphine (35.50 g, 135.35 mmol) and the mixture was stirred under ice-cooling. Then, to the mixture was added dropwise a solution of diethyl azodicarboxylate (23.60 g, 135.51 mmol) in tetrahydrofuran (10 ml). The mixture was stirred under ice-cooling for 1 hour, and further stirred at room temperature for 4 hours. The solvent was concentrated under reduced pressure and then dried. To the resulting white solid of the resulting N-[2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]-3-methylbutyl]phthalimide was added ethanol (500 ml) and pyrazine monohydrate (13.1 g, 261.69 mmol) and the mixture was refluxed at 100°C for 2 hours. The precipitated white crystal of phthaloylhydrazide was removed by filtration and the reaction solution was allowed to stand overnight. The precipitated

phthaloylhydrazide was further removed by filtration. The solvent was concentrated under reduced pressure and then dried. To the residue was added dichloromethane (500 ml), and the mixture was washed with a 2 N aqueous sodium hydroxide solution (500 ml). The organic layer was extracted with a 5% aqueous citric acid solution (500 ml) and the aqueous layer was washed with dichloromethane (500 ml). The pH of the aqueous layer was adjusted to 12 using sodium hydroxide (10.40 g), extracted with dichloromethane (500 ml), washed with a 2 N aqueous sodium hydroxide solution (500 ml) and then dried over anhydrous sodium sulfate. The inorganic salt was filtered and the filtrate was concentrated under reduced pressure to give 21.95 g of the desired product as a white solid (yield 88%).

Reference Example 2

N-[3-methyl-2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]butyl] 4-cyanobenzamide

To a solution of 1,1-dimethylethyl N-[1-(S)-(aminomethyl)-2-methylpropyl]carbamate (2.00 g, 9.89 mmol) in dichloromethane (20 ml) was added triethylamine (2.00 g, 2.76 ml), and the mixture was cooled to 0°C. To the reaction solution was added dropwise a solution of 4-cyanobenzoylchloride (2.59 g, 14.84 mmol) in dichloromethane (20 ml). The mixture was returned to room temperature and

stirred for 2 hours. The reaction solution was washed sequentially with water, a 5% aqueous citric acid solution and a saturated aqueous sodium bicarbonate solution, and then dried over anhydrous sodium sulfate. The inorganic salt was filtered and then the filtrate was concentrated under reduced pressure. The resulting crude product was recrystallized using n-hexane and ethyl acetate to give 3.05 g of the desired product as a white solid (yield 93%).

Reference Example 3

N-[2-(S)-amino-3-methylbutyl] 4-cyanobenzamide hydrochloride

N-[2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]-3-methylbutyl] 4-cyanobenzamide (2.85 g, 8.60 mmol) was dissolved in ethyl acetate (10 ml), and a 4 N hydrochloric acid/ethyl acetate solution (13 ml) was added thereto. The mixture was stirred at room temperature overnight. The precipitated salt was washed with ethyl acetate, collected by filtration and dried to give 2.03 g of the desired product as a white solid (yield 88%).

Reference Example 4

N-[3-methyl-2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]butyl]benzofurancarboxamide

To a solution of benzofuran-2-carboxylic acid (15.0 g,

92.5 mmol) in dichloromethane (300 ml) was added 1,1'-carbonylbis-1H-imidazole (15.8 g, 97.6 mmol) at room temperature, and the mixture was stirred for 2 hours. To the reaction solution was added 1,1-dimethylethyl N-[1-(S)-(aminomethyl)-2-methylpropyl]carbamate (19.7 g, 92.5 mmol) was stirred for 5 hours and allowed to stand overnight. The reaction solution was washed sequentially with a 5% aqueous citric acid solution, water, a saturated aqueous sodium bicarbonate solution and water and then the organic layer was dried over anhydrous sodium sulfate. The inorganic salt was separated by filtration, and concentrated under reduced pressure. The resulting crude product was recrystallized using diisopropyl ether to give 26.9 g of the desired product as a white solid (yield 84%).

Reference Example 5

N-[3-methyl-2-(S)-aminobutyl]benzofurancarboxamide hydrochloride

N-[3-methyl-2-(S)-[(1,1-dimethylethyloxycarbonyl)amino]butyl]benzofurancarboxamide (28.2 g, 77.5 mmol) was dissolved in ethyl acetate (50 ml), a 4 N hydrochloric acid/ethyl acetate solution (200 ml) was added thereto and then the mixture was stirred at room temperature for 6 hours. The precipitated salt was washed with ethyl acetate and collected by filtration and then

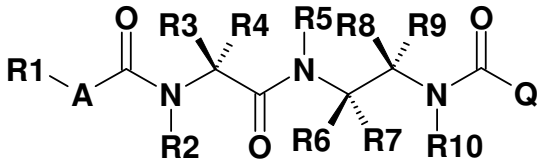
dried to give 20.8 g of the desired product as a white solid (yield 95%).

The compounds represented by the formula (1) which can be prepared in the same manner as in Examples 1 to 30 are listed in Table 1 as follows. Among these compounds, several chemical properties on certain compounds are listed in Table 2. In Table 1, Me represents a methyl group, Et represents an ethyl group, nPr represents a normal propyl group, iPr represents an isopropyl group, nBu represents a normal butyl group, iBu represents an isobutyl group, sBu represents a secondary butyl group, tBu represents a tertiary butyl group, neoPen represents a 2,2-dimethylpropyl group, 2-EtHex represents a 2-ethylhexyl group, MOE represents a methoxy ethyl group, cPr-CH_2 represents a cyclopropylmethyl group, cHex-CH_2 represents a cyclohexylmethyl group, CF_3 represents a trifluoromethyl group, CF_3CH_2 represents a 2,2,2-trifluoroethyl group, $ClCH_2$ represents a chloromethyl group, CH_3CHCl represents a chloroethyl group, CCl_3CH_2 represents a 2,2,2-trichloroethyl group, $CCl_3C(Me)_2$ represents a 2,2,2-trichloro-1,1-dimethylethyl group, 2-BocAE represents a 2-(N-tertiary butyloxycarbonyl)aminoethyl group, POCEt represents a 1-(isopropoxycarbonyl)ethyl group, 1-Me-1-MeS-Et represents a 1-methyl-1-methylthioethyl group, Ph represents a phenyl group, 4-MePh represents a 4-methylphenyl group, Bn

represents a benzyl group, α-Me-Bn represents a α-methylbenzyl group, 1-NP represents a 1-naphthyl group, 2-NP represents a 2-naphthyl group, cPen represents a cyclopenthyl group, cHex represents a cyclohexyl group, Ac represents an acetyl group, Bz represents a benzoyl group, vinyl represents an ethenyl group, allyl represents a 2-propenyl group, propargyl represents a 2-propinyl group, 2-THF represents a tetrahydrofuran-2-yl group, 3-THF represents a tetrahydrofuran-3-yl group, THF-2-CH_2 represents a tetrahydrofuran-2-ylmethyl group, THF-3-CH_2 represents a tetrahydrofuran-3-ylmethyl group, 2-TPrepresents a thiophen-2-yl group, 4-Py represents a pyridin-4-yl group, Pyr-2-CH_2 represents a pyrrolidin-2-ylmethyl group, Boc-Pyr-2-CH_2 represents a (N-tertiary butyloxycarbonylpyrrolidin)-2-ylmethyl group, (-)Ment represents a (1R,2S,5R)-2-isopropyl-5-methylcyclohexan-1-yl group, (+)Ment represents a (1S,2R,5S)-2-isopropyl-5-methylcyclohexan-1-yl group, 3-furanyl-CH_2 represents a (furan-3-yl)methyl group, 4,5-DEP-2-CH_2 represents a (4,5-diethoxypyridin-2-yl)methyl group.

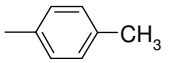
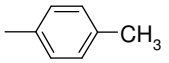
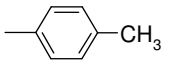
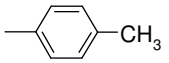
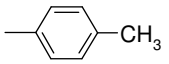
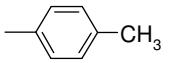
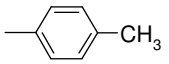
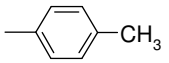
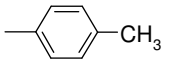
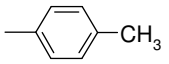
The diamine derivative represented by the formula (1) contains asymmetric carbon depending on the kinds of substituents, and may exist as an optical isomer, a diastereoisomer, a racemate or a mixture thereof in arbitrary proportions.

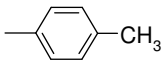
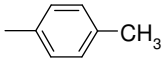
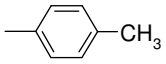
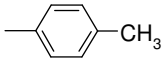
Table 1



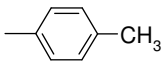
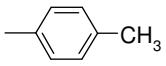
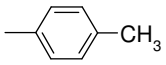
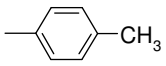
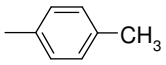
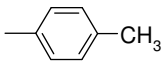
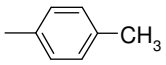
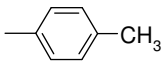
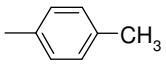
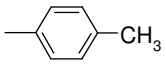
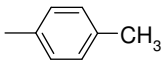
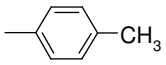
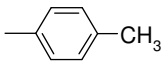
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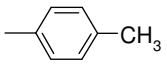
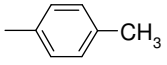
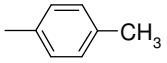
Compound (1) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1	Et	O	H	H	H	iPr	H	H	H	H	H	
2	iPr	O	H	H	H	iPr	H	H	H	H	H	
3	iBu	O	H	H	H	iPr	H	H	H	H	H	
4	tBu	O	H	H	H	iPr	H	H	H	H	H	
5	Et	O	H	H	H	iPr	H	iPr	H	H	H	
6	iPr	O	H	H	H	iPr	H	iPr	H	H	H	
7	iBu	O	H	H	H	iPr	H	iPr	H	H	H	
8	tBu	O	H	H	H	iPr	H	iPr	H	H	H	
9	Et	O	H	H	H	H	H	iPr	H	H	H	
10	iPr	O	H	H	H	H	H	iPr	H	H	H	

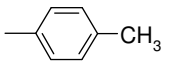
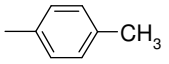
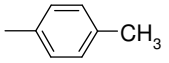
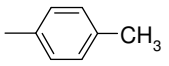
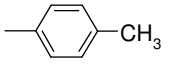
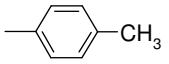
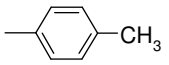
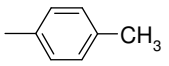
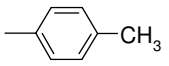
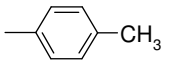
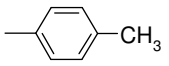
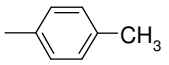
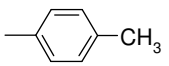
11	iBu	O	H	H	H	H	H	iPr	H	H	H	
12	tBu	O	H	H	H	H	H	iPr	H	H	H	
13	Et	O	H	H	H	H	Me	Me	H	H	H	
14	iPr	O	H	H	H	H	Me	Me	H	H	H	

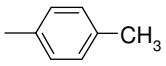
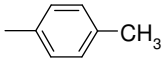
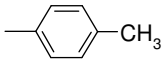
Compound (2) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
15	iBu	O	H	H	H	H	Me	Me	H	H	H	
16	tBu	O	H	H	H	H	Me	Me	H	H	H	
17	Et	O	H	Me	H	H	H	iPr	H	H	H	
18	iPr	O	H	Me	H	H	H	iPr	H	H	H	
19	iBu	O	H	Me	H	H	H	iPr	H	H	H	
20	tBu	O	H	Me	H	H	H	iPr	H	H	H	
21	Et	O	H	Me	Me	H	H	iPr	H	H	H	
22	iPr	O	H	Me	Me	H	H	iPr	H	H	H	
23	iBu	O	H	Me	Me	H	H	iPr	H	H	H	
24	tBu	O	H	Me	Me	H	H	iPr	H	H	H	
25	Et	O	H	Me	Me	H	Me	Me	H	H	H	
26	iPr	O	H	Me	Me	H	Me	Me	H	H	H	
27	iBu	O	H	Me	Me	H	Me	Me	H	H	H	

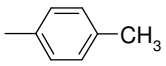
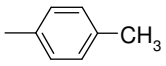
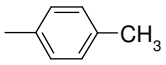
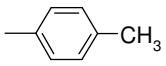
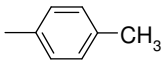
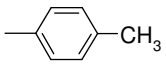
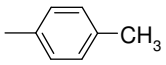
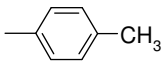
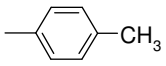
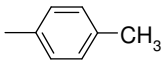
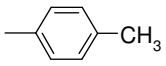
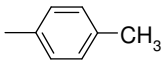
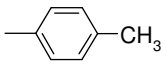
28	tBu	O	H	Me	Me	H	Me	Me	H	H	H	
29	Et	O	H	CF3, H (racemate)		H	H	iPr	H	H	H	
30	iPr	O	H	CF3, H (racemate)		H	H	iPr	H	H	H	

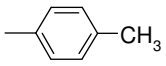
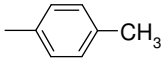
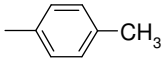
Compound (3) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
31	iBu	O	H	CF3, H (racemate)		H	H	iPr	H	H	H	
32	tBu	O	H	CF3, H (racemate)		H	H	iPr	H	H	H	
33	Et	O	H	Et	H	H	H	iPr	H	H	H	
34	iPr	O	H	Et	H	H	H	iPr	H	H	H	
35	iBu	O	H	Et	H	H	H	iPr	H	H	H	
36	tBu	O	H	Et	H	H	H	iPr	H	H	H	
37	Et	O	H	nPr	H	H	H	iPr	H	H	H	
38	iPr	O	H	nPr	H	H	H	iPr	H	H	H	
39	iBu	O	H	nPr	H	H	H	iPr	H	H	H	
40	tBu	O	H	nPr	H	H	H	iPr	H	H	H	
41	Et	O	H	iBu	H	H	H	iPr	H	H	H	
42	iPr	O	H	iBu	H	H	H	iPr	H	H	H	
43	iBu	O	H	iBu	H	H	H	iPr	H	H	H	

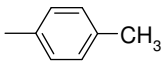
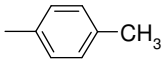
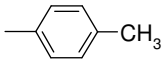
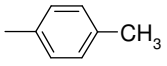
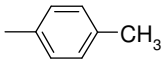
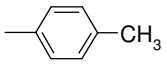
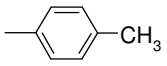
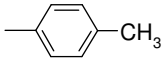
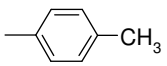
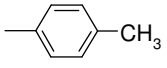
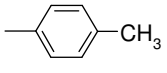
44	tBu	O	H	tBu	H	H	H	iPr	H	H	H	
45	Et	O	H	tBu	H	H	H	iPr	H	H	H	
46	iPr	O	H	tBu	H	H	H	iPr	H	H	H	

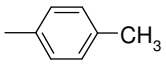
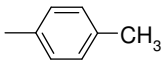
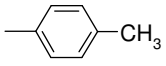
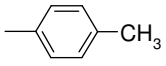
Compound (4) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
47	iBu	O	H	tBu	H	H	H	iPr	H	H	H	
48	tBu	O	H	tBu	H	H	H	iPr	H	H	H	
49	Et	O	H	sBu	H	H	H	iPr	H	H	H	
50	iPr	O	H	sBu	H	H	H	iPr	H	H	H	
51	iBu	O	H	sBu	H	H	H	iPr	H	H	H	
52	tBu	O	H	sBu	H	H	H	iPr	H	H	H	
53	Et	O	H	sBu	H	H	H	sBu	H	H	H	
54	iPr	O	H	sBu	H	H	H	sBu	H	H	H	
55	iBu	O	H	sBu	H	H	H	sBu	H	H	H	
56	tBu	O	H	sBu	H	H	H	sBu	H	H	H	
57	Et	O	H	Ph	H	H	H	iPr	H	H	H	
58	iPr	O	H	Ph	H	H	H	iPr	H	H	H	
59	iBu	O	H	Ph	H	H	H	iPr	H	H	H	

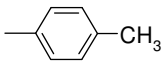
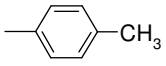
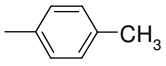
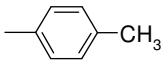
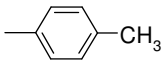
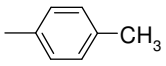
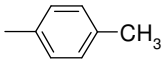
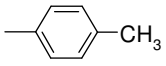
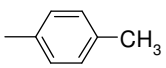
60	tBu	O	H	Ph	H	H	H	iPr	H	H	H	
61	propargyl	O	H	Ph	H	H	H	iPr	H	H	H	
62	Et	O	H	Bn, H (racemate)		H	H	iPr	H	H	H	

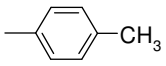
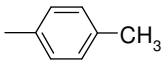
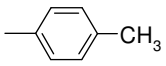
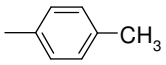
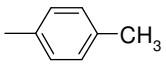
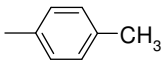
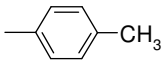
Compound (5) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
63	iPr	O	H	Bn, H (racemate)		H	H	iPr	H	H	H	
64	iBu	O	H	Bn, H (racemate)		H	H	iPr	H	H	H	
65	tBu	O	H	Bn, H (racemate)		H	H	iPr	H	H	H	
66	Et	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
67	iPr	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
68	iBu	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
69	tBu	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
70	Et	O	H	allyl	H	H	H	iPr	H	H	H	
71	iPr	O	H	allyl	H	H	H	iPr	H	H	H	
72	iBu	O	H	allyl	H	H	H	iPr	H	H	H	
73	tBu	O	H	allyl	H	H	H	iPr	H	H	H	

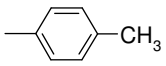
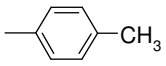
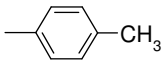
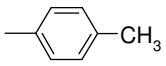
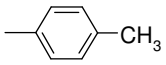
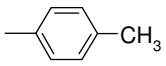
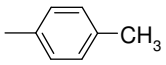
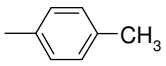
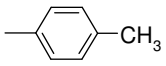
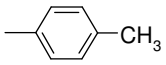
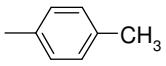
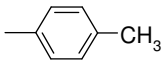
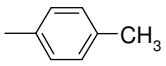
74	Et	O	H	propargyl	H	H	H	iPr	H	H	H	
75	iPr	O	H	propargyl	H	H	H	iPr	H	H	H	
76	iBu	O	H	propargyl	H	H	H	iPr	H	H	H	
77	tBu	O	H	propargyl	H	H	H	iPr	H	H	H	

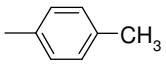
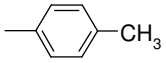
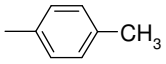
Compound (6) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
78	Et	O	H	cPen(R3,R4cyclization)		H	H	iPr	H	H	H	
79	iPr	O	H	cPen(R3,R4cyclization)		H	H	iPr	H	H	H	
80	iBu	O	H	cPen(R3,R4cyclization)		H	H	iPr	H	H	H	
81	tBu	O	H	cPen(R3,R4cyclization)		H	H	iPr	H	H	H	
82	Et	O	H	cHex(R3,R4cyclization)		H	H	iPr	H	H	H	
83	iPr	O	H	cHex(R3,R4cyclization)		H	H	iPr	H	H	H	
84	iBu	O	H	cHex(R3,R4cyclization)		H	H	iPr	H	H	H	
85	tBu	O	H	cHex(R3,R4cyclization)		H	H	iPr	H	H	H	
86	Et	O	H	1-NP	H	H	H	iPr	H	H	H	

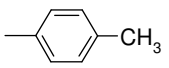
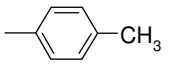
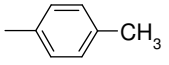
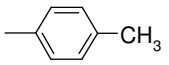
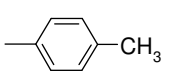
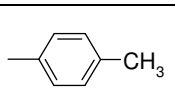
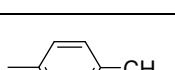
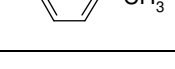
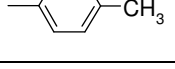
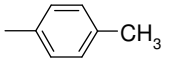
87	iPr	O	H	1-NP	H	H	H	iPr	H	H	H	
88	iBu	O	H	1-NP	H	H	H	iPr	H	H	H	
89	tBu	O	H	1-NP	H	H	H	iPr	H	H	H	
90	Et	O	H	2-TP	H	H	H	iPr	H	H	H	
91	iPr	O	H	2-TP	H	H	H	iPr	H	H	H	
92	iBu	O	H	2-TP	H	H	H	iPr	H	H	H	
93	tBu	O	H	2-TP	H	H	H	iPr	H	H	H	

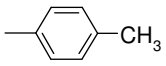
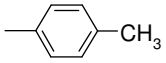
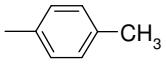
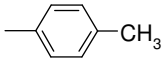
Compound (7) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
94	Et	O	H	iPr	H	H	H	H	H	H	H	
95	iPr	O	H	iPr	H	H	H	H	H	H	H	
96	iBu	O	H	iPr	H	H	H	H	H	H	H	
97	tBu	O	H	iPr	H	H	H	H	H	H	H	
98	Et	O	H	iPr	H	iPr	H	H	H	H	H	
99	iPr	O	H	iPr	H	iPr	H	H	H	H	H	
100	iBu	O	H	iPr	H	iPr	H	H	H	H	H	
101	tBu	O	H	iPr	H	iPr	H	H	H	H	H	
102	Et	O	H	iPr	H	H	Me	H	H	H	H	
103	iPr	O	H	iPr	H	H	Me	H	H	H	H	
104	iBu	O	H	iPr	H	H	Me	H	H	H	H	
105	tBu	O	H	iPr	H	H	Me	H	H	H	H	
106	Et	O	H	iPr	H	H	H	Me	H	H	H	

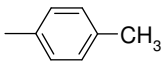
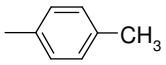
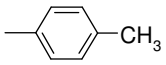
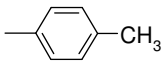
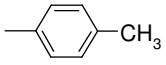
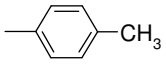
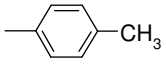
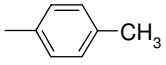
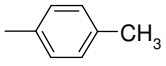
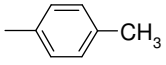
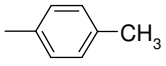
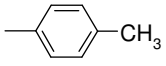
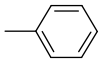
107	iPr	O	H	iPr	H	H	H	Me	H	H	H	
108	iBu	O	H	iPr	H	H	H	Me	H	H	H	
109	Et	O	H	iPr	H	H	H	H	Me	H	H	

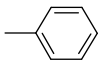
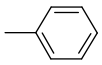
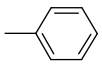
Compound (8) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
110	iPr	O	H	iPr	H	H	H	H	Me	H	H	
111	iBu	O	H	iPr	H	H	H	H	Me	H	H	
112	tBu	O	H	iPr	H	H	H	H	Me	H	H	
113	Et	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
114	iPr	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
115	iBu	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
116	tBu	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
117	Et	O	H	iPr	H	H	H	H	CF3, H (racemate)		H	
118	iPr	O	H	iPr	H	H	H	H	CF3, H (racemate)		H	
119	iBu	O	H	iPr	H	H	H	H	CF3, H (racemate)		H	
120	tBu	O	H	iPr	H	H	H	H	CF3, H (racemate)		H	
121	Me	O	H	iPr	H	H	Me	Me	H	H	H	

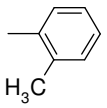
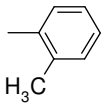
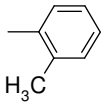
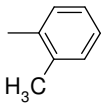
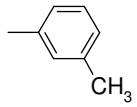
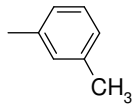
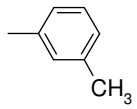
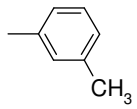
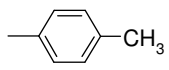
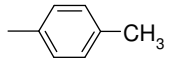
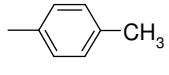
122	Et	O	H	iPr	H	H	Me	Me	H	H	H	
123	iPr	O	H	iPr	H	H	Me	Me	H	H	H	
124	allyl	O	H	iPr	H	H	Me	Me	H	H	H	
125	iBu	O	H	iPr	H	H	Me	Me	H	H	H	

Compound (9) of Formula (1) in Table 1

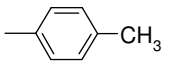
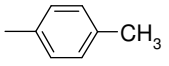
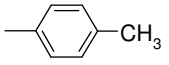
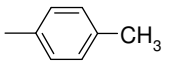
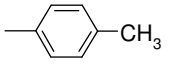
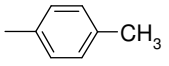
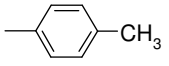
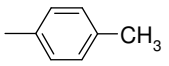
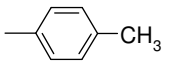
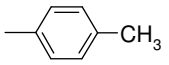
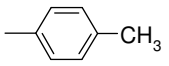
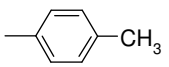
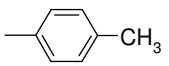
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
126	tBu	O	H	iPr	H	H	Me	Me	H	H	H	
127	THF-2-CH2	O	H	iPr	H	H	Me	Me	H	H	H	
128	THF-3-CH2	O	H	iPr	H	H	Me	Me	H	H	H	
129	α-MeBn	O	H	iPr	H	H	Me	Me	H	H	H	
130	Et	O	H	H	iPr	H	Me	Me	H	H	H	
131	iPr	O	H	H	iPr	H	Me	Me	H	H	H	
132	iBu	O	H	H	iPr	H	Me	Me	H	H	H	
133	tBu	O	H	H	iPr	H	Me	Me	H	H	H	
134	Et	O	H	iPr	H	H	H	Et	H	H	H	
135	iPr	O	H	iPr	H	H	H	Et	H	H	H	
136	iBu	O	H	iPr	H	H	H	Et	H	H	H	
137	tBu	O	H	iPr	H	H	H	Et	H	H	H	
138	Et	O	H	iPr	H	H	H	iPr	H	H	H	

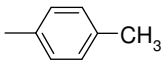
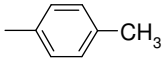
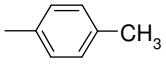
139	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
140	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
141	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (10) of Formula (1) in Table 1

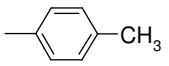
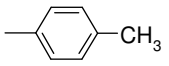
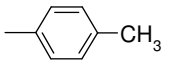
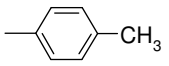
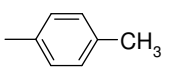
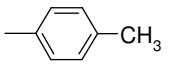
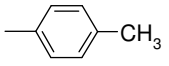
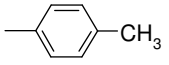
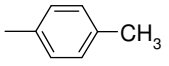
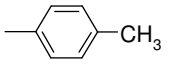
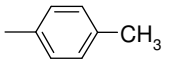
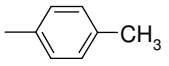
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
142	Et	O	H	iPr	H	H	H	iPr	H	H	H	
143	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
144	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
145	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
146	Et	O	H	iPr	H	H	H	iPr	H	H	H	
147	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
148	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
149	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
150	Et	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
151	iPr	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
152	iBu	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	

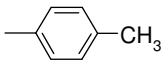
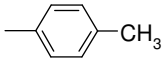
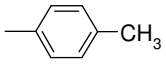
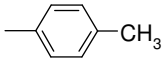
Compound (11) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
153	tBu	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
154	CF3CH2	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
155	Et	O	H	iPr	H	H	iPr	H	H	H	H	
156	iPr	O	H	iPr	H	H	iPr	H	H	H	H	
157	iBu	O	H	iPr	H	H	iPr	H	H	H	H	
158	tBu	O	H	iPr	H	H	iPr	H	H	H	H	
159	Me	O	H	iPr	H	H	H	iPr	H	H	H	
160	Et	O	H	iPr	H	H	H	iPr	H	H	H	
161	Et	S	H	iPr	H	H	H	iPr	H	H	H	
162	vinyl	O	H	iPr	H	H	H	iPr	H	H	H	
163	nPr	O	H	iPr	H	H	H	iPr	H	H	H	
164	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
165	iPr	S	H	iPr	H	H	H	iPr	H	H	H	

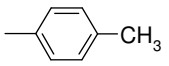
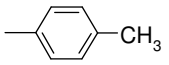
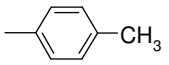
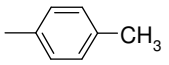
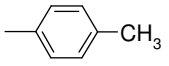
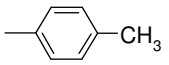
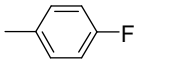
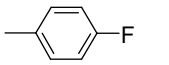
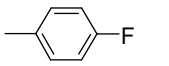
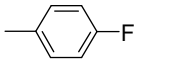
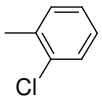
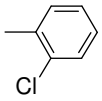
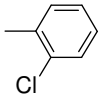
166	allyl	O	H	iPr	H	H	H	iPr	H	H	H	
167	propargyl	O	H	iPr	H	H	H	iPr	H	H	H	
168	nBu	O	H	iPr	H	H	H	iPr	H	H	H	

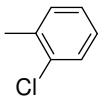
Compound (12) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
169	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
170	iBu	S	H	iPr	H	H	H	iPr	H	H	H	
171	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
172	sBu	O	H	iPr	H	H	H	iPr	H	H	H	
173	2-EtHex	O	H	iPr	H	H	H	iPr	H	H	H	
174	Boc-Pyr-2-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
175	MOE	O	H	iPr	H	H	H	iPr	H	H	H	
176	NeoPen	O	H	iPr	H	H	H	iPr	H	H	H	
177	CCl3CH2	O	H	iPr	H	H	H	iPr	H	H	H	
178	CCl3C(Me)2	O	H	iPr	H	H	H	iPr	H	H	H	
179	Pyr-2-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
180	(-)Ment	O	H	iPr	H	H	H	iPr	H	H	H	

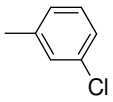
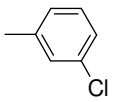
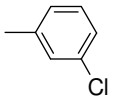
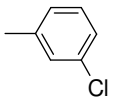
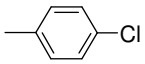
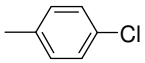
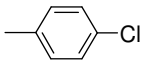
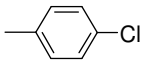
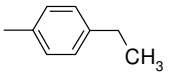
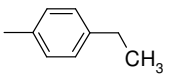
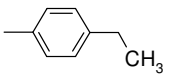
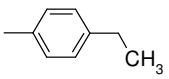
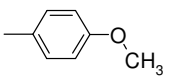
181	(+)Ment	O	H	iPr	H	H	H	iPr	H	H	H	
182	Ph	O	H	iPr	H	H	H	iPr	H	H	H	
183	4-MePh	O	H	iPr	H	H	H	iPr	H	H	H	
184	Bn	O	H	iPr	H	H	H	iPr	H	H	H	

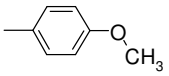
Compound (13) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
185	α-MeBn	O	H	iPr	H	H	H	iPr	H	H	H	
186	THF-2-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
187	THF-3-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
188	2-BocAE	O	H	iPr	H	H	H	iPr	H	H	H	
189	4-Py	O	H	iPr	H	H	H	iPr	H	H	H	
190	3-THF	O	H	iPr	H	H	H	iPr	H	H	H	
191	Et	O	H	iPr	H	H	H	iPr	H	H	H	
192	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
193	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
194	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
195	Et	O	H	iPr	H	H	H	iPr	H	H	H	
196	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
197	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

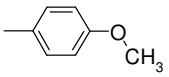
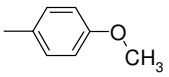
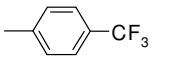
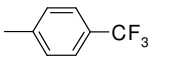
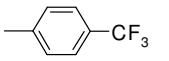
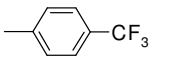
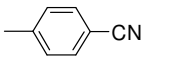
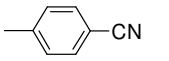
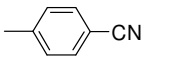
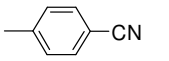
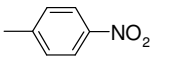
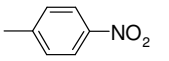
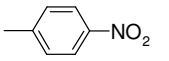
198	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

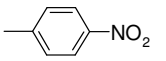
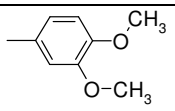
Compound (14) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
199	Et	O	H	iPr	H	H	H	iPr	H	H	H	
200	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
201	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
202	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
203	Et	O	H	iPr	H	H	H	iPr	H	H	H	
204	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
205	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
206	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
207	Et	O	H	iPr	H	H	H	iPr	H	H	H	
208	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
209	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
210	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
211	Et	O	H	iPr	H	H	H	iPr	H	H	H	

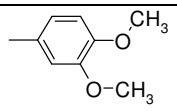
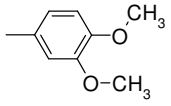
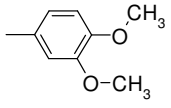
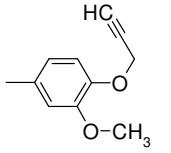
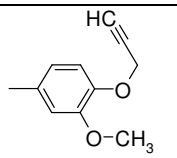
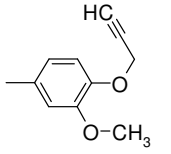
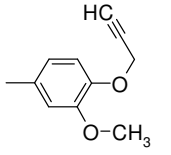
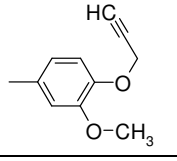
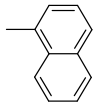
212	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (15) of Formula (1) in Table 1

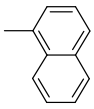
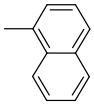
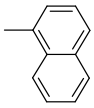
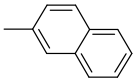
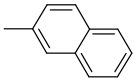
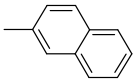
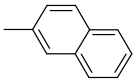
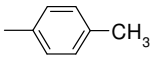
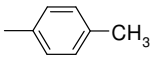
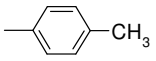
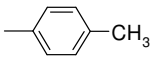
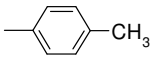
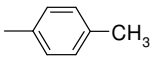
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
213	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
214	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
215	Et	O	H	iPr	H	H	H	iPr	H	H	H	
216	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
217	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
218	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
219	Et	O	H	iPr	H	H	H	iPr	H	H	H	
220	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
221	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
222	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
223	Et	O	H	iPr	H	H	H	iPr	H	H	H	
224	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
225	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

226	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
227	Et	O	H	iPr	H	H	H	iPr	H	H	H	

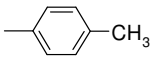
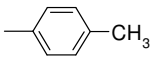
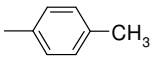
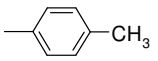
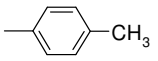
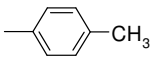
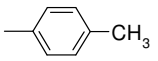
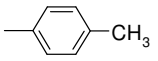
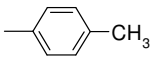
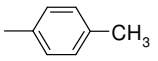
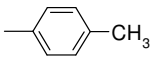
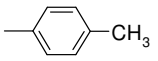
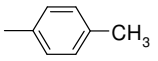
Compound (16) of Formula (1) in Table 1

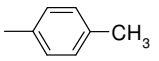
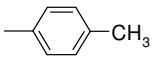
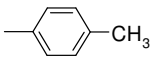
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
228	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
229	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
230	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
231	Et	O	H	iPr	H	H	H	iPr	H	H	H	
232	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
233	nPr	O	H	iPr	H	H	H	iPr	H	H	H	
234	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
235	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
236	Et	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (17) of Formula (1) in Table 1

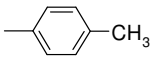
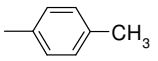
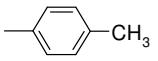
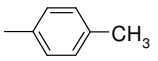
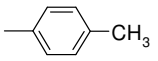
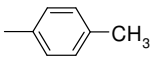
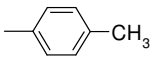
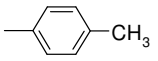
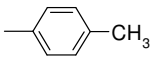
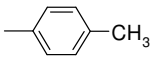
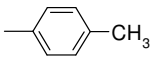
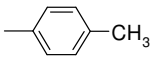
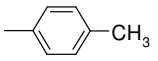
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
237	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
238	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
239	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
240	Et	O	H	iPr	H	H	H	iPr	H	H	H	
241	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
242	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
243	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
244	Me	O	Me	iPr	H	H	H	iPr	H	H	H	
245	Et	O	Me	iPr	H	H	H	iPr	H	H	H	
246	iPr	O	Me	iPr	H	H	H	iPr	H	H	H	
247	iBu	O	Me	iPr	H	H	H	iPr	H	H	H	
248	tBu	O	Me	iPr	H	H	H	iPr	H	H	H	
249	iPr	O	Ac	iPr	H	H	H	iPr	H	H	H	

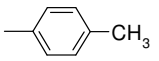
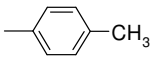
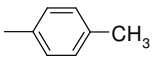
Compound (18) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
250	iBu	O	Ac	iPr	H	H	H	iPr	H	H	H	
251	tBu	O	Ac	iPr	H	H	H	iPr	H	H	H	
252	Et	O	Bz	iPr	H	H	H	iPr	H	H	H	
253	iPr	O	Bz	iPr	H	H	H	iPr	H	H	H	
254	iBu	O	Bz	iPr	H	H	H	iPr	H	H	H	
255	tBu	O	Bz	iPr	H	H	H	iPr	H	H	H	
256	Et	O	H	H	iPr	H	H	iPr	H	H	H	
257	iPr	O	H	H	iPr	H	H	iPr	H	H	H	
258	iBu	O	H	H	iPr	H	H	iPr	H	H	H	
259	tBu	O	H	H	iPr	H	H	iPr	H	H	H	
260	Et	O	H	iPr	H	Me	H	iPr	H	H	H	
261	iPr	O	H	iPr	H	Me	H	iPr	H	H	H	
262	iBu	O	H	iPr	H	Me	H	iPr	H	H	H	

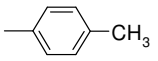
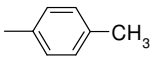
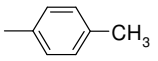
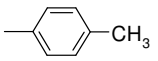
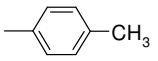
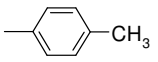
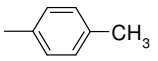
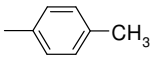
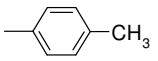
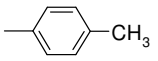
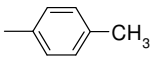
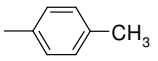
263	tBu	O	H	iPr	H	Me	H	iPr	H	H	H	
264	Et	O	H	iPr	H	Ac	H	iPr	H	H	H	
265	iPr	O	H	iPr	H	Ac	H	iPr	H	H	H	

Compound (19) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
266	iBu	O	H	iPr	H	Ac	H	iPr	H	H	H	
267	tBu	O	H	iPr	H	Ac	H	iPr	H	H	H	
268	Et	O	H	iPr	H	Bz	H	iPr	H	H	H	
269	iPr	O	H	iPr	H	Bz	H	iPr	H	H	H	
270	iBu	O	H	iPr	H	Bz	H	iPr	H	H	H	
271	tBu	O	H	iPr	H	Bz	H	iPr	H	H	H	
272	Et	O	H	iPr	H	H	H	H	iPr	H	H	
273	iPr	O	H	iPr	H	H	H	H	iPr	H	H	
274	iBu	O	H	iPr	H	H	H	H	iPr	H	H	
275	tBu	O	H	iPr	H	H	H	H	iPr	H	H	
276	Bn	O	H	iPr	H	H	H	H	iPr	H	H	
277	Et	O	H	iPr	H	H	H	H	H	iPr	H	
278	iPr	O	H	iPr	H	H	H	H	H	iPr	H	

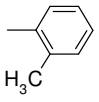
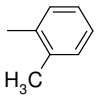
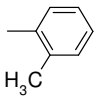
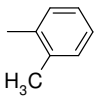
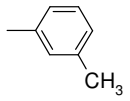
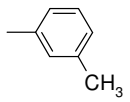
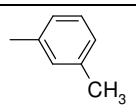
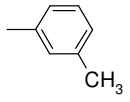
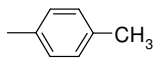
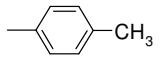
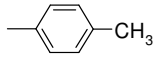
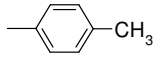
279	iBu	O	H	iPr	H	H	H	H	H	iPr	H	
280	tBu	O	H	iPr	H	H	H	H	H	iPr	H	
281	Bn	O	H	iPr	H	H	H	H	H	iPr	H	

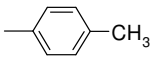
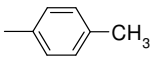
Compound (20) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
282	Et	O	H	iPr	H	H	H	nPr	H	H	H	
283	iPr	O	H	iPr	H	H	H	nPr	H	H	H	
284	iBu	O	H	iPr	H	H	H	nPr	H	H	H	
285	tBu	O	H	iPr	H	H	H	nPr	H	H	H	
286	Et	O	H	H	iPr	H	H	nPr	H	H	H	
287	iPr	O	H	H	iPr	H	H	nPr	H	H	H	
288	iBu	O	H	H	iPr	H	H	nPr	H	H	H	
289	tBu	O	H	H	iPr	H	H	nPr	H	H	H	
290	Et	O	H	iPr	H	H	H	iBu	H	H	H	
291	iPr	O	H	iPr	H	H	H	iBu	H	H	H	
292	iBu	O	H	iPr	H	H	H	iBu	H	H	H	
293	tBu	O	H	iPr	H	H	H	iBu	H	H	H	
294	Et	O	H	iPr	H	H	H	sBu	H	H	H	

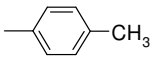
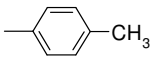
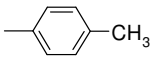
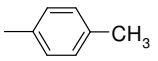
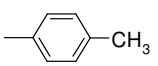
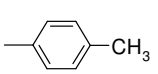
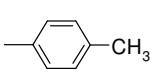
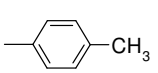
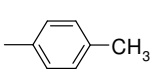
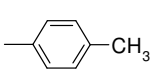
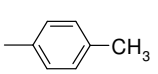
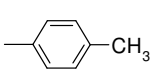
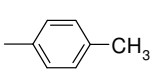
295	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
296	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
297	tBu	O	H	iPr	H	H	H	sBu	H	H	H	

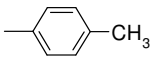
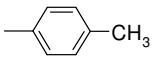
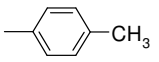
Compound (21) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
298	Et	O	H	iPr	H	H	H	sBu	H	H	H	
299	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
300	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
301	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
302	Et	O	H	iPr	H	H	H	sBu	H	H	H	
303	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
304	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
305	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
306	Me	O	H	iPr	H	H	H	sBu	H	H	H	
307	Et	O	H	iPr	H	H	H	sBu	H	H	H	
308	Et	S	H	iPr	H	H	H	sBu	H	H	H	
309	iPr	O	H	iPr	H	H	H	sBu	H	H	H	

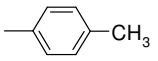
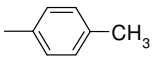
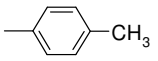
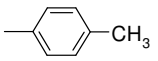
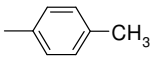
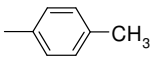
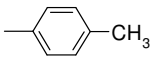
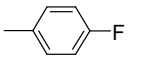
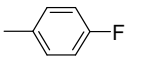
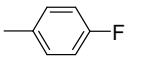
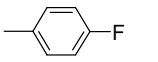
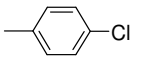
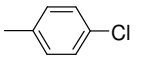
310	propargyl	O	H	iPr	H	H	H	sBu	H	H	H	
311	iBu	O	H	iPr	H	H	H	sBu	H	H	H	

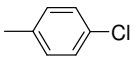
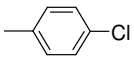
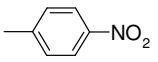
Compound (22) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
312	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
313	Ph	O	H	iPr	H	H	H	sBu	H	H	H	
314	4-MePh	O	H	iPr	H	H	H	sBu	H	H	H	
315	Bn	O	H	iPr	H	H	H	sBu	H	H	H	
316	2-EtHex	O	H	iPr	H	H	H	sBu	H	H	H	
317	POCEt	O	H	iPr	H	H	H	sBu	H	H	H	
318	3-THF	O	H	iPr	H	H	H	sBu	H	H	H	
319	Et	O	H	iPr	H	H	H	sBu	H	H	Ac	
320	iPr	O	H	iPr	H	H	H	sBu	H	H	Ac	
321	iBu	O	H	iPr	H	H	H	sBu	H	H	Ac	
322	tBu	O	H	iPr	H	H	H	sBu	H	H	Ac	
323	Et	O	H	iPr	H	H	H	sBu	H	H	Bz	
324	iPr	O	H	iPr	H	H	H	sBu	H	H	Bz	

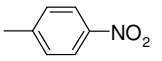
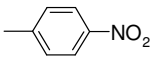
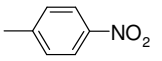
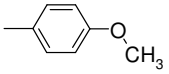
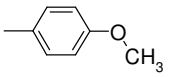
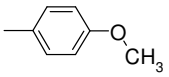
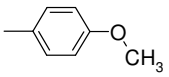
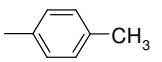
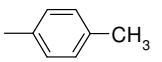
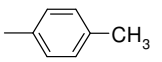
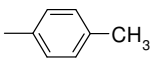
325	iBu	O	H	iPr	H	H	H	sBu	H	H	Bz	
326	tBu	O	H	iPr	H	H	H	sBu	H	H	Bz	
327	Et	O	Me	iPr	H	H	H	sBu	H	H	H	

Compound (23) of Formula (1) in Table 1

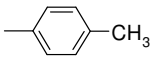
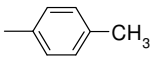
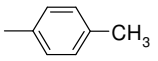
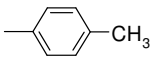
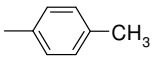
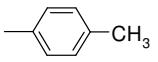
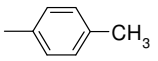
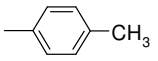
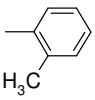
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
328	iPr	O	Me	iPr	H	H	H	sBu	H	H	H	
329	iBu	O	Me	iPr	H	H	H	sBu	H	H	H	
330	tBu	O	Me	iPr	H	H	H	sBu	H	H	H	
331	Et	O	H	H	iPr	H	H	sBu	H	H	H	
332	iPr	O	H	H	iPr	H	H	sBu	H	H	H	
333	iBu	O	H	H	iPr	H	H	sBu	H	H	H	
334	tBu	O	H	H	iPr	H	H	sBu	H	H	H	
335	Et	O	H	iPr	H	H	H	sBu	H	H	H	
336	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
337	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
338	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
339	Et	O	H	iPr	H	H	H	sBu	H	H	H	
340	iPr	O	H	iPr	H	H	H	sBu	H	H	H	

341	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
342	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
343	Et	O	H	iPr	H	H	H	sBu	H	H	H	

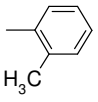
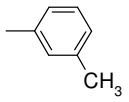
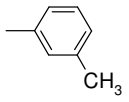
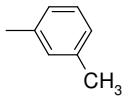
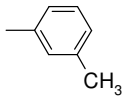
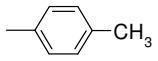
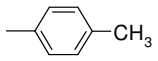
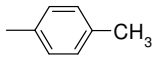
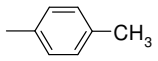
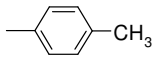
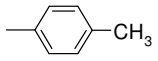
Compound (24) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
344	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
345	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
346	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
347	Et	O	H	iPr	H	H	H	sBu	H	H	H	
348	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
349	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
350	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
351	Et	O	H	iPr	H	H	H	tBu	H	H	H	
352	iPr	O	H	iPr	H	H	H	tBu	H	H	H	
353	iBu	O	H	iPr	H	H	H	tBu	H	H	H	
354	tBu	O	H	iPr	H	H	H	tBu	H	H	H	

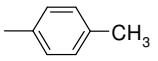
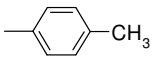
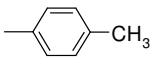
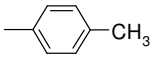
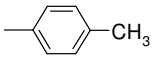
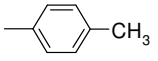
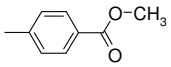
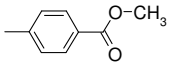
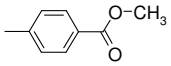
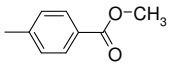
Compound (25) of Formula (1) in Table 1

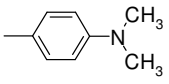
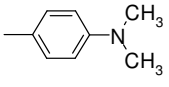
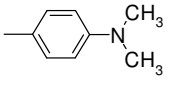
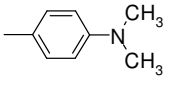
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
367	Et	O	H	iPr	H	H	H	H	H	Ph	H	
368	iPr	O	H	iPr	H	H	H	H	H	Ph	H	
369	iBu	O	H	iPr	H	H	H	H	H	Ph	H	
370	tBu	O	H	iPr	H	H	H	H	H	Ph	H	
379	Et	O	H	iPr	H	H	H	allyl	H	H	H	
380	iPr	O	H	iPr	H	H	H	allyl	H	H	H	
381	iBu	O	H	iPr	H	H	H	allyl	H	H	H	
382	tBu	O	H	iPr	H	H	H	allyl	H	H	H	
387	Et	O	H	iPr	H	H	H	H	H	H	iPr	
388	iPr	O	H	iPr	H	H	H	H	H	H	iPr	
389	iBu	O	H	iPr	H	H	H	H	H	H	iPr	

Compound (26) of Formula (1) in Table 1

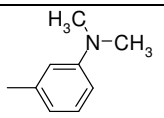
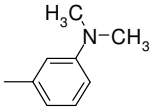
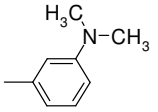
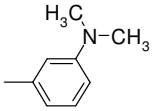
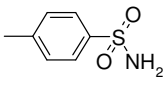
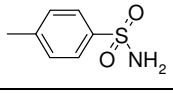
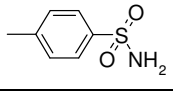
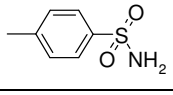
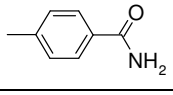
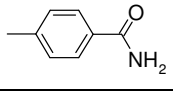
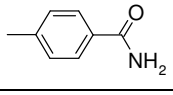
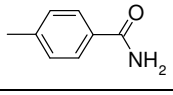
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
390	tBu	O	H	iPr	H	H	H	H	H	H	iPr	
391	Et	O	H	iPr	H	H	H	H	H	H	iPr	
392	iPr	O	H	iPr	H	H	H	H	H	H	iPr	
393	iBu	O	H	iPr	H	H	H	H	H	H	iPr	
394	tBu	O	H	iPr	H	H	H	H	H	H	iPr	
395	Et	O	H	iPr	H	H	H	H	H	H	iPr	
396	iPr	O	H	iPr	H	H	H	H	H	H	iPr	
397	iBu	O	H	iPr	H	H	H	H	H	H	iPr	
398	tBu	O	H	iPr	H	H	H	H	H	H	iPr	
403	Et	O	H	iPr	Me	H	H	iPr	H	H	H	
404	iPr	O	H	iPr	Me	H	H	iPr	H	H	H	

Compound (27) of Formula (1) in Table 1

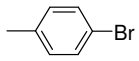
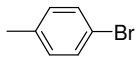
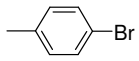
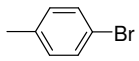
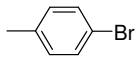
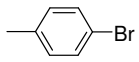
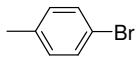
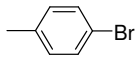
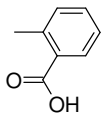
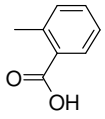
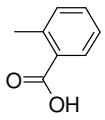
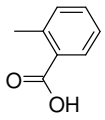
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
405	iBu	O	H	iPr	Me	H	H	iPr	H	H	H	
406	tBu	O	H	iPr	Me	H	H	iPr	H	H	H	
407	Et	O	H	iPr	H	H	H	1-Me-1-MeS-Et	H	H	H	
408	iPr	O	H	iPr	H	H	H	1-Me-1-MeS-Et	H	H	H	
409	iBu	O	H	iPr	H	H	H	1-Me-1-MeS-Et	H	H	H	
410	tBu	O	H	iPr	H	H	H	1-Me-1-MeS-Et	H	H	H	
411	Et	O	H	iPr	H	H	H	iPr	H	H	H	
412	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
413	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
414	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

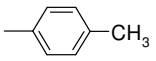
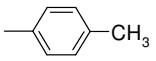
415	Et	O	H	iPr	H	H	H	iPr	H	H	H	
416	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
417	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
418	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (28) of Formula (1) in Table 1

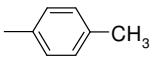
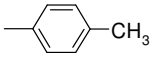
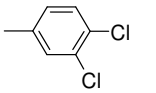
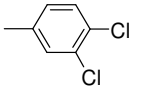
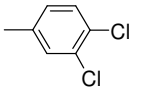
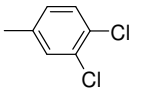
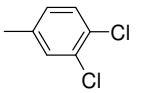
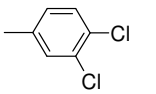
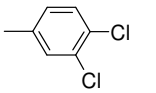
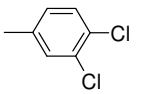
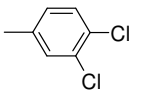
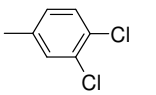
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
419	Et	O	H	iPr	H	H	H	iPr	H	H	H	
420	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
421	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
422	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
423	Et	O	H	iPr	H	H	H	iPr	H	H	H	
424	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
425	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
426	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
427	Et	O	H	iPr	H	H	H	iPr	H	H	H	
428	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
429	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
430	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

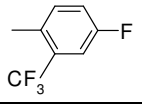
Compound (29) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
431	Et	O	H	iPr	H	H	H	iPr	H	H	H	
432	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
433	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
434	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
435	Et	O	H	iPr	H	H	H	sBu	H	H	H	
436	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
437	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
438	tBu	O	H	iPr	H	H	H	sBu	H	H	H	
439	Et	O	H	iPr	H	H	H	iPr	H	H	H	
440	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
441	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
442	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

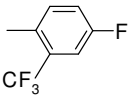
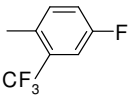
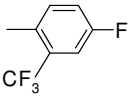
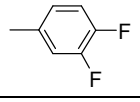
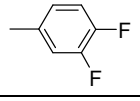
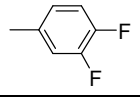
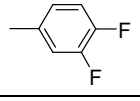
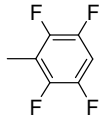
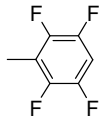
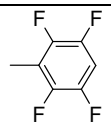
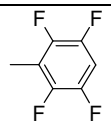
443	Et	O	H	iPr	H	H	H	3-pentyl	H	H	H	
444	iPr	O	H	iPr	H	H	H	3-pentyl	H	H	H	

Compound (30) of Formula (1) in Table 1

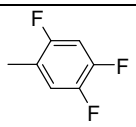
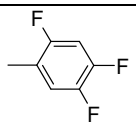
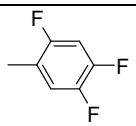
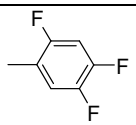
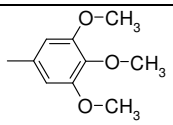
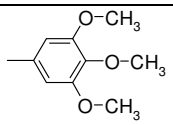
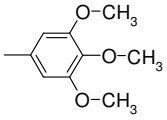
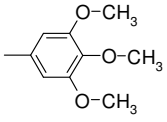
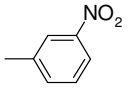
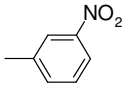
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
445	iBu	O	H	iPr	H	H	H	3-pentyl	H	H	H	
446	tBu	O	H	iPr	H	H	H	3-pentyl	H	H	H	
447	Me	O	H	iPr	H	H	H	iPr	H	H	H	
448	Et	O	H	iPr	H	H	H	iPr	H	H	H	
449	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
450	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
451	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
452	Me	O	H	iPr	H	H	H	sBu	H	H	H	
453	Et	O	H	iPr	H	H	H	sBu	H	H	H	
454	iPr	O	H	iPr	H	H	H	sBu	H	H	H	
455	iBu	O	H	iPr	H	H	H	sBu	H	H	H	
456	tBu	O	H	iPr	H	H	H	sBu	H	H	H	

457	Et	O	H	iPr	H	H	H	iPr	H	H	H	

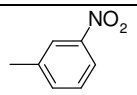
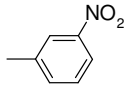
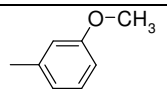
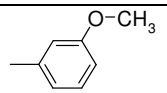
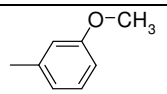
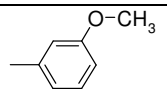
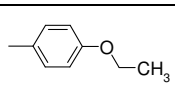
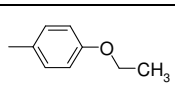
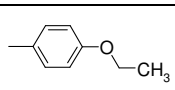
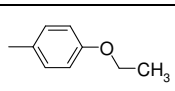
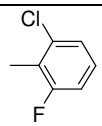
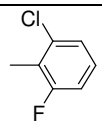
Compound (31) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
458	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
459	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
460	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
461	Et	O	H	iPr	H	H	H	iPr	H	H	H	
462	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
463	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
464	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
465	Et	O	H	iPr	H	H	H	iPr	H	H	H	
466	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
467	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
468	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

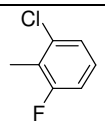
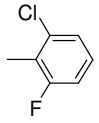
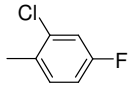
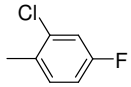
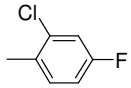
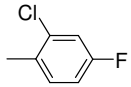
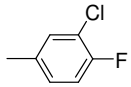
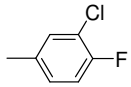
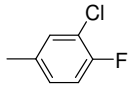
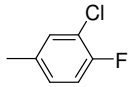
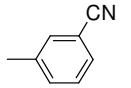
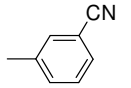
Compound (32) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
469	Et	O	H	iPr	H	H	H	iPr	H	H	H	
470	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
471	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
472	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
473	Et	O	H	iPr	H	H	H	iPr	H	H	H	
474	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
475	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
476	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
477	Et	O	H	iPr	H	H	H	iPr	H	H	H	
478	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

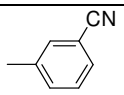
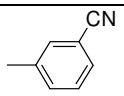
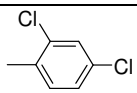
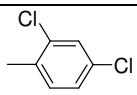
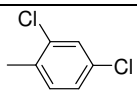
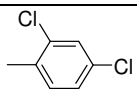
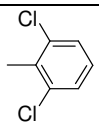
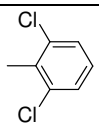
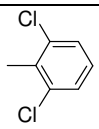
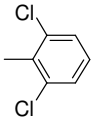
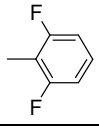
Compound (33) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
479	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
480	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
481	Et	O	H	iPr	H	H	H	iPr	H	H	H	
482	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
483	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
484	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
485	Et	O	H	iPr	H	H	H	iPr	H	H	H	
486	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
487	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
488	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
489	Et	O	H	iPr	H	H	H	iPr	H	H	H	
490	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

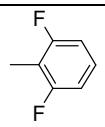
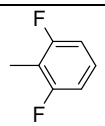
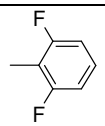
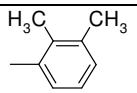
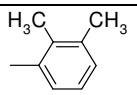
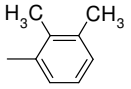
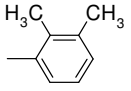
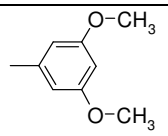
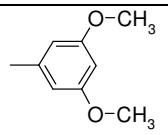
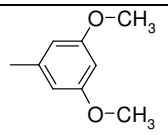
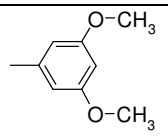
Compound (34) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
491	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
492	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
493	Et	O	H	iPr	H	H	H	iPr	H	H	H	
494	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
495	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
496	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
497	Et	O	H	iPr	H	H	H	iPr	H	H	H	
498	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
499	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
500	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
501	Et	O	H	iPr	H	H	H	iPr	H	H	H	
502	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

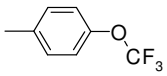
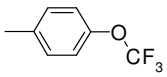
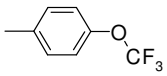
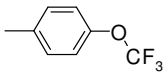
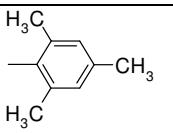
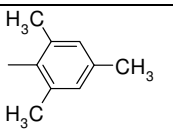
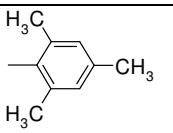
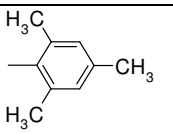
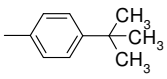
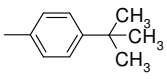
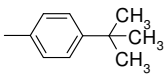
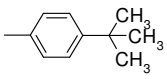
Compound (35) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
503	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
504	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
505	Et	O	H	iPr	H	H	H	iPr	H	H	H	
506	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
507	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
508	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
509	Et	O	H	iPr	H	H	H	iPr	H	H	H	
510	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
511	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
512	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
513	Et	O	H	iPr	H	H	H	iPr	H	H	H	

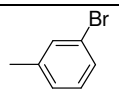
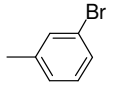
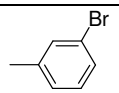
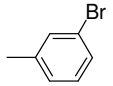
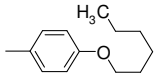
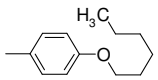
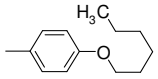
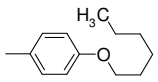
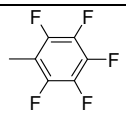
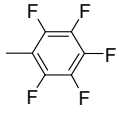
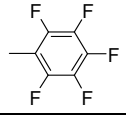
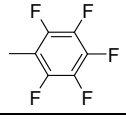
Compound (36) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
514	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
515	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
516	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
517	Et	O	H	iPr	H	H	H	iPr	H	H	H	
518	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
519	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
520	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
521	Et	O	H	iPr	H	H	H	iPr	H	H	H	
522	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
523	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
524	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

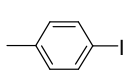
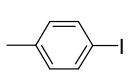
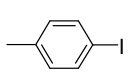
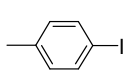
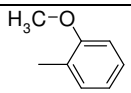
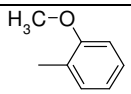
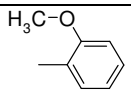
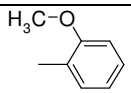
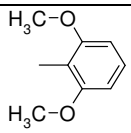
Compound (37) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
525	Et	O	H	iPr	H	H	H	iPr	H	H	H	
526	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
527	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
528	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
529	Et	O	H	iPr	H	H	H	iPr	H	H	H	
530	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
531	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
532	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
533	Et	O	H	iPr	H	H	H	iPr	H	H	H	
534	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
535	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
536	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

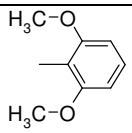
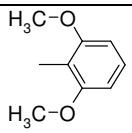
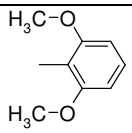
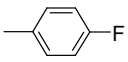
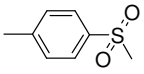
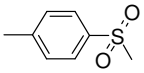
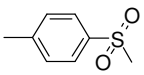
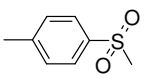
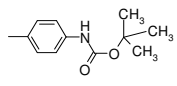
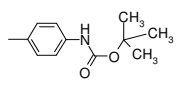
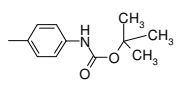
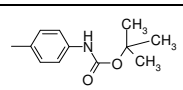
Compound (38) of Formula (1) in Table 1

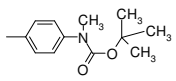
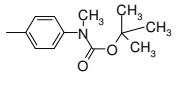
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
537	Et	O	H	iPr	H	H	H	iPr	H	H	H	
538	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
539	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
540	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
541	Et	O	H	iPr	H	H	H	iPr	H	H	H	
542	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
543	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
544	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
545	Et	O	H	iPr	H	H	H	iPr	H	H	H	
546	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
547	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
548	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (39) of Formula (1) in Table 1

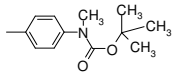
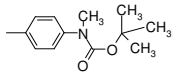
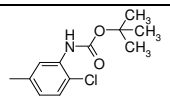
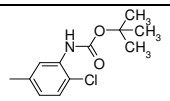
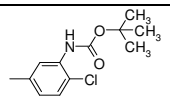
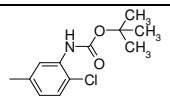
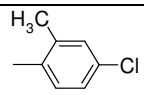
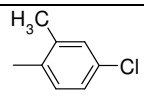
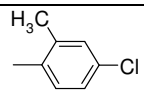
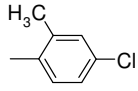
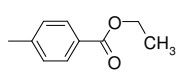
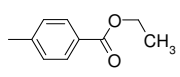
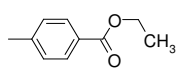
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
549	Et	O	H	iPr	H	H	H	iPr	H	H	H	
550	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
551	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
552	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
553	Et	O	H	iPr	H	H	H	iPr	H	H	H	
554	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
555	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
556	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
557	Et	O	H	iPr	H	H	H	iPr	H	H	H	
558	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
559	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
560	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
561	Et	O	H	iPr	H	H	H	iPr	H	H	H	

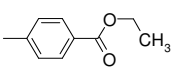
Compound (40) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
562	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
563	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
564	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
565	Me	O	H	iPr	H	H	H	sBu	H	H	H	
566	Et	O	H	iPr	H	H	H	iPr	H	H	H	
567	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
568	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
569	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
570	Et	O	H	iPr	H	H	H	iPr	H	H	H	
571	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
572	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
573	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

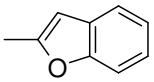
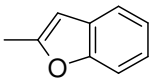
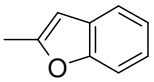
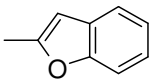
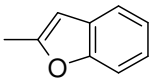
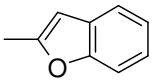
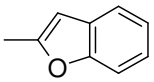
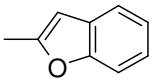
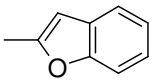
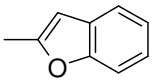
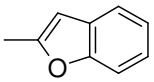
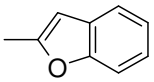
574	Et	O	H	iPr	H	H	H	iPr	H	H	H	
575	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (41) of Formula (1) in Table 1

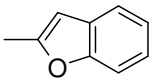
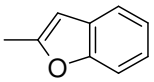
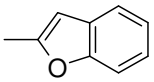
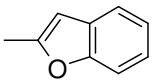
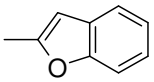
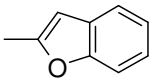
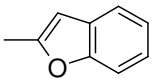
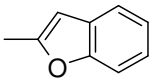
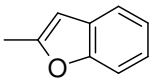
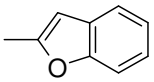
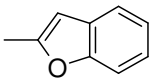
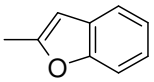
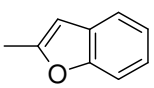
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
576	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
577	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
578	Et	O	H	iPr	H	H	H	iPr	H	H	H	
579	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
580	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
581	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
582	Et	O	H	iPr	H	H	H	iPr	H	H	H	
583	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
584	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
585	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
586	Et	O	H	iPr	H	H	H	iPr	H	H	H	
587	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
588	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

589	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

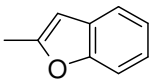
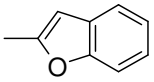
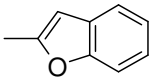
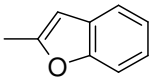
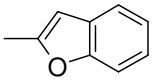
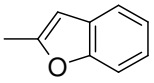
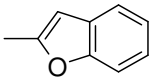
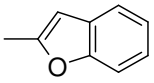
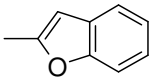
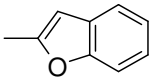
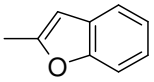
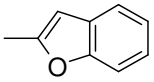
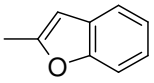
Compound (42) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
590	Et	O	H	H	H	iPr	H	H	H	H	H	
591	iPr	O	H	H	H	iPr	H	H	H	H	H	
592	iBu	O	H	H	H	iPr	H	H	H	H	H	
593	tBu	O	H	H	H	iPr	H	H	H	H	H	
594	Et	O	H	H	H	H	H	iPr	H	H	H	
595	iPr	O	H	H	H	H	H	iPr	H	H	H	
596	iBu	O	H	H	H	H	H	iPr	H	H	H	
597	tBu	O	H	H	H	H	H	iPr	H	H	H	
598	Et	O	H	Me	H	H	H	iPr	H	H	H	
599	iPr	O	H	Me	H	H	H	iPr	H	H	H	
600	iBu	O	H	Me	H	H	H	iPr	H	H	H	
601	tBu	O	H	Me	H	H	H	iPr	H	H	H	

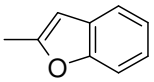
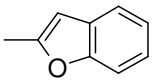
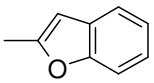
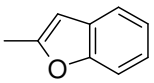
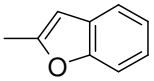
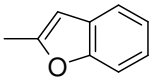
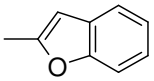
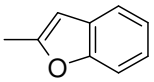
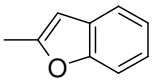
Compound (43) of Formula (1) in Table 1

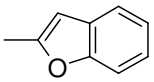
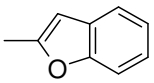
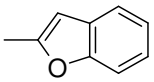
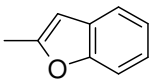
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
602	Et	O	H	Me	Me	H	H	iPr	H	H	H	
603	iPr	O	H	Me	Me	H	H	iPr	H	H	H	
604	iBu	O	H	Me	Me	H	H	iPr	H	H	H	
605	tBu	O	H	Me	Me	H	H	iPr	H	H	H	
606	Et	O	H	Et	H	H	H	iPr	H	H	H	
607	iPr	O	H	Et	H	H	H	iPr	H	H	H	
608	iBu	O	H	Et	H	H	H	iPr	H	H	H	
609	tBu	O	H	Et	H	H	H	iPr	H	H	H	
607	Et	O	H	nPr	H	H	H	iPr	H	H	H	
608	iPr	O	H	nPr	H	H	H	iPr	H	H	H	
609	iBu	O	H	nPr	H	H	H	iPr	H	H	H	
610	tBu	O	H	nPr	H	H	H	iPr	H	H	H	
611	Et	O	H	(S)-sBu	H	H	H	iPr	H	H	H	

Compound (44) of Formula (1) in Table 1

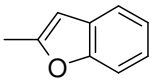
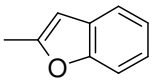
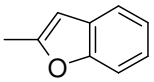
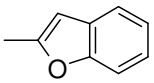
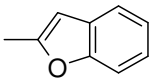
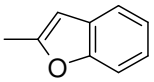
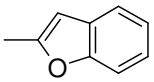
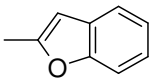
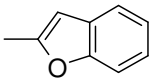
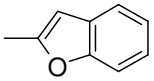
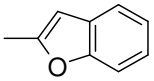
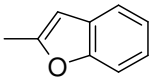
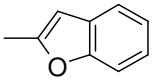
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
612	iPr	O	H	(S)-sBu	H	H	H	iPr	H	H	H	
613	iBu	O	H	(S)-sBu	H	H	H	iPr	H	H	H	
614	tBu	O	H	(S)-sBu	H	H	H	iPr	H	H	H	
615	Et	O	H	Ph	H	H	H	iPr	H	H	H	
616	iPr	O	H	Ph	H	H	H	iPr	H	H	H	
617	iBu	O	H	Ph	H	H	H	iPr	H	H	H	
618	tBu	O	H	Ph	H	H	H	iPr	H	H	H	
619	Et	O	H	Bn	H	H	H	iPr	H	H	H	
620	iPr	O	H	Bn	H	H	H	iPr	H	H	H	
621	iBu	O	H	Bn	H	H	H	iPr	H	H	H	
622	tBu	O	H	Bn	H	H	H	iPr	H	H	H	
623	Et	O	H	H	Bn	H	H	iPr	H	H	H	
624	iPr	O	H	H	Bn	H	H	iPr	H	H	H	

Compound (45) of Formula (1) in Table 1

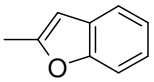
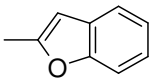
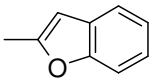
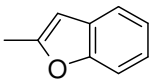
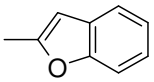
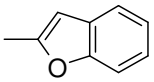
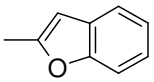
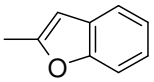
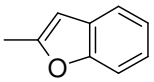
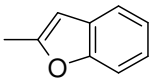
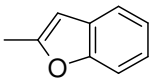
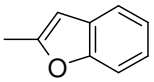
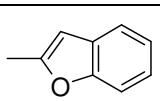
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
625	iBu	O	H	H	Bn	H	H	iPr	H	H	H	
626	tBu	O	H	H	Bn	H	H	iPr	H	H	H	
627	Et	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
628	iPr	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
629	iBu	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
630	tBu	O	H	3-THF, H (racemate)		H	H	iPr	H	H	H	
631	Et	O	H	cHex (R3,R4cyclization)		H	H	iPr	H	H	H	
632	iPr	O	H	cHex (R3,R4cyclization)		H	H	iPr	H	H	H	
633	iBu	O	H	cHex (R3,R4cyclization)		H	H	iPr	H	H	H	

634	tBu	O	H	cHex (R3,R4cyclization)		H	H	iPr	H	H	H	
635	Et	O	H	iPr	H	H	H	H	H	H	H	
636	iPr	O	H	iPr	H	H	H	H	H	H	H	
637	iBu	O	H	iPr	H	H	H	H	H	H	H	

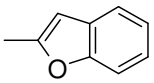
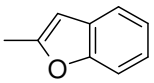
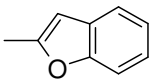
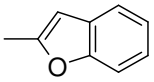
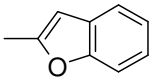
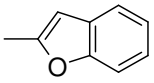
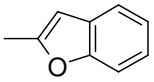
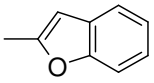
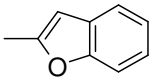
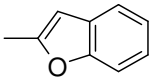
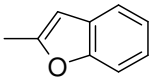
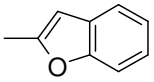
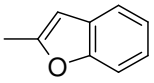
Compound (46) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
638	tBu	O	H	iPr	H	H	H	H	H	H	H	
639	Me	O	H	iPr	H	H	H	Me	H	H	H	
640	Et	O	H	iPr	H	H	H	Me	H	H	H	
641	iPr	O	H	iPr	H	H	H	Me	H	H	H	
642	iBu	O	H	iPr	H	H	H	Me	H	H	H	
643	tBu	O	H	iPr	H	H	H	Me	H	H	H	
644	Bn	O	H	iPr	H	H	H	Me	H	H	H	
645	Me	O	H	iPr	H	H	H, Me (racemate)		H	H	H	
646	Et	O	H	iPr	H	H	H, Me (racemate)		H	H	H	
647	iPr	O	H	iPr	H	H	H, Me (racemate)		H	H	H	
648	iBu	O	H	iPr	H	H	H, Me (racemate)		H	H	H	
649	tBu	O	H	iPr	H	H	H, Me (racemate)		H	H	H	
650	Et	O	H	iPr	H	H	H	Et	H	H	H	

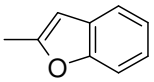
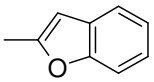
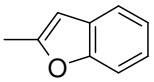
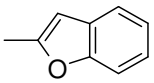
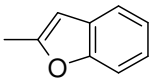
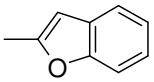
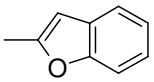
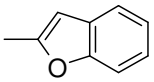
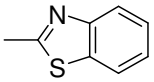
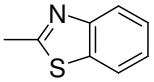
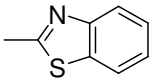
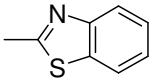
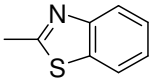
Compound (47) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
651	iPr	O	H	iPr	H	H	H	Et	H	H	H	
652	iBu	O	H	iPr	H	H	H	Et	H	H	H	
653	tBu	O	H	iPr	H	H	H	Et	H	H	H	
654	Et	O	H	iPr	H	H	H	nPr	H	H	H	
655	iPr	O	H	iPr	H	H	H	nPr	H	H	H	
656	iBu	O	H	iPr	H	H	H	nPr	H	H	H	
657	tBu	O	H	iPr	H	H	H	nPr	H	H	H	
658	Et	O	H	iPr	H	H	iPr	H	H	H	H	
659	iPr	O	H	iPr	H	H	iPr	H	H	H	H	
660	iBu	O	H	iPr	H	H	iPr	H	H	H	H	
661	tBu	O	H	iPr	H	H	iPr	H	H	H	H	
662	Me	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
663	Et	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	

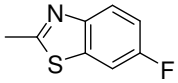
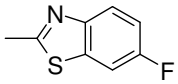
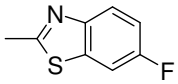
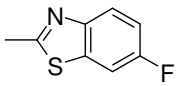
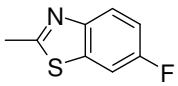
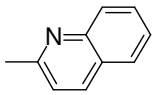
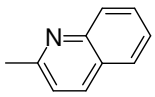
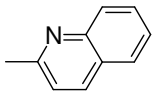
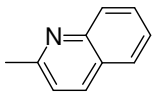
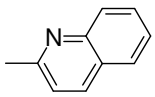
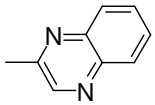
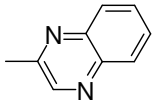
Compound (48) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
664	iPr	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
665	iBu	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
666	tBu	O	H	iPr	H	H	H, iPr (racemate)		H	H	H	
667	Et	O	H	iPr	H	H	H	H	iPr	H	H	
668	iPr	O	H	iPr	H	H	H	H	iPr	H	H	
669	iBu	O	H	iPr	H	H	H	H	iPr	H	H	
670	tBu	O	H	iPr	H	H	H	H	iPr	H	H	
671	Et	O	H	iPr	H	H	H	H	H	iPr	H	
672	iPr	O	H	iPr	H	H	H	H	H	iPr	H	
673	iBu	O	H	iPr	H	H	H	H	H	iPr	H	
674	tBu	O	H	iPr	H	H	H	H	H	iPr	H	
675	Bn	O	H	iPr	H	H	H	H	H	iPr	H	
676	Et	O	H	iPr	H	H	H	iBu	H	H	H	

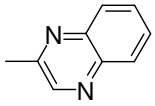
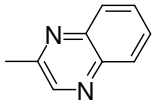
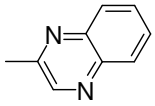
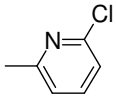
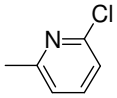
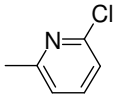
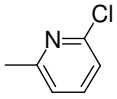
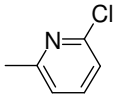
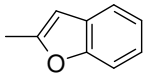
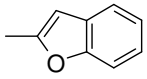
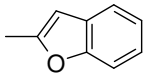
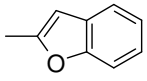
Compound (49) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
677	iPr	O	H	iPr	H	H	H	iBu	H	H	H	
678	iBu	O	H	iPr	H	H	H	iBu	H	H	H	
679	tBu	O	H	iPr	H	H	H	iBu	H	H	H	
680	Me	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
681	Et	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
682	iPr	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
683	iBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
684	tBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
685	Me	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
686	Et	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
687	iPr	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
688	iBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
689	tBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	

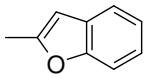
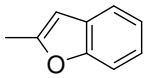
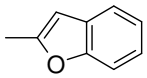
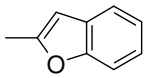
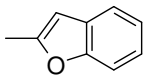
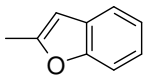
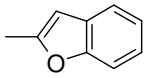
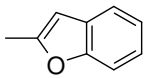
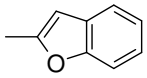
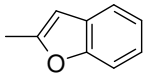
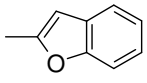
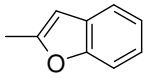
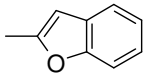
Compound (50) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
690	Me	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
691	Et	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
692	iPr	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
693	iBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
694	tBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
695	Me	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
696	Et	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
697	iPr	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
698	iBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
699	tBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
700	Me	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
701	Et	O	H	iPr	H	H	H	(S)-iBu	H	H	H	

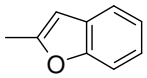
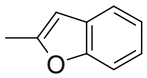
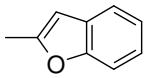
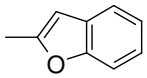
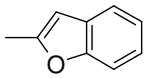
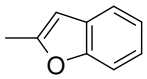
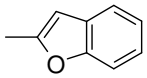
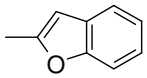
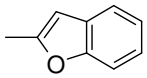
Compound (51) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
702	iPr	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
703	iBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
704	tBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
705	Me	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
706	Et	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
707	iPr	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
708	iBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
709	tBu	O	H	iPr	H	H	H	(S)-iBu	H	H	H	
710	Me	O	H	iPr	H	H	H	tBu	H	H	H	
711	Et	O	H	iPr	H	H	H	tBu	H	H	H	
712	iPr	O	H	iPr	H	H	H	tBu	H	H	H	
713	iBu	O	H	iPr	H	H	H	tBu	H	H	H	

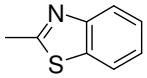
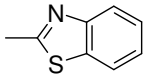
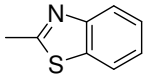
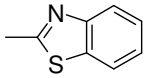
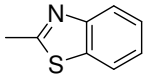
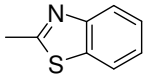
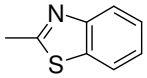
Compound (52) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
714	tBu	O	H	iPr	H	H	H	tBu	H	H	H	
715	Me	O	H	iPr	H	H	H	3-pentyl	H	H	H	
716	Et	O	H	iPr	H	H	H	3-pentyl	H	H	H	
717	iPr	O	H	iPr	H	H	H	3-pentyl	H	H	H	
718	iBu	O	H	iPr	H	H	H	3-pentyl	H	H	H	
719	tBu	O	H	iPr	H	H	H	3-pentyl	H	H	H	
733	Et	O	H	iPr	H	H	Me	Me	H	H	H	
734	iPr	O	H	iPr	H	H	Me	Me	H	H	H	
735	iBu	O	H	iPr	H	H	Me	Me	H	H	H	
736	tBu	O	H	iPr	H	H	Me	Me	H	H	H	
737	Et	O	H	iPr	H	H	H	Me	Me	H	H	
738	iPr	O	H	iPr	H	H	H	Me	Me	H	H	
739	iBu	O	H	iPr	H	H	H	Me	Me	H	H	

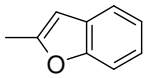
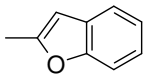
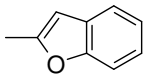
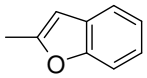
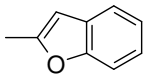
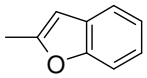
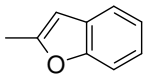
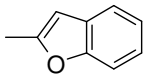
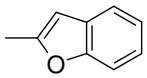
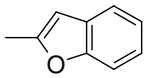
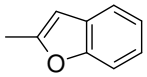
Compound (53) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
740	tBu	O	H	iPr	H	H	H	Me	Me	H	H	
741	Et	O	H	iPr	H	H	H	H	Me	Me	H	
742	iPr	O	H	iPr	H	H	H	H	Me	Me	H	
743	iBu	O	H	iPr	H	H	H	H	Me	Me	H	
744	tBu	O	H	iPr	H	H	H	H	Me	Me	H	
749	Et	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
750	iPr	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
751	iBu	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	
752	tBu	O	H	iPr	H	H	CF3, H (racemate)		H	H	H	

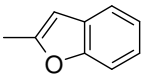
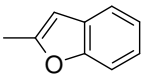
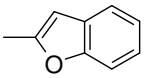
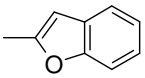
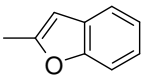
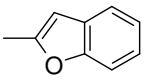
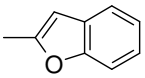
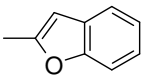
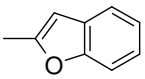
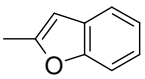
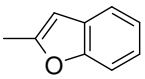
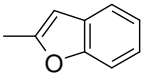
Compound (54) of Formula (1) in Table 1

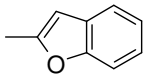
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
761	Et	O	H	iPr	H	H	H	iPr	H	H	H	
762	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
763	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
764	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
765	iPr	O	H	iPr	H	Me	H	iPr	H	H	H	
766	iPr	O	H	iPr	H	Ac	H	iPr	H	H	H	
767	iPr	O	H	iPr	H	Bz	H	iPr	H	H	H	

Compound (55) of Formula (1) in Table 1

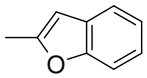
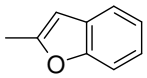
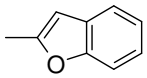
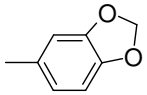
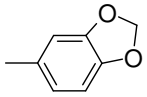
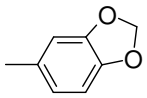
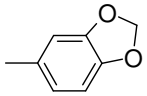
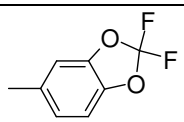
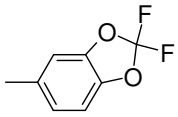
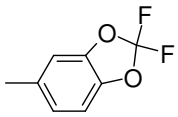
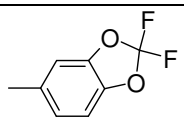
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
768	Me	O	H	iPr	H	H	H	iPr	H	H	H	
769	Et	O	H	iPr	H	H	H	iPr	H	H	H	
770	CF3CH2	O	H	iPr	H	H	H	iPr	H	H	H	
771	nPr	O	H	iPr	H	H	H	iPr	H	H	H	
772	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
773	nBu	O	H	iPr	H	H	H	iPr	H	H	H	
774	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
775	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
776	Ph	O	H	iPr	H	H	H	iPr	H	H	H	
777	Bn	O	H	iPr	H	H	H	iPr	H	H	H	
778	MOE	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (56) of Formula (1) in Table 1

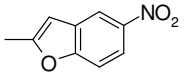
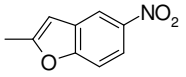
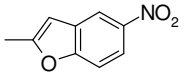
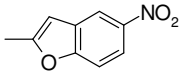
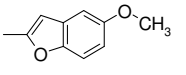
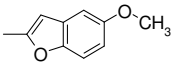
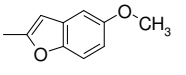
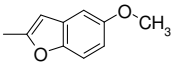
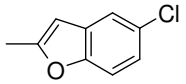
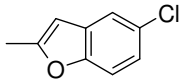
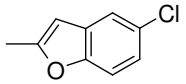
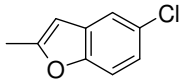
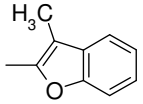
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
779	vinyl	O	H	iPr	H	H	H	iPr	H	H	H	
780	allyl	O	H	iPr	H	H	H	iPr	H	H	H	
781	propargyl	O	H	iPr	H	H	H	iPr	H	H	H	
782	3-THF	O	H	iPr	H	H	H	iPr	H	H	H	
783	THF-2-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
784	THF-3-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
785	cPr-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
786	4,5-DEP-2-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
787	3-franyl-CH2	O	H	iPr	H	H	H	iPr	H	H	H	
788	ClCH2	O	H	iPr	H	H	H	iPr	H	H	H	
789	CH3CHCl	O	H	iPr	H	H	H	iPr	H	H	H	
790	Et	S	H	iPr	H	H	H	iPr	H	H	H	

791	iPr	S	H	iPr	H	H	H	iPr	H	H	H	

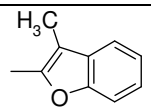
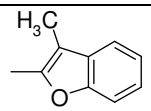
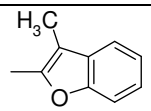
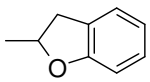
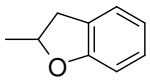
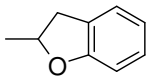
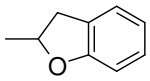
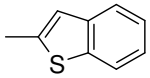
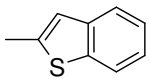
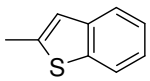
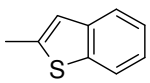
Compound (57) of Formula (1) in Table 1

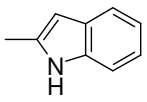
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
792	iPr	O	Me	iPr	H	H	H	iPr	H	H	H	
793	iPr	O	Ac	iPr	H	H	H	iPr	H	H	H	
794	iPr	O	Bz	iPr	H	H	H	iPr	H	H	H	
795	Et	O	H	iPr	H	H	H	iPr	H	H	H	
796	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
797	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
798	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
799	Et	O	H	iPr	H	H	H	iPr	H	H	H	
800	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
801	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
802	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (58) of Formula (1) in Table 1

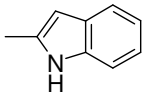
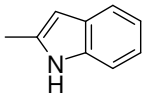
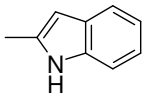
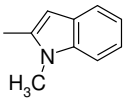
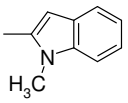
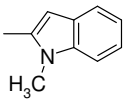
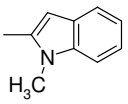
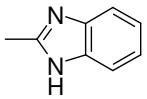
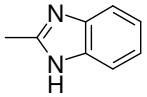
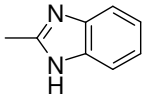
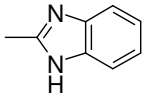
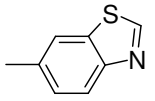
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
803	Et	O	H	iPr	H	H	H	iPr	H	H	H	
804	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
805	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
806	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
807	Et	O	H	iPr	H	H	H	iPr	H	H	H	
808	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
809	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
810	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
811	Et	O	H	iPr	H	H	H	iPr	H	H	H	
812	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
813	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
814	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
815	Et	O	H	iPr	H	H	H	iPr	H	H	H	

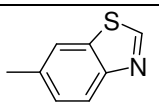
Compound (59) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
816	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
817	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
818	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
819	Et	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
820	iPr	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
821	iBu	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
822	tBu	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
823	Et	O	H	iPr	H	H	H	iPr	H	H	H	
824	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
825	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
826	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

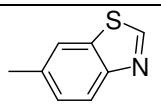
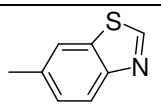
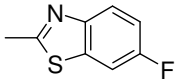
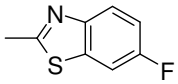
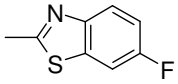
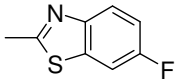
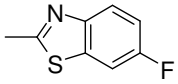
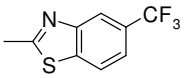
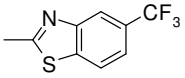
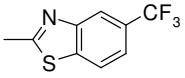
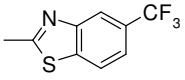
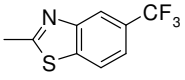
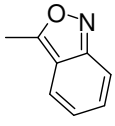
827	Et	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (60) of Formula (1) in Table 1

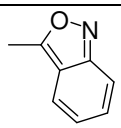
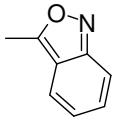
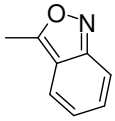
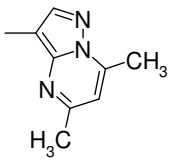
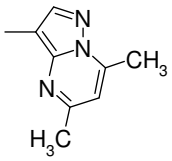
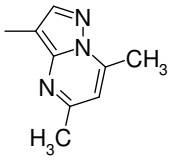
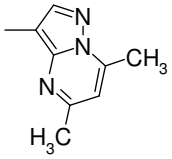
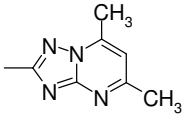
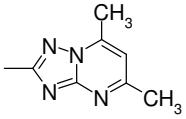
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
828	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
829	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
830	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
831	Et	O	H	iPr	H	H	H	iPr	H	H	H	
832	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
834	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
835	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
836	Et	O	H	iPr	H	H	H	iPr	H	H	H	
837	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
838	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
839	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
840	Et	O	H	iPr	H	H	H	iPr	H	H	H	

841	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

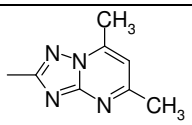
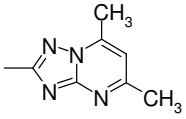
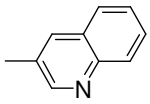
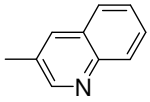
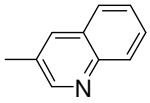
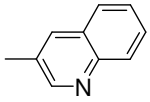
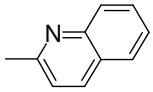
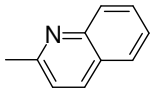
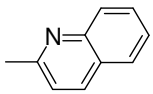
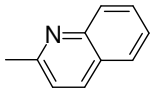
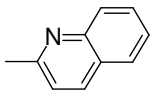
Compound (61) of Formula (1) in Table 1

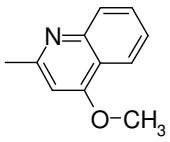
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
842	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
843	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
844	Me	O	H	iPr	H	H	H	iPr	H	H	H	
845	Et	O	H	iPr	H	H	H	iPr	H	H	H	
846	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
847	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
848	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
849	Me	O	H	iPr	H	H	H	iPr	H	H	H	
850	Et	O	H	iPr	H	H	H	iPr	H	H	H	
851	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
852	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
853	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
854	Et	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (62) of Formula (1) in Table 1

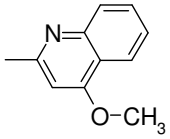
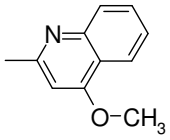
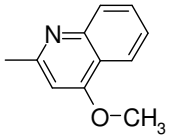
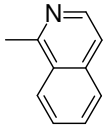
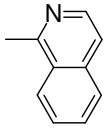
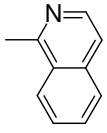
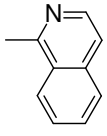
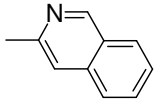
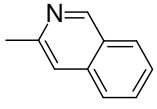
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
855	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
856	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
857	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
858	Et	O	H	iPr	H	H	H	iPr	H	H	H	
859	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
860	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
861	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
862	Et	O	H	iPr	H	H	H	iPr	H	H	H	
863	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

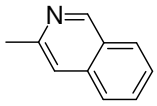
Compound (63) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
864	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
865	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
866	Et	O	H	iPr	H	H	H	iPr	H	H	H	
867	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
868	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
869	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
870	Me	O	H	iPr	H	H	H	iPr	H	H	H	
871	Et	O	H	iPr	H	H	H	iPr	H	H	H	
872	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
873	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
874	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

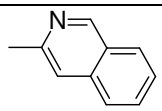
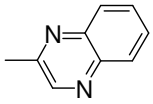
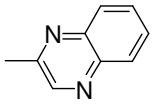
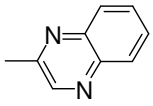
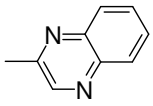
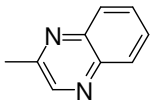
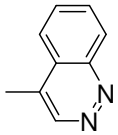
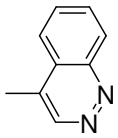
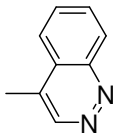
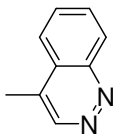
875	Et	O	H	iPr	H	H	H	iPr	H	H	H	

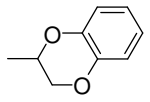
Compound (64) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
876	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
877	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
878	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
879	Et	O	H	iPr	H	H	H	iPr	H	H	H	
880	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
881	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
882	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
883	Et	O	H	iPr	H	H	H	iPr	H	H	H	
884	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

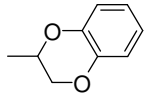
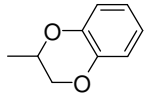
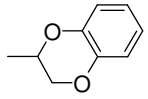
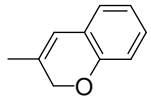
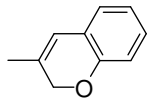
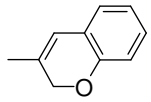
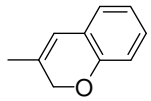
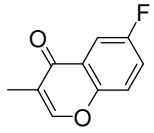
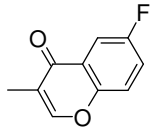
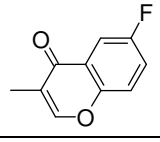
885	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

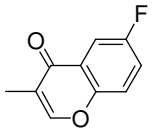
Compound (65) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
886	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
887	Me	O	H	iPr	H	H	H	iPr	H	H	H	
888	Et	O	H	iPr	H	H	H	iPr	H	H	H	
889	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
890	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
891	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
892	Et	O	H	iPr	H	H	H	iPr	H	H	H	
893	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
894	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
895	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

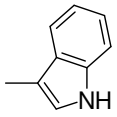
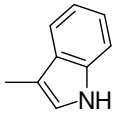
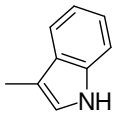
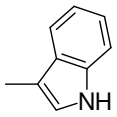
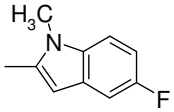
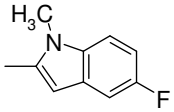
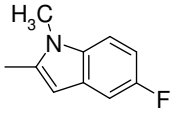
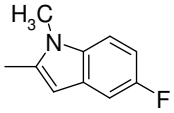
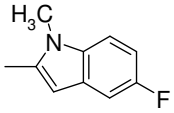
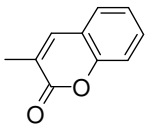
896	Et	O	H	iPr	H	H	H	iPr	H	H	H	 racemate

Compound (66) of Formula (1) in Table 1

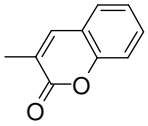
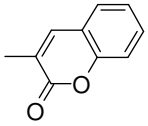
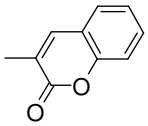
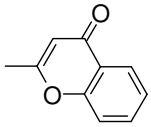
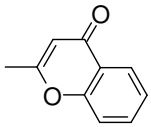
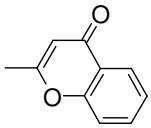
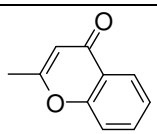
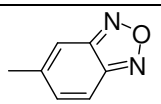
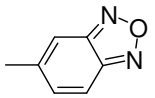
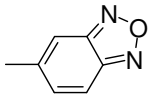
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
897	iPr	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
898	iBu	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
899	tBu	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
900	Et	O	H	iPr	H	H	H	iPr	H	H	H	
901	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
902	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
903	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
904	Et	O	H	iPr	H	H	H	iPr	H	H	H	
905	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
906	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

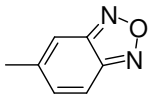
907	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (67) of Formula (1) in Table 1

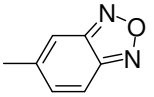
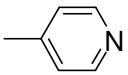
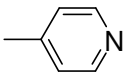
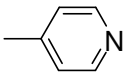
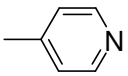
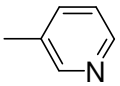
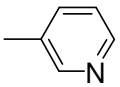
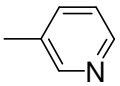
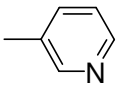
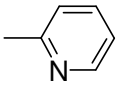
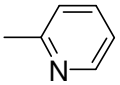
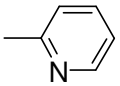
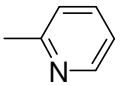
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
908	Et	O	H	iPr	H	H	H	iPr	H	H	H	
909	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
910	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
911	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
912	Me	O	H	iPr	H	H	H	iPr	H	H	H	
913	Et	O	H	iPr	H	H	H	iPr	H	H	H	
914	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
915	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
916	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
917	Et	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (68) of Formula (1) in Table 1

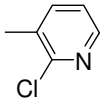
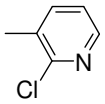
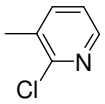
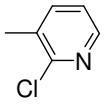
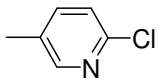
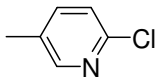
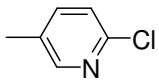
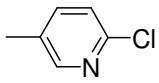
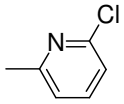
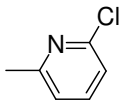
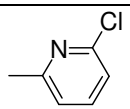
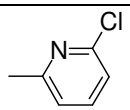
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
918	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
919	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
920	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
921	Et	O	H	iPr	H	H	H	iPr	H	H	H	
922	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
923	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
924	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
925	Me	O	H	iPr	H	H	H	iPr	H	H	H	
926	Et	O	H	iPr	H	H	H	iPr	H	H	H	
927	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

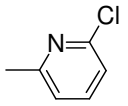
928	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (69) of Formula (1) in Table 1

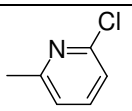
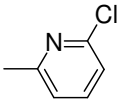
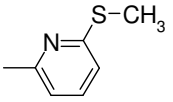
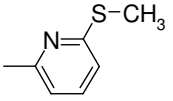
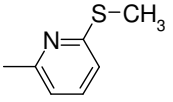
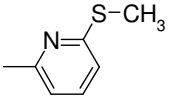
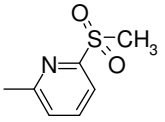
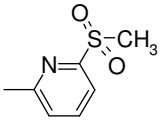
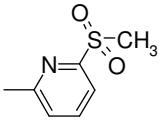
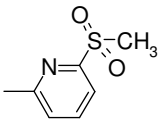
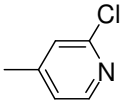
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
929	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
930	Et	O	H	iPr	H	H	H	iPr	H	H	H	
931	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
932	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
933	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
934	Et	O	H	iPr	H	H	H	iPr	H	H	H	
935	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
936	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
937	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
938	Et	O	H	iPr	H	H	H	iPr	H	H	H	
939	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
940	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
941	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

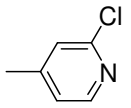
Compound (70) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
942	Et	O	H	iPr	H	H	H	iPr	H	H	H	
943	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
944	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
945	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
946	Et	O	H	iPr	H	H	H	iPr	H	H	H	
947	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
948	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
949	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
950	Et	O	H	iPr	H	H	H	iPr	H	H	H	
951	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
952	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
953	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

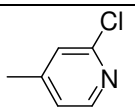
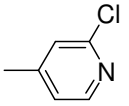
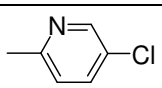
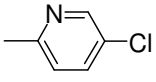
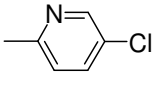
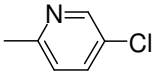
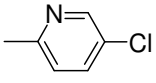
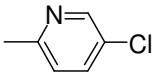
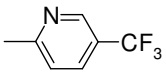
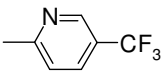
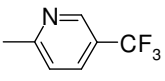
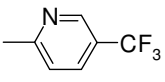
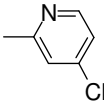
954	iPr	O	H	iPr	H	H	H	iPr	H	H	Me	

Compound (71) of Formula (1) in Table 1

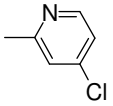
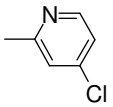
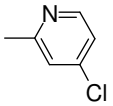
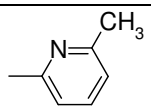
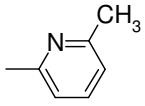
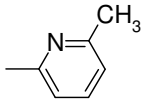
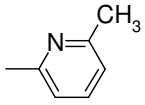
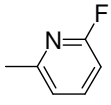
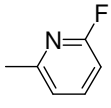
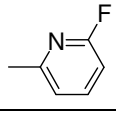
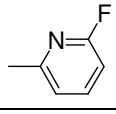
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
955	iPr	O	H	iPr	H	H	H	iPr	H	H	Ac	
956	iPr	O	H	iPr	H	H	H	iPr	H	H	Bz	
957	Et	O	H	iPr	H	H	H	iPr	H	H	H	
958	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
959	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
960	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
961	Et	O	H	iPr	H	H	H	iPr	H	H	H	
962	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
963	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
964	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
965	Et	O	H	iPr	H	H	H	iPr	H	H	H	

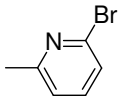
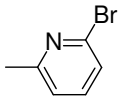
966	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (72) of Formula (1) in Table 1

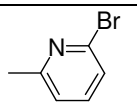
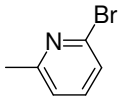
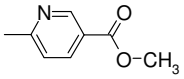
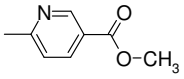
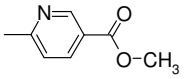
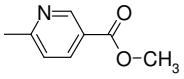
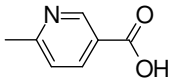
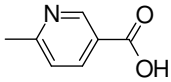
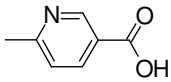
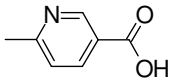
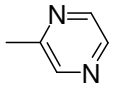
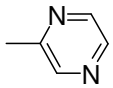
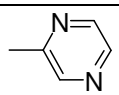
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
967	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
968	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
969	Me	O	H	iPr	H	H	H	iPr	H	H	H	
970	Et	O	H	iPr	H	H	H	iPr	H	H	H	
971	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
972	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
973	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
974	Me	O	H	iPr	H	H	H	iPr	H	H	H	
975	Et	O	H	iPr	H	H	H	iPr	H	H	H	
976	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
977	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
978	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
979	Et	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (73) of Formula (1) in Table 1

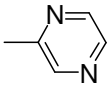
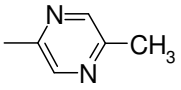
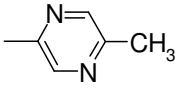
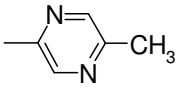
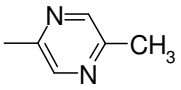
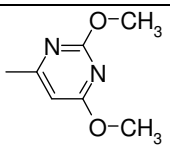
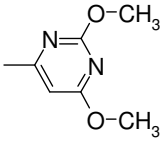
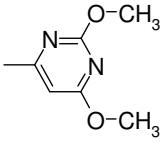
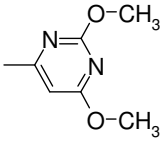
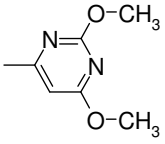
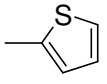
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
980	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
981	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
982	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
983	Et	O	H	iPr	H	H	H	iPr	H	H	H	
984	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
985	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
986	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
987	Et	O	H	iPr	H	H	H	iPr	H	H	H	
988	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
989	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
990	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

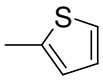
991	Et	O	H	iPr	H	H	H	iPr	H	H	H	
992	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (74) of Formula (1) in Table 1

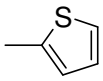
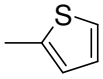
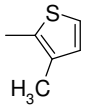
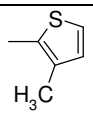
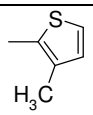
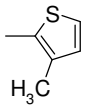
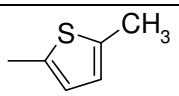
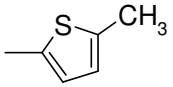
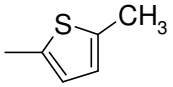
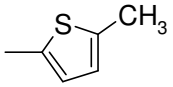
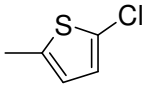
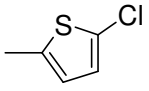
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
993	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
994	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
995	Et	O	H	iPr	H	H	H	iPr	H	H	H	
996	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
997	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
998	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
999	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1000	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1001	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1002	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1003	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1004	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1005	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

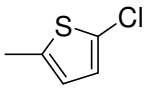
Compound (75) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1006	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1007	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1008	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1009	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1010	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1011	Me	O	H	iPr	H	H	H	iPr	H	H	H	
1012	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1013	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1014	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1015	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1016	Et	O	H	iPr	H	H	H	iPr	H	H	H	

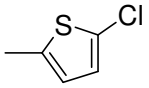
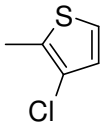
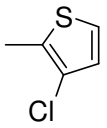
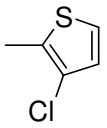
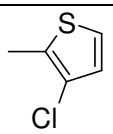
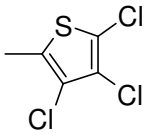
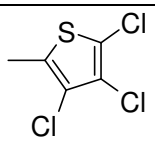
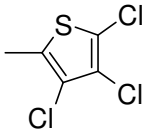
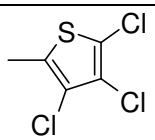
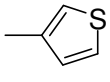
1017	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (76) of Formula (1) in Table 1

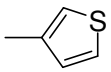
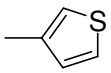
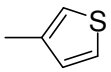
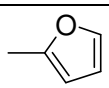
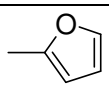
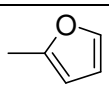
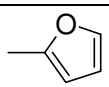
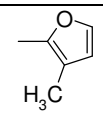
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1018	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1019	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1020	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1021	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1022	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1023	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1024	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1025	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1026	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1027	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1028	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1029	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

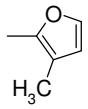
1030	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (77) of Formula (1) in Table 1

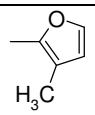
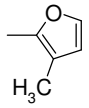
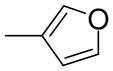
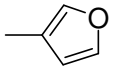
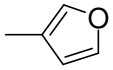
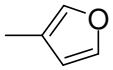
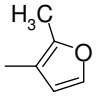
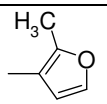
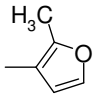
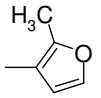
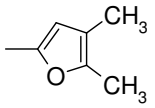
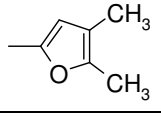
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1031	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1032	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1033	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1034	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1035	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1036	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1037	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1038	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1039	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1040	Et	O	H	iPr	H	H	H	iPr	H	H	H	

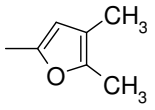
Compound (78) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1041	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1042	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1043	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1044	Et	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
1045	iPr	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
1046	iBu	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
1047	tBu	O	H	iPr	H	H	H	iPr	H	H	H	 racemate
1048	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1049	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1050	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1051	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1052	Et	O	H	iPr	H	H	H	iPr	H	H	H	

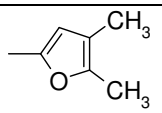
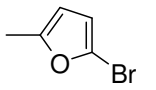
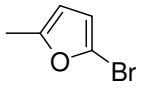
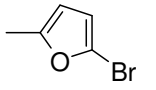
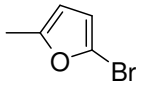
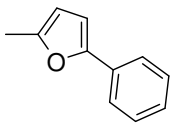
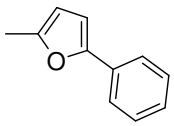
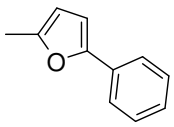
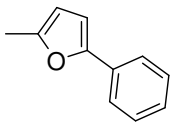
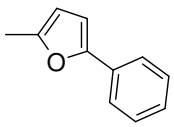
1053	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

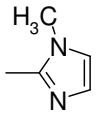
Compound (79) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1054	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1055	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1056	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1057	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1058	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1059	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1060	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1061	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1062	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1063	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1064	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1065	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

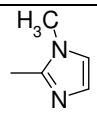
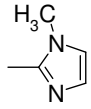
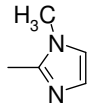
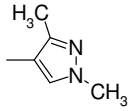
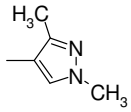
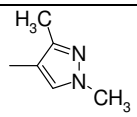
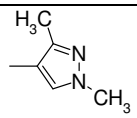
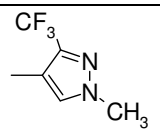
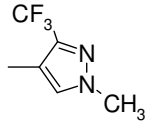
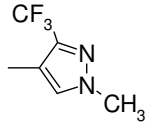
1066	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

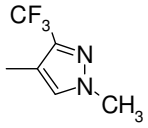
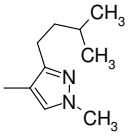
Compound (80) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1067	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1068	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1069	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1070	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1071	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1072	Me	O	H	iPr	H	H	H	iPr	H	H	H	
1073	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1074	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1075	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1076	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

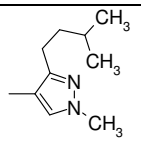
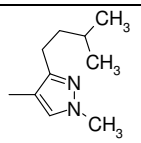
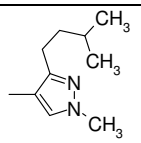
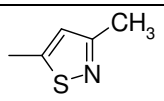
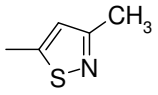
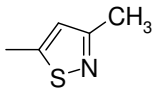
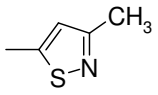
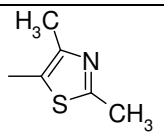
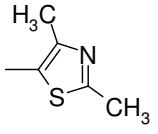
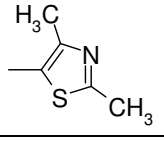
1077	Et	O	H	iPr	H	H	H	iPr	H	H	H	

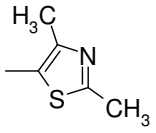
Compound (81) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1078	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1079	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1080	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1081	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1082	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1083	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1084	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1085	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1086	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1087	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

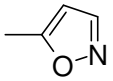
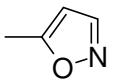
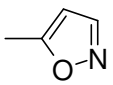
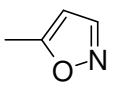
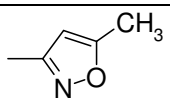
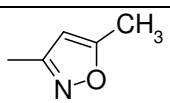
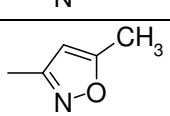
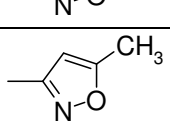
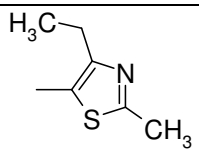
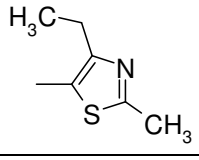
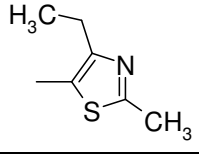
1088	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1089	Et	O	H	iPr	H	H	H	iPr	H	H	H	

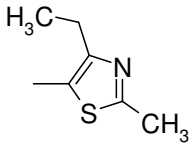
Compound (82) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1090	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1091	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1092	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1093	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1094	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1095	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1096	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1097	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1098	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1099	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

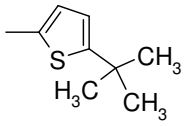
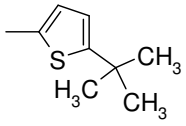
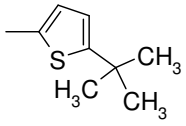
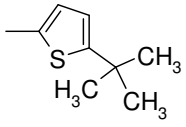
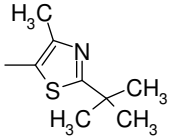
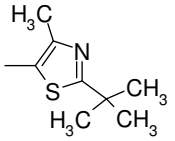
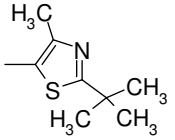
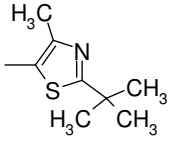
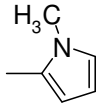
1100	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

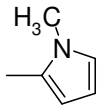
Compound (83) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1101	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1102	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1103	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1104	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1105	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1106	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1107	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1108	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1109	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1110	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1111	iBu	O	H	iPr	H	H	H	iPr	H	H	H	

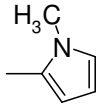
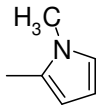
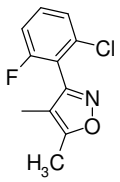
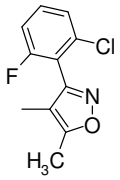
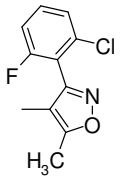
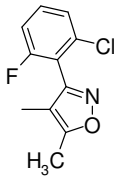
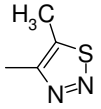
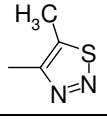
1112	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

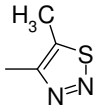
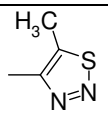
Compound (84) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1113	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1114	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1115	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1116	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1117	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1118	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1119	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1120	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1121	Et	O	H	iPr	H	H	H	iPr	H	H	H	

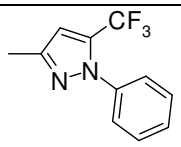
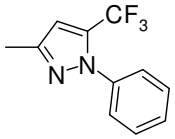
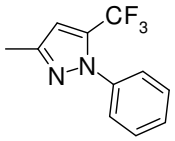
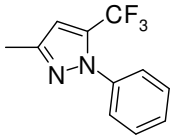
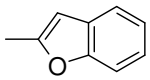
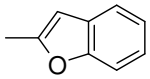
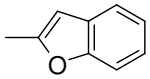
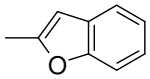
1122	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (85) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1123	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1124	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1125	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1126	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1127	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1128	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1129	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1130	iPr	O	H	iPr	H	H	H	iPr	H	H	H	

1131	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1132	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (86) of Formula (1) in Table 1

Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1133	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1134	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1135	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1136	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1137	Et	O	H	iPr	H	H	H	CF3	H	H	H	
1138	iPr	O	H	iPr	H	H	H	CF3	H	H	H	
1139	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1140	tBu	O	H	iPr	H	H	H	iPr	H	H	H	

Compound (87) of Formula (1) in Table 1

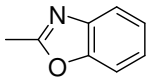
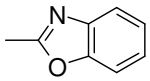
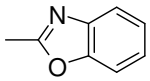
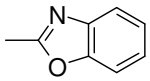
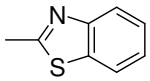
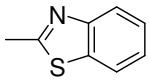
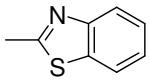
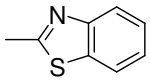
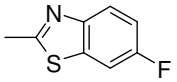
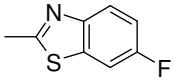
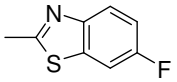
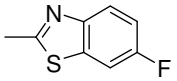
Compound No.	R1	A	R2	R3	R4	R5	R6	R7	R8	R9	R10	Q
1145	Et	O	H	iPr	H	H	H	iPr	H	H	H	
1146	iPr	O	H	iPr	H	H	H	iPr	H	H	H	
1147	iBu	O	H	iPr	H	H	H	iPr	H	H	H	
1148	tBu	O	H	iPr	H	H	H	iPr	H	H	H	
1149	Et	O	H	iPr	H	H	H	Me	H	H	H	
1150	iPr	O	H	iPr	H	H	H	Me	H	H	H	
1151	iBu	O	H	iPr	H	H	H	Me	H	H	H	
1152	tBu	O	H	iPr	H	H	H	Me	H	H	H	
1153	Et	O	H	iPr	H	H	H	Me	H	H	H	
1154	iPr	O	H	iPr	H	H	H	Me	H	H	H	
1155	iBu	O	H	iPr	H	H	H	Me	H	H	H	
1156	tBu	O	H	iPr	H	H	H	Me	H	H	H	

Table 2

Properties of Compound (1) in Table 2

Compound No.	Properties
1	^{1}H-NMR δ ($CDCl_3$, ppm): 1.17-1.20 (9H, m), 2.31 (3H, s), 3.47-3.53 (4H, m), 3.84-3.88 (1H, m), 4.00 (2H, d, J=4.4 Hz), 4.06 (2H, q, J=7.3 Hz), 5.70 (1H, br), 7.15 (2H, d, J=8.3 Hz), 7.47 (1H, br), 7.63 (2H, d, J=8.3 Hz). yellow oil
2	^{1}H-NMR δ ($CDCl_3$, ppm): 1.21-1.27 (12H, m), 2.39 (3H, s), 3.56-3.60 (4H, m), 3.93-3.96 (1H, m), 4.07 (2H, d, J=3.9 Hz), 4.89-4.96 (1H, m), 5.69 (1H, br), 7.23 (2H, d, J=7.8 Hz), 7.54 (1H, br), 7.71 (2H, d, J=7.8 Hz). yellow oil
3	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (6H, d, J=6.8 Hz), 1.20 (6H, d, J=6.8 Hz), 1.82-1.90 (1H, m), 2.32 (3H, s), 3.46-3.54 (4H, m), 3.79 (2H, d, J=6.3 Hz), 3.85-3.89 (1H, m), 4.01 (2H, d, J=4.4 Hz), 5.73 (1H, br), 7.15 (2H, d, J=8.3 Hz), 7.53 (1H, br), 7.65 (2H, d, J=8.3 Hz). yellow oil
4	^{1}H-NMR δ ($CDCl_3$, ppm): 1.24 (6H, d, J=6.3 Hz), 1.44 (9H, s), 2.37 (3H, s), 3.53-3.59 (4H, m), 3.90-3.93 (1H, m), 4.02 (2H, d, J=3.9 Hz), 5.51 (1H, br), 7.22 (2H, d, J=7.8 Hz), 7.44 (1H, br), 7.68 (2H, d, J=7.8 Hz). yellow oil
6	^{1}H-NMR δ ($CDCl_3$, ppm): 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.05 (3H, d, J=6.8 Hz), 1.58-1.94 (4H, m), 2.39 (3H, s), 2.57 (1H, br), 2.89-2.92 (1H, m), 3.08-3.14 (1H, m), 3.47-3.49 (1H, m), 3.57-3.67 (1H, m), 4.01 (1H, br), 6.98 (1H, br), 7.23 (2H, d, J=7.8 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
10	^{1}H-NMR δ ($CDCl_3$, ppm): 0.95-1.00 (6H, m), 1.21 (6H, d, J=6.3 Hz), 1.83-1.89 (1H, m), 2.37 (3H, s), 3.46-3.49 (1H, m), 3.58-3.73 (2H, m), 3.82-3.88 (1H, m), 3.92-3.99 (1H, m), 4.86-4.89 (1H, m), 5.42 (1H, br), 6.68

	(1H, br), 7.13 (1H, br), 7.18–7.19 (2H, m), 7.66 (2H, d, J=8.1 Hz). white solid
14	^{1}H-NMR δ ($CDCl_3$, ppm): 1.22 (6H, d, J=6.3 Hz), 1.39 (6H, s), 2.40 (3H, s), 3.64 (2H, d, J=5.1 Hz), 3.75 (2H, d, J=5.9 Hz), 4.85–4.88 (1H, m), 5.27 (1H, br), 6.53 (1H, br), 7.24 (2H, d, J=8.3 Hz), 7.65 (1H, br), 7.78 (1H, d, J=8.3 Hz). white solid
18	^{1}H-NMR δ ($CDCl_3$, ppm): 0.99 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.3 Hz), 1.19–1.23 (6H, m), 1.28 (3H, d, J=6.8 Hz), 1.84–1.91 (1H, m), 2.38 (3H, s), 3.55–3.58 (2H, m), 3.91–3.98 (1H, m), 4.12–4.16 (1H, m), 4.83–4.90 (1H, m), 5.02 (1H, br), 6.35 (1H, br), 6.92 (1H, br), 7.22 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
19	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (6H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.28 (3H, d, J=6.8 Hz), 1.84–1.92 (2H, m), 2.38 (3H, s), 3.50–3.65 (2H, m), 3.81 (2H, d, J=6.8 Hz), 3.91–3.98 (1H, m), 4.11–4.17 (1H, m), 5.14 (1H, br), 6.35 (1H, d, J=7.8 Hz), 6.88 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid

Properties of Compound (2) in Table 2

Compound No.	Properties
20	^{1}H-NMR δ ($CDCl_3$, ppm): 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.28 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.85-1.90 (1H, m), 2.38 (3H, s), 3.47-3.49 (1H, m), 3.60-3.66 (1H, m), 3.92-3.96 (1H, m), 4.07-4.11 (1H, m), 4.91 (1H, br), 6.41 (1H, br), 7.00 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid
22	^{1}H-NMR δ ($CDCl_3$, ppm): 0.97 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.15 (3H, d, J=6.3 Hz), 1.18 (3H, d, J=6.3 Hz), 1.44 (3H, s), 1.48 (3H, s), 1.84-1.89 (1H, m), 2.38 (3H, s), 3.41-3.47 (1H, m), 3.69-3.70 (1H, m), 3.88-3.96 (1H, m), 4.73-4.78 (1H, m), 5.02 (1H, s), 6.48 (1H, d, J=8.8 Hz), 7.13 (1H, br), 7.20 (2H, d, J=8.3 Hz), 7.74 (2H, d, J=8.3 Hz). white solid
26	^{1}H-NMR δ ($CDCl_3$, ppm): 1.06 (6H, d, J=6.1 Hz), 1.33 (6H, s), 1.47 (6H, s), 2.38 (3H, s), 3.81-3.82 (2H, m), 4.60-4.61 (1H, m), 5.32 (1H, br), 6.24 (1H, br), 7.20 (2H, d, J=8.1 Hz), 7.61 (1H, br), 7.84 (2H, d, J=8.1 Hz). white solid
38	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69-0.79 (3H, m), 0.97-1.01 (6H, m), 1.18-1.28 (6H, m), 1.46-1.51 (1H, m), 1.65-1.73 (3H, m), 1.86-1.91 (1H, m), 2.38 (3H, s), 3.54-3.56 (2H, m), 3.93-3.97 (1H, m), 4.04-4.06 (1H, m), 4.84-4.87 (1H, m), 5.05 (1H, d, J=6.8 Hz), 6.38 (1H, d, J=8.8 Hz), 6.99 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
39	^{1}H-NMR δ ($CDCl_3$, ppm): 0.67-0.76 (3H, m), 0.87 (6H, d, J=6.3 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.17-1.24 (2H, m), 1.45-1.51 (1H, m), 1.66-1.67 (1H, m), 1.84-1.89 (2H, m), 2.36 (3H, s), 3.49-3.52 (2H, m), 3.78 (2H, d, J=6.3 Hz), 3.91-3.93 (1H, m), 4.02-4.03 (1H, m), 5.07 (1H, br), 6.30 (1H, d, J=8.8 Hz), 6.91 (1H, br), 7.19 (2H, d, J=7.8 Hz), 7.66 (2H, d, J=7.8 Hz).

	white solid
40	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.24-1.31 (2H, m), 1.41 (9H, s), 1.44-1.54 (1H, m), 1.68-1.75 (1H, m), 1.86-1.91 (1H, m), 2.38 (3H, s), 3.46-3.49 (1H, m), 3.60-3.64 (1H, m), 3.92-4.00 (2H, m), 4.90 (1H, br), 6.31 (1H, d, J=8.8 Hz), 7.03 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid
42	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76-0.83 (6H, m), 0.95-1.00 (6H, m), 1.12-1.21 (6H, m), 1.32-1.43 (1H, m), 1.48-1.59 (2H, m), 1.80-1.85 (1H, m), 2.36 (3H, s), 3.45-3.51 (1H, m), 3.57-3.64 (1H, m), 3.92-3.98 (1H, m), 4.09-4.15 (1H, m), 4.77-4.85 (1H, m), 5.39 (1H, br), 6.85 (1H, br), 7.16 (2H, d, J=8.1 Hz), 7.33 (1H, br), 7.70 (2H, d, J=8.1 Hz). white solid

Properties of Compound (3) in Table 2

Compound No.	Properties
46	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (9H, s), 0.96-0.99 (6H, m), 1.18-1.22 (6H, m), 1.86-1.91 (1H, m), 2.37 (3H, s), 3.53-3.56 (2H, m), 3.93-3.99 (2H, m), 4.81-4.87 (1H, m), 5.37 (1H, d, J=8.8 Hz), 6.61 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.26 (1H, br), 7.69 (2H, d, J=8.3 Hz). white solid
47	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89-1.00 (21H, m), 1.85-1.93 (2H, m), 2.37 (3H, s), 3.55-3.57 (2H, m), 3.76-3.85 (2H, m), 3.95-3.99 (2H, m), 5.44 (1H, d, J=8.8 Hz), 6.58 (1H, d, J=8.1 Hz), 7.19 (2H, d, J=8.1 Hz), 7.24 (1H, br), 7.69 (2H, d, J=8.1 Hz). white solid
48	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 1.02 (9H, s), 1.44 (9H, s), 1.66-1.73 (1H, m), 2.38 (3H, s), 3.33-3.39 (1H, m), 3.51-3.59 (1H, m), 3.74-3.75 (1H, m), 4.88-4.89 (1H, m), 5.25 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.57 (1H, br), 7.68 (2H, d, J=8.3 Hz), 8.30 (1H, br). white solid
50	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76-0.80 (3H, m), 0.82 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.01-1.12 (2H, m), 1.17 (3H, d, J=6.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.80-1.91 (2H, m), 2.36 (3H, s), 3.44-3.59 (2H, m), 3.88-3.97 (2H, m), 4.80-4.87 (1H, m), 5.00 (1H, br), 6.18 (1H, d, J=7.8 Hz), 7.01 (1H, br), 7.19 (2H, d, J=7.8 Hz), 7.67 (2H, d, J=7.8 Hz). white solid
51	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=7.3 Hz), 0.81 (3H, d, J=7.3 Hz), 0.85 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.3 Hz), 1.04-1.11 (2H, m), 1.85-1.93 (3H, m), 2.38 (3H, s), 3.53-3.56 (2H, m), 3.81 (2H, d, J=6.3 Hz), 3.91-3.99 (2H, m), 5.11 (1H, br), 6.22 (1H, br), 7.00 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
52	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=7.8 Hz), 0.85

	(3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.04–1.12 (1H, m), 1.41 (9H, s), 1.41–1.44 (1H, m), 1.84–1.92 (2H, m), 2.38 (3H, s), 3.42–3.44 (1H, m), 3.65–3.68 (1H, m), 3.86 (1H, dd, J=7.8,6.8 Hz), 3.93–4.00 (1H, m), 4.94 (1H, br), 6.19 (1H, d, J=7.3 Hz), 7.10 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.71 (2H, d, J=8.3 Hz). white solid
54	^{1}H–NMR δ ($CDCl_3$, ppm): 0.80 (3H, t, J=7.3 Hz), 0.84 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01–1.16 (4H, m), 1.20 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.45–1.51 (1H, m), 1.83–1.84 (1H, m), 2.38 (3H, s), 3.52–3.57 (2H, m), 3.90–3.94 (1H, m), 4.01–4.03 (1H, m), 4.83–4.87 (1H, m), 5.03 (1H, br), 6.25 (1H, br), 7.06 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid

Properties of Compound (4) in Table 2

Compound No.	Properties
55	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75-0.97 (18H, m), 0.98-1.22 (4H, m), 1.43-1.51 (2H, m), 1.82-1.83 (1H, m), 2.36 (3H, s), 3.52-3.53 (2H, m), 3.79 (2H, d, J=5.9 Hz), 3.89 (1H, d, J=6.8 Hz), 3.91 (1H, d, J=6.8 Hz), 3.97-4.04 (1H, m), 5.10 (1H, br), 6.24 (1H, br), 7.00 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.67 (2H, d, J=8.3 Hz). white solid
56	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, t, J=7.3 Hz), 0.81 (3H, d, J=6.3 Hz), 0.89-0.97 (8H, m), 1.07-1.23 (2H, m), 1.43 (9H, s), 1.79-1.93 (2H, m), 2.36 (3H, s), 3.45-3.50 (1H, m), 3.55-3.60 (1H, m), 3.85 (1H, dd, J=8.3,6.8 Hz), 3.99-4.01 (1H, m), 5.02 (1H, d, J=7.8 Hz), 6.30 (1H, br), 7.17 (1H, br), 7.18 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
58	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72-0.82 (3H, m), 0.87-0.96 (3H, m), 1.15 (6H, d, J=5.9 Hz), 1.83-1.84 (1H, m), 2.37 (3H, s), 3.43-3.61 (2H, m), 3.86-3.92 (1H, m), 4.77-4.82 (1H, m), 5.03-5.15 (1H, m), 5.70 (1H, br), 6.20 (1/2H, br), 6.28 (1/2H, br), 6.62 (1/2H, br), 6.87 (1/2H, br), 7.12-7.29 (7H, m), 7.48-7.64 (2H, m). white solid
59	^{1}H-NMR δ ($CDCl_3$, ppm): 0.71-0.91 (12H, m), 1.83-1.84 (2H, m), 2.37 (3H, m), 3.44-3.64 (2H, m), 3.74-3.77 (2H, m), 3.89-3.90 (1H, m), 5.03-5.11 (1H, m), 5.85 (1H, br), 6.20 (1/2H, br), 6.28 (1/2H, br), 6.58 (1/2H, br), 6.85 (1/2H, br), 7.12-7.31 (7H, m), 7.49-7.64 (2H, m). white solid
60	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3/2H, d, J=6.8 Hz), 0.86 (3/2H, d, J=6.8 Hz), 0.94 (3/2H, d, J=6.8 Hz), 0.98 (3/2H, d, J=6.8 Hz), 1.39 (9H, s), 1.78-1.89 (1H, m), 2.38 (3/2H, s), 2.40 (3/2H, s), 3.36-3.47 (1H, m), 3.58-3.69 (1H, m), 3.89-3.96 (1H, m), 5.07-5.10 (1H, m), 5.58 (1/2H, d, J=5.9 Hz), 5.62 (1/2H, d, J=5.9 Hz), 6.10 (1/2H, d, J=8.8 Hz), 6.33 (1/2H, br), 6.73 (1/2H, br), 6.89 (1/2H, br), 7.16-7.22 (5H, m), 7.27-

	7.30 (2H, m), 7.56 (2/2H, d, J=8.3 Hz), 7.61 (2/2H, d, J=8.3 Hz). white solid
61	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.87-1.97 (1H, m), 2.41 (3H, t, J=2.4 Hz), 2.43-2.44 (1H, m), 3.47 (1H, br), 3.53 (1H, br), 3.88-3.93 (2H, m), 4.58-4.63 (2H, m), 6.06 (1H, br), 6.51 (1H, br), 7.14-7.33 (7H, m), 7.49-7.52 (1H, m), 7.62-7.65 (1H, m). white crystal m.p. 205.7°C
63	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78-0.90 (6H, m), 1.08-1.16 (6H, m), 1.69-1.81 (1H, m), 2.34 (3/2H, s), 2.36 (3/2H, s), 2.97-3.07 (2H, m), 3.47-3.53 (2H, m), 3.89-3.90 (1H, m), 4.38-4.44 (1H, m), 4.71-4.82 (1H, m), 5.47 (1H, br), 6.76 (1H, d, J=9.0 Hz), 7.07-7.10 (2H, m), 7.11-7.19 (5H, m), 7.38 (1H, br), 7.68-7.71 (2H, m). white solid

Properties of Compound (5) in Table 2

Compound No.	Properties
69	^{1}H-NMR δ ($CDCl_3$, ppm): 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.36 (9H, s), 1.59-1.69 (3H, m), 1.85-1.86 (1H, m), 2.35 (3H, s), 3.45-4.11 (7H, m), 5.10 (1H, br), 7.18-7.20 (2H, m), 7.66-7.68 (2H, m). white solid
75	^{1}H-NMR δ ($CDCl_3$, ppm): 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20 (6H, d, J=6.4 Hz), 1.86-1.90 (1H, m), 1.96 (1H, t, J=2.4 Hz), 2.36 (3H, s), 2.52-2.59 (1H, m), 2.73-2.79 (1H, m), 3.45-3.52 (1H, m), 3.60-3.66 (1H, m), 3.95-3.99 (1H, m), 4.24-4.30 (1H, m), 4.83-4.90 (1H, m), 5.28-5.34 (1H, m), 6.43 (1H, d, J=8.8 Hz), 6.87 (1H, br), 7.19 (2H, d, J=7.8 Hz), 7.66 (2H, d, J=7.8 Hz). white crystal m.p. 185.3°C.
76	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-0.90 (6H, m), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.85-1.91 (2H, m), 1.96 (1H, s), 2.36 (3H, s), 2.53-2.60 (1H, m), 2.73-2.79 (1H, m), 3.47-3.62 (2H, m), 3.81 (2H, d, J=6.3 Hz), 3.92-3.99 (1H, m), 4.23-4.28 (1H, m), 5.41 (1H, br), 6.46 (1H, d, J=8.3 Hz), 6.85 (1H, br), 7.19 (2H, d, J=7.8 Hz), 7.66 (2H, d, J=7.8 Hz). white crystal m.p. 215.1°C.
95	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J= 6.8 Hz), 0.93 (3H, d, J= 6.8 Hz), 1.18 (3H, d, J= 6.1 Hz), 1.23 (3H, d, J= 6.1 Hz), 2.14 (1H, septet, J= 6.8 Hz), 2.39 (3H, s), 3.47-3.65 (4H, m), 3.90-3.94 (1H, m), 4.83-4.86 (1H, m), 5.09 (1H, br), 6.70 (1H, br), 7.07 (1H, br), 7.22 (2H, d, J= 8.1 Hz), 7.71 (2H, d, J= 8.1 Hz). white solid
113	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78-0.95 (6H, m), 1.18 (3H, t, J=7.3 Hz), 2.11-2.20 (1H, m), 2.39 (3H, s), 3.82-3.87 (1H, m), 3.90-3.98 (1H, m), 4.01-4.10 (2H, m), 4.80-4.86 (1H, m), 5.07 (1/2H, br), 5.15 (1/2H, br), 6.04-6.10 (1H, m), 6.84 (1/2H , br), 6.93 (1/2H, br), 7.20-7.25 (2H, m), 7.63-7.68 (2H, m). white solid
114	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-0.94 (6H, m), 1.11-1.25

	(6H, m), 2.09-2.17 (1H, m), 2.39 (3H, s), 3.80-4.02 (3H, m), 4.73-4.88 (2H, m), 5.02 (1/2H, d, J=6.8 Hz), 5.10 (1/2H, d), 6.64 (1H, br), 6.85-6.92 (1H, m), 7.21 (2H, d, J=8.3 Hz), 7.66 (2H, d, J=8.3 Hz). white solid
115	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-0.95 (12H, m), 1.80-1.87 (1H, m), 2.08-2.17 (1H, m), 2.39 (3H, s), 3.62-4.02 (5H, m), 4.80-4.86 (1H, m), 5.19 (1H, d, J=6.8 Hz), 6.65 (1H, br), 6.91 (1H, d), 7.21 (2H, d, J=7.8 Hz), 7.65 (2H, d, J=7.8 Hz). APCI-MS M^+: 446. white solid
121	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.37 (3H, s), 1.42 (3H, s), 2.07-2.10 (1H, m), 2.40 (3H, s), 3.61-3.67 (2H, m), 3.65 (3H, s), 3.78 (1H, dd, J=7.8 Hz), 5.24 (1H, d, J=6.8 Hz), 6.44 (1H, br), 7.24 (2H, d, J=7.8 Hz), 7.54 (1H, br), 7.79 (2H, d, J=7.8 Hz). white solid

Properties of Compound (6) in Table 2

Compound No.	Properties
123	^{1}H-NMR δ ($CDCl_3$, ppm): 0.93 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.15 (3H, d, J=6.1 Hz), 1.22 (3H, d, J=6.1 Hz), 1.34 (3H, s), 1.39 (3H, s), 2.02-2.07 (1H, m), 2.38 (3H, s), 3.62-3.65 (2H, m), 3.77-3.80 (1H, m), 4.79-4.82 (1H, m), 5.40 (1H, d, J=7.1 Hz), 6.74 (1H, br), 7.21 (2H, d, J=8.1 Hz), 7.81 (2H, d, J=8.1 Hz), 7.92 (1H, br). white solid
124	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.34 (3H, s), 1.39 (3H, s), 2.04-2.09 (1H, m), 2.38 (3H, s), 3.55-3.68 (2H, m), 3.82 (1H, dd, J=7.8,6.8 Hz), 4.47-4.56 (2H, m), 5.18 (1H, d, J=10.1 Hz), 5.26 (1H, d, J=17.1 Hz), 5.59 (1H, d, J=7.8 Hz), 5.81-5.90 (1H, m), 6.79 (1H, br), 7.21 (2H, d, J=7.8 Hz), 7.78 (2H, d, J=7.8 Hz), 7.82 (1H, br). white solid
125	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.3 Hz), 0.89 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 1.37 (3H, s), 1.41 (3H, s), 1.84-1.93 (1H, m), 2.07-2.18 (1H, m), 2.39 (3H, s), 3.66-3.85 (5H, m), 5.16 (1H, d, J=6.3 Hz), 6.26 (1H, br), 7.23 (2H, d, J=8.3 Hz), 7.55 (1H, br), 7.80 (2H, d, J=8.3 Hz). yellow oil
126	^{1}H-NMR δ ($CDCl_3$, ppm): 0.94 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.34 (3H, s), 1.40 (9H, s), 1.42 (3H, s), 2.08-2.09 (1H, m), 2.39 (3H, s), 2.84-2.85 (1H, m), 3.64-3.70 (2H, m), 5.00 (1H, br), 6.15 (1H, br), 7.23 (2H, d, J=8.3 Hz), 7.68 (1H, br), 7.84 (2H, d, J=8.3 Hz). white solid
127	^{1}H-NMR δ ($CDCl_3$, ppm): 0.93 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.37 (3H, s), 1.40 (3H, s), 1.50-1.55 (1H, m), 1.84-1.96 (3H, m), 2.07-2.12 (1H, m), 2.39 (3H, s), 3.65-3.68 (2H, m), 3.75-3.78 (2H, m), 3.83-3.95 (2H, m), 4.03-4.08 (2H, m), 5.29 (1H, br), 6.27 (1H, br), 7.23 (2H, d, J=8.3 Hz), 7.60 (1H, br),

	7.79 (2H, d, J=8.3 Hz). white solid
128	^{1}H-NMR δ ($CDCl_3$, ppm): 0.93 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.38 (3H, s), 1.42 (3H, s), 1.57-1.63 (2H, m), 1.96-2.03 (1H, m), 2.40 (3H, s), 2.52-2.53 (1H, m), 3.52-3.57 (1H, m), 3.61-3.65 (1H, m), 3.69-3.86 (4H, m), 3.92-3.96 (2H, m), 4.03-4.08 (1H, m), 5.22 (1H, br), 6.40 (1H, br), 7.24 (2H, d, J=7.8 Hz), 7.47 (1H, br), 7.78 (2H, d, J=7.8 Hz). white solid
129	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90-0.98 (6H, m), 1.31-1.35 (3H, m), 1.43-1.47 (3H, m), 1.53 (3H, d, J=6.3 Hz), 2.06-2.09 (1H, m), 2.40 (3H, s), 3.53-3.57 (1H, m), 3.68-3.72 (2H, m), 5.24 (1H, d, J=6.8 Hz), 5.68 (1H, q, J=6.3 Hz), 6.12 (1/2H, br), 6.25 (1/2H, br), 7.22-7.35 (7H, m), 7.75 (2H, d, J=8.3 Hz). white solid

Properties of Compound (7) in Table 2

Compound No.	Properties
131	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91-0.96 (6H, m), 1.15 (3H, d, J=6.1 Hz), 1.22 (3H, d, J=6.1 Hz), 1.34 (3H, s), 1.39 (3H, s), 2.02-2.07 (1H, m), 2.38 (3H, s), 3.61-3.65 (2H, m), 3.80 (1H, t, J=7.3 Hz), 4.77-4.83 (1H, m), 5.49 (1H, d, J=7.6 Hz), 6.86 (1H, br), 7.20 (2H, d, J=8.1 Hz), 7.81 (2H, d, J=8.1 Hz), 7.98 (1H, br). white solid
135	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.3 Hz), 0.92 (3H, d, J=6.8 Hz), 0.95-0.99 (3H, m), 1.12 (3H, d, J=6.1 Hz), 1.21 (3H, d, J=6.1 Hz), 1.48-1.55 (1H, m), 1.61-1.67 (1H, m), 2.09-2.14 (1H, m), 2.37 (3H, s), 3.46-3.49 (1H, m), 3.54-3.61 (1H, m), 3.89-3.92 (1H, m), 4.01-4.05 (1H, m), 4.77-4.80 (1H, m), 5.22-5.27 (1H, m), 6.68 (1H, br), 7.19 (2H, d, J=8.1 Hz), 7.29 (1H, br), 7.70 (2H, d, J=8.1 Hz). white solid
138	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J =6.8 Hz), 0.88 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.22-1.25 (3H, m), 1.88-1.93 (1H, m), 2.08-2.13 (1H, m), 3.57-3.58 (2H, m), 3.88-3.91 (1H, m), 3.95-3.96 (1H, m), 4.08 (2H, q, J =6.8 Hz), 5.10 (1H, br), 6.19 (1H, br), 7.04 (1H, br), 7.39-7.43 (1H, m), 7.46-7.50 (2H, m), 7.78-7.80 (2H, m). white crystal m.p. 209.6°C
139	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J =6.8 Hz), 0.88 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.19 (6H, d, J =6.3 Hz), 1.88-1.93 (1H, m), 2.11-2.17 (1H, m), 3.51-3.55 (1H, m), 3.59 (1H, m), 3.87-3.90 (1H, m), 3.96 (1H, m), 4.84-4.87 (1H, m), 5.02 (1H, br), 6.19 (1H, br), 7.10 (1H, br), 7.39-7.43 (2H, m), 7.46-7.50 (1H, m), 7.78-7.81 (2H, m). white solid
140	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (6H, d, J =6.8 Hz), 0.88 (6H, d, J =6.8 Hz), 0.99 (3H, d, J =7.3 Hz), 1.01 (3H, d, J =6.8 Hz), 1.88-1.93 (2H, m), 2.10 (1H, m), 3.57 (2H, m), 3.81-3.82 (2H, d, J =5.9 Hz), 3.87-3.91 (1H, m), 3.95-3.96 (1H, m), 5.15 (1H, br), 6.20 (1H, br),

	7.06 (1H, br), 7.42-7.44 (2H, m), 7.46-7.50 (1H, m), 7.78-7.81 (2H, m). white solid
141	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J =7.3 Hz), 0.89 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.41 (9H, s), 1.91 (1H, m), 2.10 (1H, m), 3.45 (1H, m), 3.70 (1H, m), 3.81-3.84 (1H, m), 3.90 (1H, m), 4.90 (1H, br), 6.15 (1H, br), 7.20 (1H, br), 7.39-7.47 (3H, m), 7.81-7.83 (2H, m). white solid
143	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J =6.8 Hz), 0.91 (3H, d, J =6.8 Hz), 1.00 (6H, d, J =6.8 Hz), 1.17 (3H, d, J =6.3 Hz), 1.20 (3H, d, J =6.3 Hz), 1.87-1.92 (1H, m), 2.15-2.17 (1H, m), 2.45 (3H, s), 3.43-3.50 (1H, m), 3.60-3.64 (1H, m), 3.87-3.91 (1H, m), 3.93-3.96 (1H, m), 4.87 (1H, m), 4.98 (1H, br), 6.28 (1H, br), 6.50 (1H, br), 7.16-7.20 (2H, m), 7.29 (1H, m), 7.31-7.36 (1H, m). white solid

Properties of Compound (8) in Table 2

Compound No.	Properties
144	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J =6.8 Hz), 0.89 (3H, d, J =6.8 Hz), 0.93 (3H, d, J =6.8 Hz), 0.98 (3H, d, J =6.8 Hz), 1.00 (6H, d, J =7.3 Hz), 1.86-1.93 (2H, m), 2.17 (1H, m), 2.44 (3H, s), 3.50-3.52 (1H, m), 3.59 (1H, m), 3.76 (2H, m), 3.88-3.96 (2H, m), 5.10 (1H, br), 6.20 (1H, br), 6.45 (1H, br), 7.16-7.21 (2H, m), 7.27-7.36 (2H, m). white solid
145	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J =6.8 Hz), 0.92 (3H, d, J =6.8 Hz), 0.98 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.39 (9H, s), 1.86-1.91 (1H, m), 2.15-2.17 (1H, m), 2.44 (3H, s), 3.37 (1H, m), 3.68 (1H, m), 3.80-3.83 (1H, m), 3.92-3.98 (1H, m), 4.89 (1H, br), 6.20 (1H, br), 6.54 (1H, br), 7.15-7.19 (2H, m), 7.28-7.30 (1H, m), 7.35-7.37 (1H, m). white solid
147	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J =6.8 Hz), 0.96 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.23 (3H, d, J =5.9 Hz), 1.24 (3H, d, J =6.3 Hz), 1.70-2.00 (1H, m), 2.10-2.25 (1H, m), 2.39 (3H, s), 3.40-3.50 (2H, m), 3.58 (2H, m), 4.75 (1H, m), 5.15 (1H, br), 6.45 (1H, br), 6.75 (1H, br), 7.30-7.32 (2H, m), 7.55 (1H, m), 7.61 (1H, m). white solid
148	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (6H, d, J =6.8 Hz), 0.97 (6H, d, J =6.8 Hz), 1.01 (6H, d, J =6.8 Hz), 1.85-1.95 (2H, m), 2.17 (1H, m), 2.39 (3H, s), 3.47-3.58 (2H, m), 3.74 (2H, m), 3.84-3.86 (2H, m), 4.85 (1H, br), 5.30 (1H, br), 6.82 (1H, br), 7.29-7.33 (2H, m), 7.53-7.55 (1H, m), 7.61 (1H, m). white solid
151	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82-1.02 (12H, m), 1.12-1.22 (6H, m), 1.84-1.92 (1H, m), 2.08-2.20 (1H, m), 2.38 (3H, s), 3.52-3.65 (2H, m), 3.87-3.98 (2H, m), 4.79-4.89 (1H, m), 5.03 (1H, br), 6.23 (1H, br), 7.00 (1H, br), 7.21 (2H, d, J= 8.1 Hz), 7.69 (2H, d, J= 8.1 Hz). white solid

152	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82-1.05 (18H, m), 1.81-1.90 (2H, m), 2.13-2.16 (1H, m), 2.38 (3H, s), 3.51-3.66 (3H, m), 3.77-3.97 (3H, m), 5.18 (1H, s), 6.38 (1H, s), 7.03 (1H, s), 7.19-7.22 (2H, m), 7.67-7.70 (2H, m). white solid
153	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82-1.04 (12H, m), 1.38 (9H, s), 1.82-1.91 (1H, m), 2.10-2.20 (1H, m), 2.38 (3H, s), 3.44-3.49 (1H, m), 3.62-3.70 (1H, m), 3.81-3.85 (1H, m), 3.93-4.00 (1H, m), 4.96 (1H, br), 6.31 (1H, br), 7.16 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid
154	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77-0.88 (3H, m), 0.95-1.02 (9H, m), 1.85-1.91 (1H, m), 2.07-2.17 (1H, m), 2.38 (3H, s), 3.44-3.47 (1H, m), 3.64-3.68 (1H, m), 3.88-3.99 (2H, m), 4.10-4.16 (1H, m), 4.37-4.46 (1H, m), 5.43-5.45 (1H, m), 6.22-6.25 (1H, m), 6.79 (1H, br), 7.20-7.23 (2H, m), 7.63-7.67 (2H, m). white solid

Properties of Compound (9) in Table 2

Compound No.	Properties
157	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.87-0.92 (8H, m), 0.94 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.57-1.59 (1H, m), 1.91-1.98 (1H, m), 2.26-2.30 (1H, m), 2.38 (3H, s), 3.49-3.53 (2H, m), 3.84-3.91 (2H, m), 3.93-4.01 (2H, m), 6.43 (1H, br), 7.12 (1H, br), 7.20 (2H, d, J=7.8 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
159	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.98-1.02 (6H, m), 1.88-1.93 (1H, m), 2.05-2.11 (1H, m), 2.39 (3H, s), 3.54-3.60 (2H, m), 3.66 (3H, s), 3.91-3.96 (2H, m), 5.10 (1H, br), 6.20 (1H, d, J=8.8 Hz), 6.91 (1H, br), 7.22 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
160	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.3 Hz), 1.21-1.28 (3H, m), 1.86-1.93 (1H, m), 2.05-2.13 (1H, m), 2.38 (3H, s), 3.54-3.56 (2H, m), 3.88-4.00 (2H, m), 4.09 (2H, q, J=6.8 Hz), 5.11 (1H, br), 6.22 (1H, d, J=9.3 Hz), 6.96 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
161	^{1}H-NMR δ ($CDCl_3$, ppm): 1.29 (3H, d, J=6.8 Hz), 2.79 (1H, d, J=5.4 Hz), 3.95 (2H, dd, J=1.5, 4.4 Hz), 4.32-4.38 (1H, m), 5.04 (1H, s), 6.53 (1H, d, J=7.3 Hz), 6.89 (2H, d, J=8.8 Hz), 7.27-7.33 (4H, m), 7.55 (2H, d, J=8.8 Hz). white solid
162	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.86-1.95 (1H, m), 2.02-2.09 (1H, m), 2.39 (3H, s), 3.45-3.50 (1H, m), 3.62-3.71 (1H, m), 3.96 (2H, dd, J=8.3,6.3 Hz), 4.45 (1H, dd, J=6.3,1.5 Hz), 4.77 (1H, dd, J=14.1,1.5 Hz), 5.43 (1H, d, J=8.3 Hz), 6.30 (1H, d, J=8.8 Hz), 6.85 (1H, br), 7.14 (1H, dd, J=14.1,6.3 Hz), 7.21 (2H, d, J=8.3 Hz), 7.66 (2H,

	d, J=8.3 Hz). white solid
163	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.89-0.96 (3H, m), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.06-1.63 (2H, m), 1.86-1.94 (1H, m), 2.08-2.13 (1H, m), 2.38 (3H, s), 3.54-3.56 (2H, m), 3.88-3.92 (2H, m), 3.94-4.01 (2H, m), 5.11 (1H, br), 6.23 (1H, d, J=7.8 Hz), 6.97 (1H, br), 7.21 (2H, d, J=7.8 Hz), 7.68 (2H, d, J=7.8 Hz). white solid
164	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.19 (3H, d, J=6.1 Hz), 1.22 (3H, d, J=6.1 Hz), 1.85-1.90 (1H, m), 2.06-2.08 (1H, m), 2.38 (3H, s), 3.54-3.57 (2H, m), 3.90-3.98 (2H, m), 4.81-4.89 (1H, m), 5.15 (1H, dd, J=8.1,4.9 Hz), 6.40 (1H, br), 7.09 (1H, br), 7.20 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid

Properties of Compound (10) in Table 2

Compound No.	Properties
166	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.84-1.90 (1H, m), 2.03-2.10 (1H, m), 2.36 (3H, s), 3.52-3.60 (2H, m), 3.89 (1H, dd, J=8.3,6.3 Hz), 3.92-3.97 (1H, m), 4.52 (2H, d, J=4.9 Hz), 5.17 (1H, br), 5.18-5.29 (2H, m), 5.85-5.87 (1H, m), 6.19 (1H, d, J=7.8 Hz), 6.90 (1H, br), 7.19 (2H, d, J=7.8 Hz), 7.66 (2H, d, J=7.8 Hz). white solid
167	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.84-1.91 (1H, m), 2.02-2.11 (1H, m), 2.37 (3H, s), 2.45 (1H, s), 3.47-3.64 (2H, m), 3.89-3.92 (2H, m), 4.63 (2H, d, J=2.0 Hz), 5.28 (1H, d, J=7.8 Hz), 6.18 (1H, d, J=7.8 Hz), 6.85 (1H, br), 7.20 (2H, d, J=7.8 Hz), 7.65 (2H, d, J=7.8 Hz). white solid
168	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.90-0.93 (3H, m), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.33-1.36 (2H, m), 1.57-1.59 (2H, m), 1.86-1.94 (1H, m), 2.07-2.12 (1H, m), 2.38 (3H, s), 3.54-3.57 (2H, m), 3.88-3.98 (2H, m), 4.02-4.05 (2H, m), 5.09 (1H, br), 6.23 (1H, br), 6.96 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
169	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.91-0.92 (6H, m), 0.98-1.01 (6H, m), 1.88-1.93 (2H, m), 2.10-2.11 (1H, m), 2.38 (3H, s), 3.56-3.57 (2H, m), 3.82 (2H, d, J=6.3 Hz), 3.88-4.00 (2H, m), 5.11 (1H, br), 6.19 (1H, br), 6.96 (1H, br), 7.22 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
171	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.87-1.92 (1H, m), 2.11-2.13 (1H, m), 2.38 (3H, s), 3.42-3.43 (1H, m), 3.63-

	3.64 (1H, m), 3.81–3.84 (1H, m), 3.97–3.98 (1H, m), 4.96 (1H, br), 6.18 (1H, br), 7.05 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid
172	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82–0.89 (9H, m), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.17 (3H, d, J=6.3 Hz), 1.49–1.58 (2H, m), 1.86–1.93 (1H, m), 2.08–2.13 (1H, m), 2.38 (3H, s), 3.47–3.60 (2H, m), 3.88–4.00 (2H, m), 4.68–4.72 (1H, m), 5.08 (1H, br), 6.25 (1H, br), 7.00 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
173	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (6H, d, J=6.8 Hz), 0.85 (6H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.23–1.30 (8H, m), 1.50–1.51 (1H, m), 1.83–1.91 (1H, m), 2.06–2.07 (1H, m), 2.35 (3H, s), 3.51–3.55 (2H, m), 3.86–3.97 (4H, m), 5.13 (1H, d, J=8.3 Hz), 6.28 (1H, br), 7.00 (1H, br), 7.18 (2H, d, J=8.3 Hz), 7.66 (2H, d, J=8.3 Hz). white solid

Properties of Compound (11) in Table 2

Compound No.	Properties
174	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.99 (6H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.46 (9H, s), 1.61-1.68 (2H, m), 1.78-1.88 (4H, m), 2.37 (3H, s), 3.21-3.40 (5H, m), 3.93-4.09 (4H, m), 4.29 (1H, br), 4.88 (1H, br), 7.20 (2H, d, J=8.3 Hz), 7.39 (1H, br), 7.82 (2H, d, J=8.3 Hz). white solid
175	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.85-1.92 (1H, m), 2.10-2.15 (1H, m), 2.38 (3H, s), 3.38 (3H, s), 3.53-3.56 (4H, m), 3.91-3.98 (2H, m), 4.19-4.22 (2H, m), 5.24 (1H, d, J=5.9 Hz), 6.19 (1H, d, J=8.8 Hz), 6.94 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=8.3 Hz). white solid
176	^{1}H-NMR □δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.88-0.90 (3H, m), 0.90 (9H, s), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.86-1.94 (1H, m), 2.09-2.10 (1H, m), 2.38 (3H, s), 3.54-3.57 (2H, m), 3.75 (2H, s), 3.88-3.98 (2H, m), 5.14 (1H, br), 6.22 (1H, br), 6.98 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
177	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.86-1.95 (1H, m), 2.05-2.11 (1H, m), 2.39 (3H, s), 3.45-3.50 (1H, m), 3.62-3.70 (1H, m), 3.93-4.01 (2H, m), 4.65 (1H, d, J=12.2 Hz), 4.75 (1H, d, J=12.2 Hz), 5.53 (1H, d, J=8.3 Hz), 6.25 (1H, d, J=8.3 Hz), 6.82 (1H, br), 7.22 (2H, d, J=8.3 Hz), 7.66 (2H, d, J=8.3 Hz). white solid
178	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1..87-1.94 (1H, m), 1.87 (3H, s), 1.90 (3H, s), 2.03-2.07 (1H, m), 2.39 (3H, s), 3.50-3.65 (2H, m), 3.84-3.86 (1H, m), 3.97-3.99 (1H, m), 5.30

	(1H, d, J=7.8 Hz), 6.15 (1H, d, J=8.8 Hz), 6.90 (1H, br), 7.22 (2H, d, J=7.8 Hz), 7.67 (2H, d, J=7.8 Hz). white solid
179	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 1.05 (3H, d, J=6.3 Hz), 1.13 (3H, d, J=6.3 Hz), 1.63-1.70 (2H, m), 1.82-1.86 (1H, m), 2.06-2.15 (2H, m), 2.31 (3H, s), 3.29-3.32 (1H, m), 3.40-3.43 (2H, m), 3.54-3.57 (1H, m), 3.95-3.98 (1H, m), 4.38-4.39 (1H, m), 4.72-4.75 (1H, m), 5.20 (1H, d, J=8.3 Hz), 7.13 (2H, d, J=8.3 Hz), 7.31 (2H, d, J=8.3 Hz), 7.74 (1H, br). white solid
180	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=7.3 Hz), 0.82-0.95 (16H, m), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.28-1.34 (1H, m), 1.63-1.66 (2H, m), 1.86-1.95 (3H, m), 2.07-2.14 (1H, m), 2.38 (3H, s), 3.48-3.62 (2H, m), 3.90-3.99 (2H, m), 4.51-4.55 (1H, m), 5.04 (1H, br), 6.22 (1H, d, J=8.3 Hz), 7.02 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid

Properties of Compound (12) in Table 2

Compound No.	Properties
181	^{1}H-NMR □δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.84-0.95 (16H, m), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.30-1.32 (1H, m), 1.65-1.66 (2H, m), 1.86-1.91 (2H, m), 1.99-2.02 (1H, m), 2.13-2.17 (1H, m), 2.38 (3H, s), 3.46-3.49 (1H, m), 3.60-3.64 (1H, m), 3.88 (1H, t, J=6.8 Hz), 3.95-3.96 (1H, m), 4.48-4.54 (1H, m), 5.03 (1H, br), 6.16 (1H, br), 7.02 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid
182	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.3 Hz), 0.92 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.88-1.93 (1H, m), 2.09-2.14 (1H, m), 2.38 (3H, s), 3.47-3.51 (1H, m), 3.60-3.69 (1H, m), 3.99-4.02 (2H, m), 5.59 (1H, d, J=8.3 Hz), 6.29 (1H, d, J=8.3 Hz), 6.85 (1H, br), 7.11 (2H, d, J=8.3 Hz), 7.18-7.21 (3H, m), 7.32-7.36 (2H, m), 7.65 (2H, d, J=8.3 Hz). white solid
183	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.08-2.13 (1H, m), 2.32 (3H, s), 2.38 (3H, s), 3.48-3.53 (1H, m), 3.59-3.66 (1H, m), 3.97-4.07 (2H, m), 5.54 (1H, d, J=8.3 Hz), 6.28 (1H, d, J=7.8 Hz), 6.87 (1H, br), 6.98 (2H, d, J=8.3 Hz), 7.13 (2H, d, J=8.3 Hz), 7.19 (2H, d, J=8.3 Hz), 7.65 (2H, d, J=8.3 Hz). white solid
184	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78-0.90 (6H, m), 1.08-1.16 (6H, m), 1.69-1.81 (1H, m), 2.34 (3/2H, s), 2.36 (3/2H, s), 2.97-3.07 (2H, m), 3.47-3.53 (2H, m), 3.89-3.90 (1H, m), 4.38-4.44 (1H, m), 4.71-4.82 (1H, m), 5.47 (1H, br), 6.76 (1H, d, J=9.0 Hz), 7.07-7.10 (2H, m), 7.11-7.19 (5H, m), 7.38 (1H, br), 7.68-7.71 (2H, m). white solid
185	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78-1.00 (12H, m), 1.49 (3H, d, J=6.3 Hz), 1.83-1.86 (1H, m), 2.07-2.11 (1H, m), 2.37

	(3H, s), 3.50–3.55 (2H, m), 3.87–3.90 (2H, m), 5.31–5.34 (1H, m), 5.72 (1H, q, J=6.3 Hz), 6.15 (1/2H, br), 6.47 (1/2H, br), 6.95 (1/2H, br), 7.08 (1/2H, br), 7.19 (2H, d, J=8.3 Hz), 7.27–7.33 (5H, m), 7.68 (2H, d, J=8.3 Hz). white solid
186	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.51–1.58 (1H, m), 1.85–1.98 (4H, m), 2.11–2.18 (1H, m), 2.38 (3H, s), 3.50–3.57 (2H, m), 3.80–3.98 (5H, m), 4.06–4.16 (2H, m), 5.26 (1H, br), 6.24 (1H, br), 6.98 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid
187	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=7.3 Hz), 0.81 (3H, d, J=7.3 Hz), 0.85 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.3 Hz), 1.04–1.11 (2H, m), 1.85–1.93 (3H, m), 2.38 (3H, s), 3.53–3.56 (2H, m), 3.81 (2H, d, J=6.3 Hz), 3.91–3.99 (2H, m), 5.11 (1H, br), 6.22 (1H, br), 7.00 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white solid

Properties of Compound (13) in Table 2

Compound No.	Properties
188	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.39 (9H, s), 1.81-1.88 (1H, m), 2.14-2.17 (1H, m), 2.33 (3H, s), 3.06-3.08 (1H, m), 3.43-3.49 (2H, m), 3.62-3.65 (1H, m), 3.83-3.96 (3H, m), 4.17-4.20 (1H, m), 5.04 (1H, br), 5.26 (1H, d, J=6.8 Hz), 6.99 (1H, d, J=6.8 Hz), 7.15 (2H, d, J=7.8 Hz), 7.67 (2H, d, J=7.8 Hz). yellow solid
191	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J =6.8 Hz), 0.89 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =7.3 Hz), 1.23 (3H, t, J =6.8 Hz), 1.87-1.92 (1H, m), 2.10-2.15 (1H, m), 3.47-3.50 (1H, m), 3.60 (1H, m), 3.89 (1H, dd, J =6.3,7.8 Hz), 3.95 (1H, t, J =5.4 Hz), 4.09 (2H, q, J =6.8 Hz), 5.05 (1H, br), 6.18 (1H, br, J =7.8 Hz), 7.06-7.11 (2H, m), 7.13 (1H, br), 7.80-7.84 (2H, m). white crystal m.p. 200.6°C
192	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.19-1.24 (6H, m), 1.87-1.94 (1H, m), 2.10-2.15 (1H, m), 3.46-3.65 (2H, m), 3.87-3.98 (2H, m), 4.82-4.88 (1H, m), 5.02 (1H, br), 6.23 (1H, br), 7.07-7.21 (2H, m), 7.81-7.85 (2H, m). white solid
193	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.87-1.94 (2H, m), 2.11-2.17 (1H, m), 3.48-3.59 (2H, m), 3.81-3.99 (3H, m), 5.10 (1H, m), 6.24 (1H, m), 7.07-7.11 (2H, m), 7.81-7.84 (2H, m). white solid
194	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.41 (9H, s), 1.86-1.95 (1H, m), 2.05-2.15 (1H, m), 3.33-3.74 (2H, m), 3.93-3.99 (2H, m), 4.93 (1H, br), 6.19 (1H, br), 7.06-7.11 (2H, m), 7.83-

	7.87 (2H, m). white solid
196	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J =6.8 Hz), 0.92 (3H, d, J =6.8 Hz), 0.97 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.19 (3H, d, J =6.3 Hz), 1.20 (3H, d, J =6.3 Hz), 1.90-1.95 (1H, m), 2.13-2.18 (1H, m), 3.50-3.58 (1H, m), 3.60-3.65 (1H, m), 3.88-3.98 (2H, m), 4.80 (1H, m), 4.98 (1H, br), 6.25 (1H, d, J =7.3 Hz), 6.76 (1H, br), 7.28-7.39 (3H, m), 7.61-7.62 (1H, m). white crystal m.p. 196.8°C
197	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (6H, d, J =6.8 Hz), 0.93 (6H, d, J =6.8 Hz), 0.98 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.85-1.93 (2H, m), 2.15-2.17 (1H, m), 3.56-3.61 (2H, m), 3.79 (2H, m), 3.89-3.94 (2H, m), 5.06 (1H, br), 6.25 (1H, br), 6.74 (1H, br), 7.28-7.40 (3H, m), 7.61-7.63 (1H, m). white crystal m.p. 189.8°C

Properties of Compound (14) in Table 2

Compound No.	Properties
198	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J =6.8 Hz), 0.92 (3H, d, J =6.3 Hz), 0.98 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.40 (9H, s), 1.87-1.91 (1H, m), 2.14-2.17 (1H, m), 3.43-3.50 (1H, m), 3.66-3.67 (1H, m), 3.83 (1H, dd, J =6.3,7.8 Hz), 3.95-3.97 (1H, m), 4.88 (1H, br), 6.20 (1H, br), 6.79 (1H, br), 7.27-7.39 (3H, m), 7.59-7.62 (1H, m). white crystal m.p. 169.2°C
200	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J =6.8 Hz), 0.91 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.20 (3H, d, J =5.8 Hz), 1.21 (3H, d, J =5.8 Hz), 1.87-1.92 (1H, m), 2.12-2.17 (1H, m), 3.44-3.46 (1H, m), 3.65-3.68 (1H, m), 3.86-3.92 (1H, m), 3.93-3.96 (1H, m), 4.85-4.88 (1H, m), 4.99 (1H, br), 6.16 (1H, d, J =8.8 Hz), 7.21-7.22 (1H, br), 7.33-7.37 (1H, m), 7.43-7.46 (1H, m), 7.65-7.67 (1H, m), 7.84-7.85 (1H, m). white crystal m.p. 216.3°C
201	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (6H, d, J =6.8 Hz), 0.91 (6H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.87-1.92 (2H, m), 2.13-2.17 (1H, m), 3.47-3.51 (1H, m), 3.62 (1H, m), 3.82 (2H, d, J =5.9 Hz), 3.86-3.96 (2H, m), 5.08 (1H, br), 6.16 (1H, br), 7.17 (1H, br), 7.33-7.37 (1H, m), 7.43-7.46 (1H, m), 7.66 (1H, d, J =7.8 Hz), 7.83-7.84 (1H, m). white crystal m.p. 197.9°C
202	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J =6.8 Hz), 0.91 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.41 (9H, s), 1.87-1.92 (1H, m), 2.14-2.19 (1H, m), 3.32 (1H, m), 3.72-3.75 (1H, m), 3.80-3.84 (1H, m), 3.96 (1H, dd, J =5.3,8.2 Hz), 4.92 (1H, br), 6.17 (1H, d, J =7.3 Hz), 7.29 (1H, br), 7.32-7.36 (1H, m), 7.43-7.45 (1H, m), 7.67-7.69 (1H, m), 7.85-7.86 (1H, m). white crystal m.p. 176.0°C
203	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J =6.8 Hz), 0.89 (3H, d, J =6.3 Hz), 0.99 (3H, d, J =7.3 Hz), 1.01 (3H,

	d, J =7.3 Hz), 1.21–1.25 (3H, m), 1.85–1.93 (1H, m), 2.09–2.17 (1H, m), 3.47–3.51 (1H, m), 3.60–3.62 (1H, m), 3.89 (1H, dd, J =6.3, 7.8 Hz), 3.92–3.98 (1H, m), 4.09 (2H, q, J =6.8 Hz), 5.07 (1H, br), 6.22 (1H, d, J =8.3 Hz), 7.21 (1H, br), 7.37–7.39 (2H, m), 7.74–7.76 (2H, m). white crystal m.p. 213.5°C
204	^{1}H–NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J =6.8 Hz), 0.90 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =7.9 Hz), 1.01 (3H, d, J =6.8 Hz), 1.19 (3H, d, J =5.9 Hz), 1.22 (3H, d, J =6.3 Hz), 1.87–1.94 (2H, m), 2.13–2.15 (1H, m), 3.64–3.48 (2H, m), 3.94–4.01 (2H, m), 4.84–4.87 (1H, m), 4.98 (1H, br), 6.20 (1H, br), 7.23 (1H, br), 7.38–7.40 (2H, m), 7.75–7.77 (2H, m). white solid

Properties of Compound (15) in Table 2

Compound No.	Properties
205	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (6H, d, J =6.8 Hz), 0.89 (6H, d, J =6.8 Hz), 0.99 (3H, d, J =7.3 Hz), 1.01 (3H, d, J =7.3 Hz), 1.87-1.94 (2H, m), 2.10-2.20 (1H, m), 3.46-3.48 (1H, m), 3.61 (1H, m), 3.86 (2H, d, J =6.8 Hz), 3.95-4.01 (2H, m), 5.05 (1H, br), 6.20 (1H, br), 7.22 (1H, br), 7.38-7.40 (2H, m), 7.74-7.77 (2H, m). white solid
206	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J =6.8 Hz), 0.91 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.41 (9H, s), 1.86-1.91 (1H, m), 2.12-2.17 (1H, m), 3.32 (1H, m), 3.71-3.75 (1H, m), 3.80-3.83 (1H, m), 3.92-3.98 (1H, m), 4.90 (1H, br), 6.15 (1H, br), 7.29 (1H, br), 7.36-7.39 (2H, m), 7.77-7.79 (2H, m). white crystal m.p. 204.9°C
208	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.19-1.26 (9H, m), 1.86-1.94 (1H, m), 2.08-2.13 (1H, m), 2.68 (2H, q, J=7.8 Hz), 3.49-3.57 (2H, m), 3.88-3.99 (2H, m), 4.83-4.89 (1H, m), 5.07 (1H, br), 6.27 (1H, br), 7.04 (1H, br), 7.24 (2H, d, J=8.3 Hz), 7.71 (2H, d, J=8.3 Hz). white solid
209	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.89-0.91 (6H, m), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=7.8 Hz), 1.86-1.94 (2H, m), 2.05-2.11 (1H, m), 2.68 (2H, q, J=7.8 Hz), 3.55-3.58 (2H, m), 3.81-3.83 (2H, m), 3.89-3.99 (2H, m), 5.14 (1H, br), 6.26 (1H, br), 6.99 (1H, br), 7.24 (2H, d, J=8.3 Hz), 7.71 (2H, d, J=8.3 Hz). white solid
210	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=7.8 Hz), 1.42 (9H, s), 1.87-1.92 (1H, m), 2.12-2.13 (1H, m), 2.68 (2H, q, J=7.8 Hz), 3.42-3.43 (1H, m), 3.64-3.65 (1H, m), 3.81-

	3.85 (1H, m), 3.95–3.97 (1H, m), 4.94 (1H, br), 6.17 (1H, br), 7.07 (1H, br), 7.24 (2H, d, J=8.3 Hz), 7.73 (2H, d, J=8.3 Hz). white solid
212	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J =6.8 Hz), 0.88 (3H, d, J =6.8 Hz), 0.99 (3H, d, J =6.3 Hz), 1.00 (3H, d, J =6.8 Hz), 1.20 (6H, d, J =6.3 Hz), 1.87–1.92 (1H, m), 2.07–2.12 (1H, m), 3.56 (2H, m), 3.84 (3H, s), 3.85–3.95 (2H, m), 4.86 (1H, q, J =6.3 Hz), 5.06 (1H, d, J =7.3 Hz), 6.25 (1H, br), 6.86–6.19 (2H, m), 7.00 (1H, br), 7.75–7.77 (2H, m). white solid
213	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (6H, d, J =6.8 Hz), 0.88 (6H, d, J =6.8 Hz), 0.99 (3H, d, J =6.3 Hz), 1.00 (3H, d, J =6.3 Hz), 1.87–1.92 (2H, m), 2.04–2.15 (1H, m), 3.55 (2H, m), 3.81 (1H, m), 3.84 (3H, s), 3.88 (1H, m), 3.90–3.91 (2H, m), 5.15 (1H, br), 6.15 (1H, br), 6.89–6.90 (2H, m), 6.92 (1H, br), 7.75–7.77 (2H, m). white solid

Properties of Compound (16) in Table 2

Compound No.	Properties
214	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J =6.8 Hz), 0.89 (3H, d, J =6.8 Hz), 0.98 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.41 (9H, s), 1.84-1.89 (1H, m), 2.09-2.17 (1H, m), 3.42 (1H, m), 3.62-3.65 (1H, m), 3.83 (1H, dd, J =6.3,7.8 Hz), 3.84 (3H, s), 3.92-3.99 (1H, m), 4.94 (1H, br), 6.19 (1H, d, J =8.3 Hz), 6.11-6.91 (2H, m), 7.03 (1H, br), 7.76-7.78 (2H, m). white solid
216	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J =6.8 Hz), 0.91 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.02 (3H, d, J =6.8 Hz), 1.19 (3H, d, J =5.9 Hz), 1.21 (3H, d, J =6.9 Hz), 1.88-1.92 (1H, m), 2.13-2.18 (1H, m), 3.41 (1H, m), 3.70 (1H, m), 3.86-3.90 (1H, m), 3.95-3.97 (1H, m), 4.81-4.87 (1H, m), 4.99 (1H, br), 6.19 (1H, br), 7.44 (1H, br), 7.67-7.69 (2H, m), 7.89-7.95 (2H, m). white solid
217	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (6H, d, J =6.8 Hz), 0.91 (6H, d, J =6.8 Hz), 1.00 (3H, d, J =7.3 Hz), 1.02 (3H, d, J =6.8 Hz), 1.88-1.91 (2H, m), 2.20 (1H, m), 3.45 (1H, m), 3.65 (1H, m), 3.82 (2H, d, J =6.3 Hz), 3.88-3.90 (1H, m), 3.95-3.97 (1H, m), 5.20 (1H, br), 6.35 (1H, br), 7.39 (1H, br), 7.67-7.69 (2H, m), 7.93-7.95 (2H, m). white solid
218	^{1}H-NMR δ ($CDCl_3$, ppm): 0.99 (3H, d, J =6.8 Hz), 0.93 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.02 (3H, d, J =6.8 Hz), 1.41 (9H, s), 1.88-1.90 (1H, m), 2.16-2.17 (1H, m), 3.35 (1H, m), 3.80-3.84 (2H, dd, J =6.8 Hz), 3.98 (1H, m), 4.85 (1H, br), 6.25 (1H, br), 7.45 (1H, br), 7.67-7.69 (2H, m), 7.95-7.97 (2H, m). white solid
220	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J =6.8 Hz), 0.90 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.02 (3H, d, J =6.8 Hz), 1.20 (3H, d, J =6.3 Hz), 1.24 (3H, d, J =6.3 Hz), 1.87-1.92 (1H, m), 2.13-2.17 (1H, m), 3.33 (1H, m), 3.74-3.77 (1H, m), 3.86-3.89 (1H, m), 3.92-

	3.97 (1H, m), 4.83 (1H, q, J =6.3 Hz), 4.97 (1H, br), 6.17 (1H, d, J =7.3 Hz), 7.55 (1H, br), 7.71-7.74 (2H, m), 7.90-7.95 (2H, m). white solid
221	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (6H, d, J =7.3 Hz), 0.94 (6H, d, J =6.8 Hz), 0.99 (3H, d, J =6.8 Hz), 1.02 (3H, d, J =6.8 Hz), 1.94 (2H, m), 2.15-2.17 (1H, m), 3.37 (1H, m), 3.74 (1H, m), 3.82 (2H, d, J =6.8 Hz), 3.87 (2H, d, J =6.8 Hz), 5.04 (1H, br), 6.20 (1H, br), 7.52 (1H, br), 7.71-7.73 (2H, m), 7.94 (2H, d, J =8.3 Hz). white solid
222	^{1}H-NMR δ ($CDCl_3$, ppm): 0.93 (6H, d, J =6.8 Hz), 0.99 (6H, d, J =6.8 Hz), 1.02 (6H, d, J =6.8 Hz), 1.41 (9H, s), 1.86-1.91 (1H, m), 2.14-2.20 (1H, m), 3.23 (1H, m), 3.81-3.83 (2H, m), 3.95-3.97 (1H, m), 4.88 (1H, br), 6.18 (1H, br), 7.58 (1H, br), 7.68-7.74 (2H, m), 7.94-7.97 (2H, m). white solid

Properties of Compound (17) in Table 2

Compound No.	Properties
224	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J =6.8 Hz), 0.93 (3H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.03 (3H, d, J =6.8 Hz), 1.20 (3H, d, J =5.9 Hz), 1.23 (3H, d, J =5.9 Hz), 1.88-1.93 (1H, m), 2.15-2.20 (1H, m), 3.32 (1H, m), 3.77 (1H, m), 3.83-3.96 (2H, m), 3.98 (1H, dd, J =6.3 Hz), 4.86 (1H, q, J =6.3 Hz), 4.96 (1H, br), 6.18 (1H, d, J =8.3 Hz), 7.62 (1H, br), 8.00-8.03 (2H, m), 8.26-8.29 (2H, m). white solid
225	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (6H, d, J =6.8 Hz), 1.00 (6H, d, J =6.8 Hz), 1.03 (6H, d, J =6.8 Hz), 1.88-1.93 (2H, m), 2.17-2.20 (1H, m), 3.36 (1H, m), 3.74-3.78 (1H, m), 3.83 (2H, d, J =6.3 Hz), 3.87-3.90 (1H, m), 3.97 (1H, dd, J =5.9 Hz), 5.03 (1H, br), 6.16 (1H, br), 7.59 (1H, br), 7.99-8.02 (2H, m), 8.26-8.28 (2H, m). white solid
226	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J =6.8 Hz), 0.95 (3H, d, J =7.3 Hz), 1.00 (3H, d, J =6.8 Hz), 1.03 (3H, d, J =6.8 Hz), 1.41 (9H, s), 1.86-1.91 (1H, m), 2.18-2.21 (1H, m), 3.20 (1H, m), 3.82 (2H, t, J =6.3 Hz), 3.97 (1H, m), 4.87 (1H, br), 6.13 (1H, br), 7.67 (1H, br), 8.02-8.04 (2H, m), 8.25-8.29 (2H, m). white solid
227	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.21-1.25 (3H, m), 1.90 (1H, q, J=6.3 Hz), 2.10 (1H, q, J=6.8 Hz), 3.92 (3H, s), 3.94 (3H, s), 3.88-3.94 (2H, m), 4.07-4.13 (2H, m), 6.18-6.19 (1H, m), 6.86 (1H, d, J=8.8 Hz), 7.01 (1H, br), 7.33-7.36 (1H, m), 7.44 (1H, d, J=1.9 Hz). white crystal, m.p. 205.2°C
228	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=7.3 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=7.1 Hz), 1.22 (3H, d, J=6.8 Hz), 1.91-1.96 (1H, m), 2.10-2.13 (1H, m), 3.40-3.51 (1H, m), 3.54-3.60 (1H, m), 3.87-4.01 (2H, m),

	3.92 (3H, s), 3.94 (3H, s), 6.22 (1H, br), 6.86 (1H, d, J=8.3 Hz), 7.01 (1H, br), 7.34-7.36 (1H, m), 7.44-7.45 (1H, m). white crystal, m.p. 212.7°C
229	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (6H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=7.3 Hz), 1.90-1.93 (1H, m), 2.11-2.13 (1H, m), 3.49-3.58 (2H, m), 3.82-3.84 (2H, m), 3.89-4.00 (2H, m), 3.91 (3H, s), 3.94 (3H, s), 6.22 (1H, br), 6.86 (1H, d, J=8.3 Hz), 7.12 (1H, br), 7.33-7.36 (1H, m), 7.43-7.45 (1H, m). white solid
230	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.88-1.90 (1H, m), 2.12-2.14 (1H, m), 3.68-3.71 (1H, m), 3.82-3.84 (1H, m), 3.86-4.01 (2H, m), 3.91 (3H, s), 3.94 (3H, s), 6.17 (1H, br), 6.86 (1H, d, J=8.3 Hz), 7.12 (1H, br), 7.37-7.39 (1H, m), 7.45-7.46 (1H, m). white solid

Properties of Compound (18) in Table 2

Compound No.	Properties
231	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.23-1.25 (3H, m), 1.87-1.91 (1H, m), 2.12-2.14 (1H, m), 2.52 (1H, t, J=2.4 Hz), 3.58-3.60 (1H, m), 3.88-3.89 (1H, m), 3.94 (3H, s), 4.10 (1H, q, J=6.8 Hz), 4.81 (2H, d, J=2.4 Hz), 5.01 (1H, br), 6.18 (1H, br), 7.01-7.04 (2H, m), 7.33-7.35 (1H, m), 7.46-7.47 (1H, m). white crystal m.p. 215.3°C
232	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.23 (3H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.11-2.16 (1H, m), 2.53 (1H, t, J=2.4 Hz), 3.48-3.51 (1H, m), 3.58-3.60 (1H, m), 3.89-3.91 (1H, m), 3.94 (3H, s), 4.80 (2H, d, J=2.4 Hz), 4.85-4.90 (1H, m), 5.00 (1H, br), 6.17 (1H, br), 7.02 (1H, d, J=8.3 Hz), 7.10 (1H, br), 7.33-7.36 (1H, m), 7.46-7.47 (1H, m). white crystal m.p. 203.2°C
234	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (6H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.87-1.93 (2H, m), 2.11-2.13 (1H, m), 2.52 (1H, t, J=2.4 Hz), 3.59-3.70 (1H, m), 3.82-3.94 (4H, m), 3.94 (3H, s), 4.81 (2H, d, J=2.4 Hz), 5.09 (1H, br), 6.19 (1H, br), 7.02 (1H, d, J=7.3 Hz), 7.06 (1H, br), 7.33-7.35 (1H, m), 7.46-7.47 (1H, m). white crystal m.p. 197.8°C
235	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.86-1.91 (1H, m), 2.13-2.16 (1H, m), 2.52 (1H, t, J=2.4 Hz), 3.58-3.60 (1H, m), 3.88-3.90 (1H, m), 3.93 (3H, s), 4.81 (2H, d, J=2.4 Hz), 4.92 (1H, br), 6.16 (1H, br), 7.02 (1H, d, J=8.9 Hz), 7.16 (1H, br), 7.36-7.38 (1H, m), 7.46-7.47 (1H, m). white crystal m.p. 162.1°C
238	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J =6.8 Hz), 0.84

	(3H, d, J =6.8 Hz), 0.88 (6H, d, J =6.8 Hz), 1.00 (3H, d, J =6.8 Hz), 1.02 (3H, d, J =6.8 Hz), 1.81 (1H, m), 1.92 (1H, m), 2.13 (1H, m), 3.61–3.67 (4H, m), 3.88–3.92 (1H, m), 4.00–4.03 (1H, m), 5.06 (1H, br), 6.31 (1H, br), 6.70 (1H, br), 7.41–7.61 (4H, m), 7.83–7.91 (2H, m), 8.33–8.35 (1H, m). white crystal m.p. 221.7°C
239	^{1}H–NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J =6.8 Hz), 0.87 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.03 (3H, d, J =6.8 Hz), 1.37 (9H, s), 1.91–1.95 (1H, m), 2.12–2.13 (1H, m), 3.51 (1H, m), 3.76 (1H, m), 3.80–3.83 (1H, m), 4.00–4.03 (1H, m), 4.86 (1H, br), 6.24 (1H, br), 6.77 (1H, br), 7.41–7.56 (3H, m), 7.61 (1H, m), 7.63–7.90 (2H, m), 8.35 (1H, d, J =7.8 Hz). white crystal m.p. 212.1°C

Properties of Compound (19) in Table 2

Compound No.	Properties
241	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J =6.8 Hz), 0.89 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.03 (3H, d, J =6.8 Hz), 1.17 (3H, d, J =6.3 Hz), 1.18 (3H, d, J =6.8 Hz), 1.90-1.95 (1H, m), 2.10-2.17 (1H, m), 3.59-3.61 (1H, m), 3.65 (1H, m), 3.91 (1H, dd, J =6.3,8.3 Hz), 4.00-4.01 (1H, m), 4.84 (1H, q, J =6.3 Hz), 5.03 (1H, br), 6.23 (1H, br, J =8.8 Hz), 7.26 (1H, br), 7.51-7.57 (2H, m), 7.85-7.91 (3H, m), 7.92-7.93 (1H, m), 8.35 (1H, m). white crystal m.p. 230.8°C
242	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (6H, d, J =6.8 Hz), 0.89 (6H, d, J =6.8 Hz), 1.01 (3H, d, J =6.8 Hz), 1.03 (3H, d, J =6.8 Hz), 1.91-1.96 (2H, m), 2.11-2.17 (1H, m), 3.63 (2H, m), 3.80 (2H, d, J =6.3 Hz), 3.91 (1H, dd, J =6.3,7.8 Hz), 4.00-4.01 (1H, m), 5.11 (1H, br), 6.22 (1H, br), 7.20 (1H, br), 7.51-7.57 (2H, m), 7.84-7.89 (3H, m), 7.91-7.94 (1H, m), 8.34 (1H, m). white crystal m.p. 226.3°C
243	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J =6.8 Hz), 0.89 (3H, d, J =6.8 Hz), 1.01 (3H, d, J =7.3 Hz), 1.03 (3H, d, J =7.3 Hz), 1.41 (9H, s), 1.90-1.94 (1H, m), 2.11-2.17 (1H, m), 3.47 (1H, m), 3.73-3.76 (1H, m), 3.84 (1H, dd, J =6.8,7.7 Hz), 3.98-4.03 (1H, m), 4.96 (1H, br), 6.21 (1H, d, J =8.3 Hz), 7.31 (1H, br), 7.50-7.57 (2H, m), 7.87-7.88 (3H, m), 7.91-7.93 (1H, m), 8.36 (1H, m). white solid
246	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.26 (3H, d, J=6.3 Hz), 1.70 (1H, br), 1.81-1.95 (1H, m), 2.21-2.30 (1H, m), 2.38 (3H, s), 2.81 (3H, s), 3.46-3.53 (2H, m), 3.96-4.02 (2H, m), 4.89-4.94 (1H, m), 7.19-7.20 (2H, m), 7.68-7.70 (2H, m). white solid
247	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.85 (3H, d, J=6.3 Hz), 0.93 (3H, d, J=6.3 Hz), 0.94 (3H,

	d, J=6.3 Hz), 0.95 (6H, d, J=6.3 Hz), 1.85-1.98 (2H, m), 2.24-2.34 (1H, m), 2.38 (3H, s), 2.84 (3H, s), 3.45-3.56 (2H, m), 3.84-4.02 (4H, m), 6.44-6.46 (1H, m), 7.13 (1H, br), 7.19-7.21 (2H, m), 7.67-7.69 (2H, m). white crystal
248	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.90-0.95 (6H, m), 1.43 (9H, s), 1.75-1.95 (2H, m), 2.33 (3H, s), 2.75 (3H, s), 3.41-3.60 (2H, m), 3.85-3.95 (2H, m), 6.45 (1H, br), 7.17 (2H, d, J=8.3 Hz), 7.65 (2H, d, J=8.3 Hz). white semisolid
249	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.26 (3H, d, J=6.3 Hz), 1.70 (1H, br), 1.81-1.95 (1H, m), 2.21-2.30 (1H, m), 2.38 (3H, s), 2.45 (3H, s), 3.46-3.53 (2H, m), 3.96-4.02 (2H, m), 4.89-4.94 (1H, m), 7.19-7.20 (2H, m), 7.68-7.70 (2H, m). white solid

Properties of Compound (20) in Table 2

Compound No.	Properties
253	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.26 (3H, d, J=6.3 Hz), 1.70 (1H, br), 1.81-1.95 (1H, m), 2.21-2.30 (1H, m), 2.38 (3H, s), 3.46-3.53 (2H, m), 3.96-4.02 (2H, m), 4.89-4.94 (1H, m), 7.19-7.20 (2H, m), 7.44-7.51 (3H, m), 7.68-7.70 (2H, m), 7.95-7.96 (2H, m). white solid
257	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.11 (3H, d, J=6.1 Hz), 1.21 (3H, d, J=6.1 Hz), 1.82-1.87 (1H, m), 2.07-2.10 (1H, m), 2.36 (3H, s), 3.45-3.49 (1H, m), 3.57-3.65 (1H, m), 3.93-4.00 (2H, m), 4.77-4.80 (1H, m), 5.41 (1H, br), 6.95 (1H, br), 7.17 (2H, d, J=8.1 Hz), 7.36 (1H, br), 7.68 (2H, d, J=8.1 Hz). white solid
261	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.26 (3H, d, J=6.3 Hz), 1.70 (1H, br), 1.81-1.95 (1H, m), 2.21-2.30 (1H, m), 2.38 (3H, s), 2.81 (3H, s), 3.46-3.53 (2H, m), 3.96-4.02 (2H, m), 4.89-4.94 (1H, m), 7.19-7.20 (2H, m), 7.68-7.70 (2H, m). white solid
265	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.26 (3H, d, J=6.3 Hz), 1.70 (1H, br), 1.81-1.95 (1H, m), 2.21-2.30 (1H, m), 2.38 (3H, s), 2.45 (3H, s), 3.46-3.53 (2H, m), 3.96-4.02 (2H, m), 4.89-4.94 (1H, m), 7.19-7.20 (2H, m), 7.68-7.70 (2H, m). white solid
269	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.27 (3H, d, J=6.3 Hz), 1.71 (1H, br), 1.81-1.95 (1H, m), 2.21-2.32

	(1H, m), 2.38 (3H, s), 3.46-3.53 (2H, m), 3.96-4.02 (2H, m), 4.89-4.94 (1H, m), 7.19-7.20 (2H, m), 7.44-7.51 (3H, m), 7.68-7.70 (2H, m), 7.95-7.96 (2H, m). white solid
274	^{1}H-NMR δ ($CDCl_3$, ppm): 0.73-0.76 (3H, m), 0.88 (3H, d, J=6.8 Hz), 0.90-0.92 (6H, m), 1.00-1.02 (6H, m), 1.78-1.95 (1H, m), 2.39 (3H, s), 3.32 (1H, br), 3.59-4.09 (6H, m), 5.05 (1H, br), 6.48-6.50 (1H, m), 6.75 (1H, br), 7.21-7.23 (2H, m), 7.67-7.68 (2H, m). white solid
276	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74-1.63 (12H, m), 1.89-1.94 (2H, m), 2.40 (3H, s), 3.29-3.49 (2H, m), 3.94-4.08 (2H, m), 5.06-5.09 (2H, m), 7.10-7.35 (5H, m), 7.60-7.70 (2H, m). white solid
278	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.01 (6H, d, J=6.8 Hz), 1.17-1.22 (6H, m), 1.90-2.03 (2H, m), 2.39 (3H, s), 3.25-4.25 (5H, m), 4.85 (1H, br), 6.30-6.70 (2H, m), 7.22-7.24 (2H, m), 7.65-7.67 (2H, m). white solid

Properties of Compound (21) in Table 2

Compound No.	Properties
279	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.88 (6H, d, J=6.8 Hz), 1.01 (6H, d, J=6.8 Hz), 2.39 (3H, s), 3.35-3.39 (1H, m), 3.50-3.60 (2H, m), 3.61-3.79 (3H, m), 4.05-4.10 (1H, m), 5.15 (1H, br), 6.45 (1H, br), 7.22-7.24 (2H, m), 7.65-7.67 (2H, m). white solid
281	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 1.01 (6H, d, J=6.8 Hz), 1.93-1.99 (1H, m), 2.01-2.04 (1H, m), 2.38 (3H, s), 3.34-3.37 (1H, m), 3.52-3.56 (1H, m), 3.91-3.93 (1H, m), 4.08 (1H, br), 5.00-5.10 (2H, m), 6.39 (1H, br), 6.66 (1H, br), 7.17-7.34 (5H, m), 7.52-7.59 (2H, m), 7.62-7.68 (2H, m). white solid
283	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=7.3 Hz), 0.90 (3H, d, J=7.3 Hz), 1.19-1.26 (6H, m), 1.28-1.46 (2H, m), 1.48-1.55 (2H, m), 2.01-2.05 (1H, m), 2.37 (3H, s), 3.50-3.53 (2H, m), 3.94-3.98 (1H, m), 4.08-4.13 (1H, m), 4.81-4.88 (1H, m), 5.32 (1H, d, J=8.1 Hz), 6.79 (1H, d, J=8.1 Hz), 7.19 (2H, d, J=8.1 Hz), 7.34 (1H, br), 7.70 (2H, d, J=8.1 Hz). white solid
287	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.90-0.93 (6H, m), 1.12 (3H, d, J=6.1 Hz), 1.26-1.56 (4H, m), 2.05-2.13 (1H, m), 2.38 (3H, s), 3.45-3.60 (2H, m), 3.88-3.91 (1H, m), 4.09-4.14 (1H, m), 4.77-4.85 (1H, m), 5.22 (1H, d, J=8.3 Hz), 6.60 (1H, d, J=8.3 Hz), 7.20 (2H, d, J=8.1 Hz), 7.29 (1H, br), 7.70 (2H, d, J=8.1 Hz). white solid
291	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83-0.95 (12H, m), 1.19-1.28 (6H, m), 1.35-1.51 (2H, m), 1.64-1.71 (1H, m), 2.08-2.14 (1H, m), 2.38 (3H, s), 3.41-3.48 (1H, m), 3.54-3.58 (1H, m), 3.87 (1H, dd, J=6.3, 8.3 Hz), 4.18-4.23 (1H, m), 4.86 (1H, t, J=6.3 Hz), 5.04 (1H, br), 6.13

	(1H, br), 7.11 (1H, br), 7.22 (2H, d, J=7.8 Hz), 7.70 (2H, d, J=7.8 Hz). white solid
292	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84-0.96 (18H, m), 1.35-1.50 (2H, m), 1.65-1.75 (1H, m), 1.88-1.94 (1/2H, m), 2.05-2.13 (1/2H, m), 2.38 (3H, s), 3.43-3.53 (2H, m), 3.64 (1H, s), 3.82-3.93 (2H, m), 4.16-4.22 (1H, m), 4.77 (1H, d, J=8.3 Hz), 5.13 (1H, br), 6.16 (1H, br), 6.96 (1/2H, br), 7.09 (1/2H, br), 7.23 (2H, d, J=7.8 Hz), 7.70 (2H, d, J=7.8 Hz). APCI-MS M^+: 433. white solid
293	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85-0.96 (12H, m), 1.36-1.47 (1H, m), 1.68-1.73 (1H, m), 2.07-2.13 (1H, m), 2.38 (3H, s), 3.36-3.64 (3H, m), 3.81 (1H, dd, J=6.3, 7.8 Hz), 4.18-4.23 (1H, m), 4.92-4.96 (1H, m), 6.04-6.08 (1H, m), 7.15 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.71 (2H, d, J=8.3 Hz). white solid

Properties of Compound (22) in Table 2

Compound No.	Properties
294	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23-1.25 (3H, m), 1.52-1.56 (2H, m), 1.65-1.70 (1H, m), 2.05-2.12 (1H, m), 3.50-3.57 (2H, m), 3.90-3.92 (1H, m), 4.02-4.12 (3H, m), 5.30 (1H, br), 6.18 (1H, br), 7.06 (1H, brs), 7.40-7.49 (3H, m), 7.79-7.81 (1H, m). white crystal m.p. 208.4°C
295	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.19-1.26 (3H, m), 1.48-1.60 (2H, m), 1.60-1.63 (1H, m), 2.11-2.15 (1H, m), 3.49-3.60 (2H, m), 3.87-3.91 (1H, m), 3.99-4.10 (1H, m), 4.84-4.87 (1H, m), 5.05 (1H, br), 6.18 (1H, br), 7.11 (1H, br), 7.40-7.48 (3H, m), 7.79-7.81 (2H, m). white crystal m.p. 212.9°C
296	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.12 (6H, d, J=6.8 Hz), 1.17-1.20 (2H, m), 1.75-1.98 (1H, m), 2.11-2.15 (1H, m), 3.51-3.58 (2H, m), 3.81-3.83 (2H, m), 3.90-3.92 (1H, m), 4.02-4.06 (1H, m), 5.10 (1H, br), 6.18 (1H, br), 7.09 (1H, br), 7.40-7.50 (3H, m), 7.79-7.81 (2H, m). white crystal m.p. 183.2°C
297	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21-1.27 (2H, m), 1.41 (9H, s), 1.63-1.70 (1H, m), 2.11-2.15 (1H, m), 3.40-3.49 (1H, m), 3.64-3.70 (1H, m), 3.82-3.85 (1H, m), 4.03-4.06 (1H, m), 4.97 (1H, br), 6.18 (1H, br), 7.26 (1H, br), 7.39-7.49 (3H, m), 7.80-7.83 (1H, m). white crystal m.p. 166.6°C
298	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.91-0.94 (6H, m), 0.96 (3H, d, J=6.8 Hz), 1.14-1.22 (4H, m),1.47-1.57 (1H, m),1.61-1.70 (1H, m), 2.10-2.17 (1H, m), 2.43 (3H, s), 3.47-3.59 (2H, m), 3.93 (1H, dd, J=6.3,8.3 Hz), 3.97-4.04 (3H, m), 5.16 (1H, d, J=8.29

	Hz), 6.48 (1H, d, J=7.8 Hz), 6.55 (1H, br), 7.15-7.23 (2H, m), 7.28-7.30 (1H, m), 7.33-7.35 (1H, m). white crystal m.p. 189.8°C
299	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91-0.94 (6H, m), 0.97 (3H, d, J=6.8 Hz), 1.16-1.23 (7H, m), 1.50-1.56 (1H, m), 1.64-1.66 (1H, m), 2.11-2.16 (1H, m), 2.44 (3H, s), 3.45-3.51 (1H, m), 3.59-3.62 (1H, m), 3.91 (1H, dd, J=6.3,8.3 Hz), 3.98-4.04 (1H, m), 4.77 (1H, m), 5.05 (1H, d, J=8.29 Hz), 6.39 (1H, d, J=7.8 Hz), 6.56 (1H, br), 7.15-7.20 (2H, m), 7.28-7.30 (1H, m), 7.34-7.36 (1H, m). white crystal m.p. 205.0°C
300	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-0.97 (18H, m), 1.17-1.20 (1H, m), 1.50-1.54 (1H, m), 1.65-1.67 (1H, m), 1.80-1.90 (1H, m), 2.05-2.15 (1H, m), 2.44 (3H, s), 3.49-3.56 (2H, m), 3.75 (2H, br), 3.92 (1H, dd, J=6.3,8.3 Hz), 4.00-4.02 (1H, m), 5.15 (1H, d, J=8.3 Hz), 6.44 (1H, br), 6.54 (1H, br), 7.15-7.20 (2H, m), 7.28-7.30 (1H, m), 7.33-7.35 (1H, m). white crystal m.p. 183.8°C

Properties of Compound (23) in Table 2

Compound No.	Properties
301	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.91-0.95 (6H, m), 0.98 (3H, d, J=6.8 Hz), 1.16-1.23 (1H, m), 1.39 (9H, s), 1.51-1.57 (1H, m), 1.63-1.66 (1H, m), 2.11-2.14 (1H, m), 2.44 (3H, s), 3.39 (1H, m), 3.65-3.69 (1H, m), 3.83 (1H, dd, J=6.3, 7.8 Hz), 4.00-4.03 (1H, m), 4.93 (1H, d, J=7.3 Hz), 6.31 (1H, br), 6.60 (1H, br), 7.15-7.26 (2H, m), 7.28-7.30 (1H, m), 7.35-7.37 (1H, m). white crystal m.p. 179.1°C
302	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.87-0.94 (6H, m), 0.97 (3 H, d, J=6.8 Hz), 1.16-1.23 (4H, m), 1.49-1.54 (1H, m), 1.64-1.67 (1H, m), 2.07-2.08 (1H, m), 2.37 (3H,s), 3.53-3.60 (2H, m), 3.92-3.96 (1H, m), 4.02-4.10 (3H, m), 5.24 (1H, d, J=8.3 Hz), 6.48 (1H, d, J=8.8 Hz), 7.06 (1H, br), 7.27-7.29 (2H, m), 7.54-7.56 (1H,m), 7.62 (1H, m). white crystal m.p. 180.5°C
303	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.14-1.26 (7H, m), 1.50-1.56 (1H, m), 1.63-1.68 (1H, m), 2.06-2.11 (1H, m), 3.54-3.57 (2H, t, J=5.9 Hz), 3.92 (1H, dd, J=6.3,8.3 Hz), 4.03 (1H, m), 4.82-4.89 (1H, m), 5.13 (1H, d, J=8.3 Hz), 6.41 (1H, d, J=8.3 Hz), 7.08 (1H, br), 7.28-7.31 (2H, m), 7.54-7.57 (1H, m), 7.62 (1H, m). white crystal m.p. 200.9°C
304	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-0.97 (18H, m), 1.17-1.20 (1H, m), 1.50-1.54 (1H, m), 1.65-1.67 (1H, m), 1.80-1.90 (1H, m), 2.05-2.15 (1H, m), 2.44 (3H, s), 3.49-3.56 (2H, m), 3.75 (2H, br), 3.92 (1H, dd, J=6.3,8.3 Hz), 4.00-4.02 (1H, m), 5.15 (1H, d, J=8.3 Hz), 6.44 (1H, br), 6.54 (1H,br), 7.15-7.20 (2H ,m), 7.28-7.30 (1H, m), 7.33-7.35 (1H, m). white crystal m.p. 183.8°C
305	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d,J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.92 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.17-1.24 (1H, m), 1.42 (9H, s), 1.45-1.57

	(1H, m), 1.63–1.66 (1H, m), 2.07–2.12 (1H, m), 2.37 (3H, s), 3.46–3.50 (1H, m), 3.61–3.64 (1H, m), 3.84 (1H, dd, J=6.3,8.3 Hz), 4.00–4.06 (1H, m), 5.02 (1H, d, J=7.8 Hz), 6.33 (1H, d, J=8.3 Hz), 7.13 (1H, br), 7.27–7.30 (2H,m), 7.56–7.58 (1H, m),7 .64 (1H, m). white crystal m.p. 161.9°C
306	^{1}H–NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.91 (3H, t, J=7.3 Hz), 0.96 (3H, d, J=6.8 Hz), 1.14–1.24 (2H, m), 1.48–1.54 (1H, m), 2.04–2.07 (1H, m), 2.36 (3H, s), 3.49–3.50 (2H, m), 3.55–3.66 (3H, m), 3.89–3.90 (1H, m), 3.99–4.01 (1H, m), 5.14 (1H, br), 6.28 (1H, br), 6.92 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.66 (2H, d, J=8.3 Hz). white solid

Properties of Compound (24) in Table 2

Compound No.	Properties
307	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.91 (3H,t, J=7.3 Hz), 0.96 (3H, d, J=6.8 Hz), 1.19-1.24 (5H, m), 1.48-1.51 (1H, m), 2.04-2.07 (1H, m), 2.36 (3H, s), 3.52-3.56 (1H, m), 3.86-3.90 (1H, m), 4.00-4.11 (4H, m), 5.10 (1H, br), 6.26 (1H, br), 6.95 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.66 (2H, d, J=8.3 Hz). white solid
308	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.17-1.24 (1H, m), 1.27 (3H, t, J=7.3 Hz), 1.50-1.56 (1H, m), 1.60-1.68 (1H, m), 2.02-2.10 (1H, m), 2.38 (3H, s), 2.86-2.91 (2H, m), 3.47-3.64 (2H, m), 4.02-4.08 (1H, m), 4.12-4.20 (1H, m), 5.88 (1H, d, J=7.8 Hz), 6.24 (1H, d, J=7.8 Hz), 6.92 (1H, br), 7.21 (2H, d, J=7.8 Hz), 7.68 (2H, d, J=7.8 Hz). white solid
309	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-0.94 (14H, m), 1.17-1.22 (6H, m), 1.48-1.51 (1H, m), 1.99-2.03 (1H, m), 2.36 (3H, s), 3.47-3.50 (1H, m), 3.58-3.65 (1H, m), 3.96-4.13 (2H, m), 4.81-4.87 (1H, m), 5.48 (1H, d, J=8.3 Hz), 6.92 (1H, d, J=8.5 Hz), 7.16 (2H, d, J=8.1 Hz), 7.37 (1H, br), 7.68 (2H, d, J=8.1 Hz). white solid
310	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.85 (6H, d, J=6.8 Hz), 0.91 (3H, t, J=7.3 Hz), 0.96 (3H, d, J=6.8 Hz), 1.11 (3H, d, J=6.3 Hz), 1.15-1.24 (8H, m), 1.49-1.64 (4H, m), 2.06-2.08 (1H, m), 2.36 (3H, s), 3.53 (2H, s), 3.85-4.03 (4H, m), 5.08 (1H, br), 6.23 (1H, br), 6.98 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.67 (2H, d, J=8.3 Hz). white solid
311	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82-0.99 (18H, m), 1.22-1.24 (2H, m), 1.59-1.60 (1H, m), 1.83-1.85 (1H, m), 2.12-2.14 (1H, m), 2.38 (3H, s), 3.54-3.57 (2H, m), 3.81-3.82 (2H, m), 4.02-4.03 (1H, m), 5.09 (1H, br), 6.23 (1H, br), 6.97 (1H, br), 7.22 (2H, d, J=8.3 Hz), 7.69

	(2H, d, J=8.3 Hz). white solid
312	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83-1.08 (14H, m), 1.42 (9H, s), 1.64-1.67 (1H, m), 2.17-2.18 (1H, m), 2.38 (3H, s), 3.44-3.45 (1H, m), 3.61-3.62 (1H, m), 3.83 (1H, dd, J=7.8,6.3 Hz), 4.03-4.07 (1H, m), 4.98 (1H, br), 6.20 (1H, br), 7.09 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white solid
313	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.18-1.24 (2H, m), 1.50-1.53 (1H, m), 2.06-2.11 (1H, m), 2.36 (3H, s), 3.43-3.47 (1H, m), 3.60-3.64 (1H, m), 3.97-4.03 (2H, m), 5.58 (1H, d, J=8.3 Hz), 6.32 (1H, br), 6.85 (1H, br), 7.09 (2H, d, J=7.8 Hz), 7.16-7.18 (3H, m), 7.30-7.34 (2H, m), 7.63 (2H, d, J=7.8 Hz). white solid

Properties of Compound (25) in Table 2

Compound No.	Properties
314	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=7.3 Hz), 0.92 (3H, d, J=7.3 Hz), 0.96 (3H, d, J=6.8 Hz), 1.15-1.24 (2H, m), 1.48-1.54 (1H, m), 2.05-2.10 (1H, m), 2.30 (3H, s), 2.36 (3H, s), 3.44-3.48 (1H, m), 3.57-3.63 (1H, m), 3.95-4.01 (2H, m), 5.54 (1H, d, J=8.8 Hz), 6.31 (1H, d, J=8.3 Hz), 6.87 (1H, br), 6.96 (2H, d, J=8.3 Hz), 7.11 (2H, d, J=8.3 Hz), 7.17 (2H, d, J=7.8 Hz), 7.63 (2H, d, J=7.8 Hz). white solid
315	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, t, J=7.3 Hz), 0.94 (3H, d, J=6.8 Hz), 1.10-1.16 (2H, m), 1.48-1.49 (1H, m), 2.03-2.10 (1H, m), 2.35 (3H, s), 3.48-3.50 (2H, m), 3.89-4.01 (2H, m), 5.05 (2H, s), 5.23 (1H, br), 6.21 (1H, br), 6.92 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.31 (5H, s), 7.66 (2H, d, J=8.3 Hz). white solid
316	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.85 (6H, d, J=6.8 Hz), 0.91 (3H, t, J=7.3 Hz), 0.96 (3H, d, J=6.8 Hz), 1.11 (3H, d, J=6.3 Hz), 1.15-1.24 (8H, m), 1.49-1.64 (4H, m), 2.06-2.08 (1H, m), 2.36 (3H, s), 3.53 (2H, s), 3.85-4.03 (4H, m), 5.08 (1H, br), 6.23 (1H, br), 6.98 (1H, br), 7.19 (2H, d, J=8.3 Hz), 7.67 (2H, d, J=8.3 Hz). white solid
317	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.79 (3H, d, J=6.8 Hz), 0.83 (3H, t, J=7.3 Hz), 0.87 (3H, d, J=6.8 Hz), 1.14-1.19 (6H, m), 1.36 (3H, d, J=6.8 Hz), 1.40-1.47 (2H, m), 1.54-1.57 (1H, m), 1.95-1.99 (1H, m), 2.30 (3H, s), 3.37-3.41 (1H, m), 3.52-3.58 (1H, m), 3.89-3.97 (2H, m), 4.82-4.87 (1H, m), 4.93-4.98 (1H, m), 5.51 (1H, d, J=8.8 Hz), 6.55 (1H, d, J=8.3 Hz), 7.07 (1H, br), 7.11 (2H, d, J=8.3 Hz), 7.60 (2H, d, J=8.3 Hz). white solid
320	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-0.94 (14H, m), 1.17-1.22 (6H, m), 1.48-1.51 (1H, m), 1.99-2.03 (1H, m), 2.36

	(3H, s), 2.45 (3H, s), 3.47-3.50 (1H, m), 3.58-3.65 (1H, m), 3.96-4.13 (2H, m), 4.81-4.87 (1H, m), 5.48 (1H, d, J=8.3 Hz), 6.92 (1H, d, J=8.5 Hz), 7.16 (2H, d, J=8.1 Hz), 7.37 (1H, br), 7.68 (2H, d, J=8.1 Hz). white solid
324	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-0.94 (14H, m), 1.17-1.22 (6H, m), 1.48-1.51 (1H, m), 1.99-2.03 (1H, m), 2.36 (3H, s), 3.47-3.50 (1H, m), 3.58-3.65 (1H, m), 3.96-4.13 (2H, m), 4.81-4.87 (1H, m), 5.48 (1H, d, J=8.3 Hz), 6.92 (1H, d, J=8.5 Hz), 7.16 (2H, d, J=8.1 Hz), 7.37 (1H, br), 7.44-7.51 (3H, m), 7.68 (2H, d, J=8.1 Hz), 7.95-7.96 (2H, m). white solid
328	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.90 (3H, t, J=7.3 Hz), 0.95 (3H, d, J=6.8 Hz), 1.24 (3H, d, J=6.8 Hz), 1.26 (3H, d, J=6.8 Hz), 1.45-1.57 (1H, m), 1.59-1.61 (1H, m), 2.25-2.31 (1H, m), 2.38 (3H, s), 2.81 (3H, s), 3.45-3.51 (2H, m), 3.99-4.02 (2H, m), 6.45 (1H, br), 7.14 (1H, br), 7.20 (2H, d, J=7.8 Hz), 7.69 (2H, d, J=8.3 Hz). pale yellow semisolid

Properties of Compound (26) in Table 2

Compound No.	Properties
329	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.87-0.92 (8H, m), 0.94 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.57-1.59 (1H, m), 1.91-1.98 (1H, m), 2.26-2.30 (1H, m), 2.38 (3H, s), 2.84 (3H, s), 3.49-3.53 (2H, m), 3.84-3.91 (2H, m), 3.93-4.01 (2H, m), 6.43 (1H, br), 7.12 (1H, br), 7.20 (2H, d, J=7.8 Hz), 7.69 (2H, d, J=8.3 Hz). white semisolid
330	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.87-0.94 (8H, m), 1.44 (9H, s), 1.80-1.88 (1H, m), 2.21-2.30 (1H, m), 2.34 (3H, s), 2.78 (3H, s), 3.43-3.51 (2H, m), 3.93-4.08 (2H, m), 6.47-6.49 (1H, m), 7.14-7.19 (2H, m), 7.65-7.67 (2H, m). white semisolid
332	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.6 Hz), 0.86-0.89 (8H, m), 0.95 (3H, d, J=6.6 Hz), 1.12 (3H, d, J=6.1 Hz), 1.21 (3H, d, J=6.1 Hz), 1.49-1.52 (1H, m), 2.04-2.10 (1H, m), 2.36 (3H, s), 3.44-3.47 (1H, m), 3.58-3.65 (1H, m), 3.96-4.07 (2H, m), 4.77-4.82 (1H, m), 5.42 (1H, d, J=8.1 Hz), 7.01 (1H, d, J=8.3 Hz), 7.17 (2H, d, J=8.1 Hz), 7.37-7.39 (1H, m), 7.69 (2H, d, J=8.1 Hz). white solid
335	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.3 Hz), 0.94 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20-1.25 (5H, m), 1.91-1.95 (1H, m), 2.10-2.15 (1H, m), 3.44-3.52 (1H, m), 3.59-3.62 (1H, m), 3.87-3.91 (1H, m), 3.99-4.12 (4H, m), 5.06 (1H, br), 6.22 (1H, br), 7.07-7.12 (2H, m), 7.81-7.84 (2H, m). white crystal m.p. 187.7°C
336	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=7.3 Hz), 0.99 (3H, t, J=6.8 Hz), 1.20-1.34 (8H, m), 1.93-1.95 (1H, m), 2.12-2.14 (1H, m), 3.47-3.49 (1H, m), 4.01 (2H, br), 6.18 (1H, br), 7.07-7.11 (2H, m), 7.82-7.85 (2H, m).

	white solid
337	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20-1.25 (2H, m), 1.91-1.95 (2H, m), 2.11-2.13 (1H, m), 3.43-3.51 (1H, m), 3.59-3.63 (1H, m), 3.82-3.91 (3H, m), 4.02-4.04 (2H, m), 5.09 (1H, br), 6.22 (1H, br), 7.07-7.11 (2H, m), 7.81-7.84 (2H, m). white crystal m.p. 188.5°C
338	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20-1.26 (2H, m), 1.45 (9H, s), 1.92-1.94 (1H, m), 2.15 (1H, br), 3.48-3.49 (2H, m), 3.80-3.83 (1H, m), 3.96-4.01 (2H, m), 4.86 (1H, br), 6.19 (1H, br), 7.08 (2H, t, J=8.7 Hz), 7.83-7.87 (2H, m). white crystal m.p. 163.1°C

Properties of Compound (27) in Table 2

Compound No.	Properties
339	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.93 (3H, t ,J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.15-1.24 (4H, m), 1.48-1.58 (1H, m), 1.60-1.69 (1H, m), 2.06-2.14 (1H, m), 3.46-3.53 (1H, m), 3.57-3.61 (1H, m), 3.91 (1H, dd, J=6.3,7.8 Hz), 3.99-4.11 (3H, m), 5.15 (1H, d, J=7.8 Hz), 6.35 (1H, d, J=8.3 Hz), 7.28 (1H, br), 7.36-7.39 (2H, m), 7.74-7.76 (2H,m). white crystal m.p. 215.3°C
340	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d,J=6.8 Hz), 0.89 (3H, d,J=6.8 Hz), 0.93 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.17-1.25 (7H, m), 1.50-1.56 (1H, m), 1.64-1.67 (1H, m), 2.08-2.13 (1H, m), 3.45-3.48 (1H, m), 3.61-3.64 (1H, m), 3.89 (1H, dd, J=6.8,7.8 Hz), 4.02-4.04 (1H, m), 4.83-4.87 (1H, m), 5.08 (1H, d, J=7.8 Hz), 6.32 (1H, d, J= 8.3 Hz), 7.32 (1H, br), 7.37-7.39 (2H, m), 7.74-7.78 (2H, m). white crystal m.p. 232.0°C
341	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.18-1.25 (1H, m), 1.41 (9H, s), 1.51-1.57 (1H, m), 1.62-1.65 (1H, m), 2.10-2.15 (1H, m), 3.35 (1H, m), 3.68-3.72 (1H,m), 3.83 (1H, dd, J= 6.3, 7.3 Hz), 4.01-4.05 (1H, m), 4.98 (1H, d, J=7.3 Hz), 6.27 (1H, d, J=7.8 Hz), 7.36-7.39 (3H, m), 7.76-7.80 (2H, m). white crystal m.p. 195.9°C
342	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.87-0.94 (12H, m), 0.97 (3H, d, J=6.8 Hz), 1.61-1.24 (1H, m), 1.50-1.56 (1H, m), 1.63-1.68 (1H, m), 1.87-1.88 (1H, m), 2.07-2.09 (1H, m), 2.38 (3H, s), 3.54-3.59 (1H, m), 3.82 (2H, br), 3.92 (1H, dd, J=6.3, 8.3 Hz), 4.00-4.05 (1H, m), 5.22 (1H, d, J=8.3 Hz), 6.42 (1H, d, J=7.3 Hz), 7.04 (1H, br), 7.28-7.29 (2H, m), 7.54-7.56 (1H, m), 7.62 (1H, m). white crystal m.p. 178.7°C
343	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.92

	(3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.19-1.26 (3H, m), 1.52-1.59 (3H, m), 2.14-2.19 (1H, m), 3.26-3.45 (1H, m), 3.73-3.78 (1H, m), 3.87-3.91 (1H, m), 4.04-4.13 (3H, m), 5.03 (1H, br), 6.19 (1H, br), 7.62 (1H, br), 8.01 (2H, d, J=8.8 Hz), 8.26-8.29 (2H, m). white crystal m.p. 218.2°C
344	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.24 (3H, d, J=6.8 Hz), 1.51-1.58 (3H, m), 2.15-2.20 (1H, m), 3.25-3.43 (1H, m), 3.74-3.76 (1H, m), 3.88 (1H, t, J=6.8 Hz), 4.03-4.06 (1H, m), 4.83-4.87 (1H, m), 4.91-4.99 (1H, m), 6.17 (1H, br), 7.65 (1H, br), 8.01-8.03 (2H, m), 8.27-8.29 (2H, m). white crystal m.p. 234.2°C
345	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (6H, d, J=6.8 Hz), 0.92 (6H, d, J=6.8 Hz), 0.95 (3H, t, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.51-1.70 (3H, m), 1.75-1.89 (1H, m), 2.16-2.21 (1H, m), 3.74-3.76 (1H, m), 3.82-3.85 (2H, m), 3.87-3.90 (1H, m), 4.02-4.07 (1H, m), 5.05 (1H, br), 6.20 (1H, br), 7.62 (1H, br), 8.00-8.02 (2H, m), 8.27-8.29 (2H, m). white crystal m.p. 220.9°C

Properties of Compound (28) in Table 2

Compound No.	Properties
346	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.45-1.62 (2H, m), 2.15-2.21 (1H, m), 3.80-3.84 (2H, m), 4.03-4.09 (1H, m), 5.30 (1H, br), 6.15 (1H, br), 7.69 (1H, br), 8.03-8.05 (2H, m), 8.26-8.28 (2H, m). white crystal m.p. 200.7°C
347	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.17-1.25 (3H, m), 1.52-1.56 (2H, m), 1.57-1.67 (1H, m), 3.50-3.56 (1H, m), 3.84 (3H, s), 3.89-3.92 (1H, m), 4.02-4.12 (2H, m), 5.30 (1H, br), 6.25 (1H, br), 6.90-6.92 (2H, m), 7.75-7.77 (2H, m). white crystal m.p. 213.0°C
348	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.13-1.20 (5H, m), 1.59-1.66 (1H, m), 2.10 (1H, q, J=6.8 Hz), 3.50-3.55 (2H, m), 3.84 (3H, s), 3.90 (1H, q, J=6.8 Hz), 3.99-4.02 (1H, m), 4.83-4.89 (1H, m), 5.04 (1H, br), 6.24 (1H, br), 6.90-6.91 (2H, m), 6.99 (1H, br), 7.76-7.78 (2H, m). white crystal m.p. 201.7°C
349	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (6H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.50-1.57 (2H, m), 1.66 (1H, brm), 2.10-2.13 (1H, m), 3.50-3.53 (2H, m), 3.82-3.84 (2H, m), 3.84 (3H, s), 3.88-3.92 (1H, m), 4.01-4.04 (1H, m), 5.12 (1H, br), 6.23 (1H, br), 6.90-6.95 (2H, m), 7.75-7.77 (2H, m). white crystal m.p. 188.4°C
350	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.18-1.23 (2H, m), 1.45 (9H, s), 1.58-1.64 (1H, m), 2.08-2.13 (1H, m), 3.40-3.50 (1H, m), 3.82-3.84 (2H, m), 3.84 (3H, s), 4.01-4.03 (1H, m), 4.95 (1H, br), 6.21 (1H, br), 6.89-6.91 (2H, m), 7.06 (1H, br), 7.77-7.79 (2H, m).

	white crystal m.p. 148.5°C
352	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 1.01 (9H, s), 1.19-1.23 (6H, m), 2.38 (3H, s), 3.47 (2H, br), 3.85-3.96 (3H, m), 4.85-4.86 (1H, m), 4.88-5.00 (1H, m), 6.17-6.19 (1H, m), 6.80-7.00 (1H, m), 7.21 (2H, d, J=8.3 Hz), 7.68 (2H, d, J=6.8 Hz). white solid
354	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 1.01 (9H, s), 1.41 (9H, s), 2.38 (3H, s), 2.85 (2H, br), 3.80 (1H, br), 3.95-3.97 (1H, m), 4.00 (1H, br), 4.90-5.05 (1H, m), 6.18 (1H, br), 7.00 (1H, br), 7.20 (2H, d, J=7.8 Hz), 7.70 (2H, d, J=8.3 Hz). white solid

Properties of Compound (29) in Table 2

Compound No.	Properties
388	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76-0.85 (6H, m), 1.02-1.19 (12H, m), 1.97-2.01 (1H, m), 2.21 (3H, s), 3.42-3.52 (4H, m), 3.63-3.66 (1H, m), 3.99-4.01 (1H, m), 4.80 (1H, br), 5.37 (1H, br), 7.03-7.20 (4H, m), 7.72 (1H, br). yellow oil
389	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81-0.89 (12H, m), 1.04 (3H, d, J=6.8 Hz), 1.09 (3H, d, J=6.8 Hz), 1.77-1.84 (1H, m), 2.05-2.08 (1H, m), 2.21 (3H, s), 3.44-3.54 (4H, m), 3.66-3.79 (3H, m), 3.97-3.99 (1H, m), 5.25 (1H, br), 7.03-7.06 (1H, m), 7.13-7.23 (3H, m), 7.44 (1H, br). yellow oil
390	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.08 (3H, d, J=6.8 Hz), 1.14 (3H, d, J=6.8 Hz), 1.41 (9H, s), 2.14-2.15 (1H, m), 2.26 (3H, s), 3.47-3.61 (4H, m), 3.68-3.75 (1H, m), 3.97-3.99 (1H, m), 5.06 (1H, br), 7.06-7.28 (5H, m). white semisolid
392	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 1.08-1.21 (12H, m), 2.01-2.08 (1H, m), 2.31 (3H, s), 3.45-3.47 (4H, m), 3.91-3.97 (2H, m), 4.79-4.83 (1H, m), 5.17 (1H, d, J=8.3 Hz), 7.03-7.24 (4H, m), 7.33 (1H, br). white semisolid
393	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78-0.88 (12H, m), 1.11 (6H, d, J=6.3 Hz), 1.80-1.89 (1H, m), 2.02-2.06 (1H, m), 2.33 (3H, s), 3.46-3.48 (4H, m), 3.73-3.82 (2H, m), 3.92-4.04 (2H, m), 5.38 (1H, br), 7.06-7.26 (4H, m), 7.55 (1H, br). yellow oil

Properties of Compound (30) in Table 2

Compound No.	Properties
394	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 1.14 (6H, d, J=6.8 Hz), 1.41 (9H, s), 2.12-2.13 (1H, m), 2.36 (3H, s), 3.52 (4H, s), 3.96-3.97 (2H, m), 5.04 (1H, br), 7.09 (2H, d, J=7.3 Hz), 7.13 (1H, br), 7.20 (1H, d, J=7.8 Hz), 7.25-7.29 (1H, m). white semisolid
395	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.17 (6H, d, J=6.8 Hz), 1.24 (3H, t, J=7.3 Hz), 2.17-2.18 (1H, m), 2.40 (3H, s), 3.54-3.55 (4H, m), 4.07-4.16 (4H, m), 5.26 (1H, d, J=8.8 Hz), 7.21-7.27 (4H, m), 7.34 (1H, br). white solid
396	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.16-1.29 (12H, m), 2.09-2.14 (1H, m), 2.39 (3H, s), 3.53-3.54 (4H, m), 4.04-4.05 (2H, m), 4.87-4.90 (1H, m), 5.26 (1H, br), 7.21-7.26 (4H, m), 7.42 (1H, br). white semisolid
397	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90-0.97 (12H, m), 1.12-1.18 (6H, m), 1.91-1.97 (1H, m), 2.15-2.16 (1H, m), 2.40 (3H, s), 3.53-3.54 (4H, m), 3.79-3.88 (2H, m), 4.04-4.05 (2H, m), 5.27 (1H, br), 7.21-7.26 (4H, m), 7.45 (1H, br). white solid
398	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.16 (6H, d, J=6.3 Hz), 1.43 (9H, s), 2.14-2.22 (1H, m), 2.38 (3H, s), 3.53 (4H, s), 3.98-4.03 (2H, m), 5.09 (1H, br), 7.18-7.30 (5H, m). white solid
404	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.3 Hz), 0.82 (3H, d, J=6.3 Hz), 0.93 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 1.21-1.25 (6H, m), 1.77-1.88 (1H, m), 2.18-2.30 (1H, m), 2.35 (3H, s), 2.78 (3H, s), 3.42-3.54 (2H, m), 3.90-4.00 (2H, m), 4.86-4.93 (1H, m), 6.42 (1H, d, J=8.8 Hz), 7.07 (1H, br), 7.18 (2H, d, J=8.3 Hz), 7.66 (2H, d, J=8.3 Hz).

	white crystal m.p. 121.1°C
405	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.3 Hz), 0.83 (3H, d, J=6.3 Hz), 0.90-0.99 (12H, m, J=6.8 Hz), 1.75-1.95 (2H, m), 2.25-2.30 (1H, m), 2.36 (3H, s), 2.82 (3H, s), 3.43-3.53 (2H, m), 3.82-3.99 (4H, m), 6.40 (1H, d, J=8.3 Hz), 7.06 (1H, br), 7.18 (2H, d, J=7.8 Hz), 7.66 (2H, d, J=7.8 Hz). white crystal m.p. 117.7°C.
408	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.25 (3H, d, J=6.8 Hz), 1.34 (3H, s), 1.41 (3H, s), 2.07-2.18 (4H, m), 2.38 (3H, s), 3.43-3.51 (1H, m), 3.92-4.02 (2H, m), 4.10-4.18 (1H, m), 4.87-4.90 (1H, m), 5.06 (1H, d, J=6.8 Hz), 6.56 (1H, d, J=8.3 Hz), 7.11 (1H, br), 7.21 (2H, d, J=7.8 Hz), 7.70 (2H, d, J=7.8 Hz). APCI-MS M^+: 452. white solid

Properties of Compound (31) in Table 2

Compound No.	Properties
411	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.21-1.25 (3H, m), 1.87-1.95 (1H, m), 2.09-2.16 (1H, m), 3.49-3.52 (1H, m), 3.63-3.66 (1H, m), 3.87-3.91 (1H, m), 3.94 (3H, s), 3.96-4.00 (1H, m), 4.07-4.12 (2H, m), 5.06 (1H, br), 6.18-6.21 (1H, m), 7.83-7.89 (2H, m), 8.08-8.11 (2H, m). white crystal: m.p. 215.2°C
412	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.23 (3H, d, J=6.8 Hz), 1.86-1.94 (1H, m), 2.00-2.16 (1H, m), 3.42-3.50 (1H, m), 3.66-3.75 (1H, m), 3.85-3.90 (1H, m), 3.94 (3H, s), 3.95-4.01 (1H, m), 4.11-4.13 (1H, m), 4.82-4.88 (1H, m), 6.21-6.23 (1H, m), 7.35 (1H, br), 7.84-7.89 (2H, m), 8.08-8.10 (2H, m). white crystal: m.p. 237.9°C
413	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (6H, d, J=6.8 Hz), 0.89 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.60-1.67 (1H, m), 1.88-2.05 (1H, m), 2.06-2.13 (1H, m), 3.45-3.49 (1H, m), 3.63-3.66 (1H, m), 3.81-3.90 (2H, m), 3.91-3.92 (1H, m), 3.94 (3H, s), 3.96-4.01 (1H, m), 5.11 (1H, br), 6.21 (1H, br), 7.29-7.32 (1H, br), 7.86-7.89 (2H, m), 8.05-8.10 (2H, m). white crystal: m.p. 225.7°C
414	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.41 (9H, s), 1.85-1.94 (1H, m), 2.12-2.17 (1H, m), 3.25-3.37 (1H, m), 3.74-3.77 (1H, m), 3.81-3.84 (1H, m), 3.93 (3H, s), 3.95-4.02 (1H, m), 4.93 (1H, br), 6.17 (1H, br), 7.41 (1H, br), 7.86-7.91 (2H, m), 8.07-8.11 (2H, m). white crystal: m.p. 213.0°C
416	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.86-1.95 (1H, m), 2.04-2.11 (1H, m), 3.01

	(3H, s), 3.05 (3H, s), 3.51–3.66 (2H, m), 3.90–3.96 (1H, m), 4.84–4.89 (1H, m), 5.11–5.13 (1H, m), 6.20–6.23 (1H, m), 6.64–6.67 (2H, m), 7.65–7.69 (1H, m), 7.93–7.96 (1H, m). white solid
420	APCI–MS M^+ 435. brown solid
424	APCI–MS M^+ 473. pale brown solid
427	^{1}H–NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.76 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 1.12–1.19 (3H, m), 1.75–1.80 (1H, m), 1.87–1.91 (1H, m), 3.76–3.90 (2H, m), 3.93–4.00 (4H, m), 7.00–7.01 (2H, m), 7.26 (1/2H, br), 7.56–7.59 (1H, m), 7.90–7.92 (2H, m), 7.93–7.96 (2H, m), 8.07 (1H, br), 8.40 (1/2H, br). white solid

Properties of Compound (32) in Table 2

Compound No.	Properties
428	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 1.17 (6H, d, J=6.8 Hz), 1.86-1.91 (1H, m), 1.99-2.05 (1H, m), 3.21-3.35 (2H, m), 3.80-3.83 (2H, m), 4.71-4.76 (1H, m), 7.02 (2H, s), 7.18 (1H, d, J=8.3 Hz), 7.66 (1H, s), 7.85 (2H, d, J=7.8 Hz), 7.92 (2H, d, J=7.8 Hz). white solid
431	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=7.8 Hz), 1.23 (3H, t, J=6.8 Hz), 1.85-1.94 (1H, m), 2.08-2.17 (1H, m), 3.46-3.52 (1H, m), 3.60-3.66 (1H, m), 3.87-3.99 (2H, m), 4.06-4.12 (2H, m), 5.06 (1H, br), 6.19 (1H, d, J=7.8 Hz), 7.23 (1H, br), 7.55 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white crystal m.p. 221.7°C
432	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.18-1.24 (6H, m), 1.87-1.92 (1H, m), 2.11-2.16 (1H, m), 3.40-3.46 (1H, m), 3.64-3.68 (1H, m), 3.85-3.97 (2H, m), 4.84-4.87 (1H, m), 4.99 (1H, br), 6.17 (1H, d), 7.26 (1H, br), 7.55 (2H, d, J=8.3 Hz), 7.70 (2H, d, J=8.3 Hz). white crystal m.p. 244.8°C
433	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86-0.91 (12H, m), 1.00 (6H, t, J=7.3 Hz), 1.85-1.92 (2H, m), 2.12-2.16 (1H, m), 3.43-3.50 (1H, m), 3.62-3.66 (1H, m), 3.81-3.99 (4H, m), 5.07 (1H, br), 6.18 (1H, br), 7.22 (1H, br), 7.56 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white crystal m.p. 221.1°C
435	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84-1.00 (12H, m), 1.18-1.25 (4H, m), 1.48-1.55 (1H, m), 1.64-1.68 (1H, m), 2.11-2.16 (1H, m), 3.44-3.51 (1H, m), 3.59-3.64 (1H, m), 3.88 (1H, dd, J=6.3, 7.8 Hz), 4.01-4.12 (3H, m), 5.07 (1H, br), 6.20 (1H, d, J=8.3 Hz), 7.23 (1H, br), 7.55 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white crystal m.p. 226.2°C
436	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85-1.00 (12H, m), 1.20-1.25

	(7H, m), 1.49–1.66 (2H, m), 2.10–2.16 (1H, m), 3.40–3.47 (1H, m), 3.63–3.68 (1H, m), 3.85–3.90 (1H, m), 4.00–4.05 (1H, m), 4.83–4.87 (1H, m), 4.99 (1H, br), 6.18 (1H, d, J=6.8 Hz), 7.26 (1H, br), 7.55 (2H, d, J=8.8 Hz), 7.70 (2H, d, J=8.8 Hz). white crystal m.p. 237.5°C
437	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85–1.00 (18H, m), 1.17–1.25 (1H, m), 1.50–1.57 (1H, m), 1.62–1.68 (1H, m), 1.88–1.92 (1H, m), 2.12–2.16 (1H, m), 3.43–3.50 (1H, m), 3.60–3.66 (1H, m), 3.80–3.90 (2H, m), 4.00–4.07 (1H, m), 5.08 (1H, br), 6.18 (1H, d), 7.24 (1H, br), 7.56 (2H, d, J=8.3 Hz), 7.69 (2H, d, J=8.3 Hz). white crystal m.p. 221.6°C
440	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.24 (3H, d, J=6.8 Hz), 1.84–1.89 (1H, m), 2.26–2.29 (1H, m), 3.43–3.51 (1H, m), 3.65–3.75 (1H, m), 3.93–3.95 (1H, m), 4.05 (1H, q, J=5.8 Hz), 4.88 (1H, q, J=6.3 Hz), 5.10 (1H, br), 6.67 (1H, br), 6.73 (1H, br), 7.48–7.56 (3H, m), 8.02–8.03 (1H, m). white crystal: m.p. 230.3°C

Properties of Compound (33) in Table 2

Compound No.	Properties
444	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.3 Hz), 0.87 (3H, d, J=7.3 Hz), 0.92 (3H, t, J=6.8 Hz), 0.96 (3H, t, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.22 (3H, d, J=6.8 Hz), 1.25-1.53 (6H, m), 2.38 (3H, s), 3.53-3.56 (2H, m), 3.87 (1H, q, J=6.3 Hz), 4.20 (1H, br), 4.86 (1H, q, J=6.3 Hz), 5.01 (1H, br), 6.15 (1H, br), 7.11 (1H, br), 7.21 (2H, d, J=8.3 Hz), 7.69 (2H, q, J=8.8 Hz). white solid
447	^{1}H-NMR □ ($CDCl_3$, ppm): 0.83 (3H, d, J=7.3 Hz), 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.87-1.96 (1H, m), 2.13 (1H, q, J=6.8 Hz), 3.46-3.51 (1H, m), 3.60-3.64 (1H, m), 3.68 (3H, s), 3.88-4.00 (2H, m), 5.14 (1H, br), 6.22 (1H, br), 7.29-7.31 (1H, m), 7.48-7.51 (1H, m), 7.58-7.64 (1H, m), 7.91-7.96 (1H, m). white crystal: m.p. 203.5°C
448	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.3 Hz), 0.92 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.22-1.28 (3H, m), 1.87-1.94 (1H, m), 2.13-2.18 (1H, m), 3.35-3.48 (1H, m), 3.61-3.65 (1H, m), 3.80-3.91 (1H, m), 3.93-3.97 (1H, m), 4.08-4.13 (2H, m), 5.02 (1H, br), 6.15-6.17 (1H, m), 7.30 (1H, br), 7.49-7.52 (1H, m), 7.58-7.65 (1H, m), 7.96-7.97 (1H, m). white crystal: m.p. 198.8°C
449	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.23 (3H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.14-2.19 (1H, m), 3.25-3.45 (1H, m), 3.61-3.75 (1H, m), 3.82-3.88 (1H, m), 3.90-3.97 (1H, m), 4.83-4.97 (1H, m), 5.00 (1H, br), 6.15-6.17 (1H, m), 7.35 (1H, br), 7.48-7.52 (1H, m), 7.59-7.66 (1H, m), 7.97 (1H, d, J=1.9 Hz). white crystal: m.p. 211.6°C
450	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (6H, d, J=6.8 Hz), 0.92 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.02 (3H,

	d, J=6.8 Hz), 1.85–1.96 (2H, m), 2.13–2.18 (1H, m), 3.25–3.48 (1H, m), 3.58–3.65 (1H, m), 3.82–3.95 (4H, m), 5.07 (1H, br), 6.17–6.19 (1H, m), 7.32 (1H, br), 7.47–7.52 (1H, m), 7.59–7.65 (1H, m), 7.96–7.97 (1H, m). white crystal: m.p. 193.3°C
451	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.85–1.97 (1H, m), 2.14–2.21 (1H, m), 3.20–3.25 (1H, m), 3.79–3.83 (1H, m), 3.92–3.99 (1H, m), 4.90 (1H, br), 6.15 (1H, br), 7.41 (1H, br), 7.48 (1H, d, J=8.8 Hz), 7.62–7.68 (1H, m), 7.99 (1H, d, J=1.9 Hz). white crystal: m.p. 193.7°C
452	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=7.3 Hz), 0.82 (3H, d, J=6.8 Hz), 0.90 (3H, t, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.12–1.25 (1H, m), 1.50–1.54 (1H, m), 1.63–1.67 (1H, m), 2.11–2.16 (1H, m), 3.49–3.53 (1H, m), 3.61–3.65 (1H, m), 3.68 (3H, s), 3.87–3.91 (1H, m), 4.01–4.03 (1H, m), 5.16 (1H, br), 6.23 (1H, br), 7.32 (1H, br), 7.45–7.51 (1H, m), 7.60–7.64 (1H, m), 7.91–7.96 (1H, m). white crystal: m.p. 190.5°C

Properties of Compound (34) in Table 2

Compound No.	Properties
453	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.99 (3H, t, J=6.8 Hz), 1.20-1.26 (3H, m), 1.50-1.67 (3H, m), 2.10-2.19 (1H, m), 3.39-3.50 (1H, m), 3.58-3.63 (1H, m), 3.84-3.98 (1H, m), 4.00-4.05 (1H, m), 4.08-4.14 (2H, m), 5.05 (1H, br), 6.19 (1H, br), 7.33 (1H, br), 7.48-7.52 (1H, m), 7.58-7.65 (1H, m), 7.97 (1H, d, J=1.9 Hz). white crystal: m.p. 201.2°C
454	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 1.00 (3H, t, J=6.8 Hz), 1.20-1.25 (6H, m), 1.50-1.67 (1H, m), 1.70-1.85 (2H, m), 2.12-2.17 (1H, m), 3.39-3.45 (1H, m), 3.58-3.65 (1H, m), 3.85-3.89 (1H, m), 4.00-4.03 (1H, m), 4.85-4.88 (1H, m), 4.99-5.02 (1H, m), 6.20 (1H, br), 7.39 (1H, br), 7.47-7.51 (1H, m), 7.59-7.66 (1H, m), 7.97 (1H, d, J=1.9 Hz). white crystal: m.p. 194.8°C
455	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (6H, d, J=6.8 Hz), 0.91 (6H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, t, J=6.8 Hz), 1.13-1.25 (1H, m), 1.50-1.56 (1H, m), 1.81-1.97 (2H, m), 2.13-2.18 (1H, m), 3.40-3.49 (1H, m), 3.63-3.71 (1H, m), 3.82-3.90 (3H, m), 4.00-4.04 (1H, m), 5.10 (1H, br), 6.12 (1H, br), 7.36 (1H, br), 7.48-7.51 (1H, m), 7.59-7.65 (1H, m), 7.96 (1H, d, J=1.9 Hz). white crystal: m.p. 184.6°C
456	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, t, J=6.8 Hz), 1.20-1.25 (1H, m), 1.43 (9H, s), 1.51-1.63 (2H, m), 2.13-2.18 (1H, m), 3.20-3.31 (1H, m), 3.79-3.83 (2H, m), 4.00-4.06 (1H, m), 4.91 (1H, br), 6.14 (1H, br), 7.44 (1H, br), 7.49-7.52 (1H, m), 7.65-7.68 (1H, m), 7.99 (1H, d, J=1.9 Hz). white crystal: m.p. 168.6°C
458	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.01 (3H,

	d, J=6.8 Hz), 1.18 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.92-1.97 (1H, m), 2.16-2.22 (1H, m), 3.44-3.51 (2H, m), 3.87-4.06 (2H, m), 4.75 (1H, br), 4.99 (1/2H, br), 5.01 (1/2H, br), 6.21-6.23 (1H, m), 6.64 (1H, m), 7.21-7.31 (1H, m), 7.37-7.42 (1H, m), 7.58-7.61 (1H, m). white solid
462	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.22 (3H, d, J=6.8 Hz), 1.95-1.99 (2H, m), 3.27-3.31 (1H, m), 3.64-3.71 (1H, m), 3.86-3.90 (1H, m), 4.01-4.05 (1H, m), 4.84-4.86 (1H, m), 5.10-5.12 (1H, m), 6.61 (1/2H, br), 6.85 (1/2H, br), 7.22-7.24 (1H, m), 7.54-7.57 (1H, m), 7.67-7.71 (1H, m), 7.80-7.93 (1H, m). white solid
466	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.00 (6H, d, J=6.8 Hz), 1.22 (3H, d, J=6.8 Hz), 1.24 (3H, d, J=6.8 Hz), 1.88 (1H, q, J=6.8 Hz), 2.07-2.11 (1H, m), 3.38-3.47 (1H, m), 3.50-3.52 (1H, m), 3.98-4.03 (2H, m), 4.83-4.86 (1H, m), 5.62-5.64 (1H, m), 7.17-7.21 (1H, m), 7.35-7.47 (1H, m), 8.06-8.08 (1H, m). white solid

Properties of Compound (35) in Table 2

Compound No.	Properties
470	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.20-1.23 (6H, m), 1.91-1.96 (1H, m), 2.06-2.10 (1H, m), 3.43-3.50 (1H, m), 3.55-3.59 (1H, m), 3.89-3.93 (1H, m), 4.00-4.12 (1H, m), 4.84-4.89 (1H, m), 5.06-5.08 (1H, m), 6.58 (1H, br), 6.80 (1H, br), 6.98-7.04 (1H, m), 7.91-7.93 (1H, m). white solid
474	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (6H, d, J=6.8 Hz), 1.01 (6H, d, J=6.8 Hz), 1.13 (6H, d, J=6.8 Hz), 1.81-2.07 (2H, m), 3.31-3.40 (1H, m), 3.71-3.82 (1H, m), 3.86 (3H, s), 3.88 (3H, s), 3.89 (3H, s), 3.85-3.90 (1H, m), 4.00-4.05 (1H, m), 4.76-4.81 (1H, m), 4.97-5.03 (1H, m), 6.56 (1/2H, br), 6.21 (1/2H, br), 7.06 (1H, s), 7.10 (1H, s). white solid
478	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.04 (3H, d, J=6.8 Hz), 1.05 (3H, d, J=6.8 Hz), 1.19 (6H, d, J=6.8 Hz), 1.96-1.98 (1H, m), 2.05-2.24 (1H, m), 3.37-3.48 (1H, m), 3.62-3.75 (1H, m), 3.80-3.92 (1H, m), 3.98-4.02 (1H, m), 4.69-4.78 (1H, m), 5.08 (1H, d, J=7.8 Hz), 6.24-6.25 (1H, m), 6.70 (1H, br), 7.55-7.60 (2H, m), 7.64-7.71 (1H, m), 8.02-8.06 (1H, m). white solid
482	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.18 (6H, d, J=6.8 Hz), 1.93-2.15 (2H, m), 3.50-3.61 (2H, m), 3.86 (3H, s), 3.88-3.93 (1H, m), 4.03-4.07 (1H, m), 4.83-4.87 (1H, m), 5.10-5.15 (1H, m), 6.57 (1/2H, br), 6.59 (1/2H, br), 7.01-7.03 (1H, m), 7.28-7.40 (3H, m). white solid
486	ESI-MS M^+: 436. white solid
490	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-1.23 (18H, m), 1.91-1.98 (1H, m), 2.18-2.27 (1H, m), 3.33-4.10 (4H, m), 4.77-

	5.04 (2H, m), 6.09 (2/3H, d), 6.24 (1/3H, d), 6.64 (2/3H, br), 6.72 (1/3H, br), 7.00–7.36 (3H, m). white solid
494	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84–1.05 (12H, m), 1.18–1.22 (6H, m), 1.86–2.00 (1H, m), 2.10–2.18 (1H, m), 3.48–3.67 (2H, m), 3.89–4.14 (2H, m), 4.79–4.87 (1H, m), 4.97–5.06 (1H, m), 6.26 (1/3H, d), 6.49 (2/3H, d, J=7.8 Hz), 6.67 (2/3H, br), 6.86 (1/3H, br), 7.02–7.16 (2H, m), 7.67–7.76 (1H, m). white solid
498	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81–1.02 (12H, m), 1.18–1.25 (6H, m), 1.89–2.06 (2H, m), 3.29–3.41 (1H, m), 3.62–3.72 (1H, m), 3.85–4.08 (2H, m), 4.83–4.90 (1H, m), 5.02–5.08 (1H, m), 6.20 (1/3H, d), 6.56 (2/3H, br), 6.78 (2/3H, d), 7.18–7.21 (1H, m), 7.32 (1/3H, br), 7.66–7.73 (1H, m), 7.89–7.98 (1H, m). white solid

Properties of Compound (36) in Table 2

Compound No.	Properties
502	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (6H, d, J=6.8 Hz), 1.02 (6H, d, J=6.8 Hz), 1.19-1.23 (6H, m), 1.96-2.04 (2H, m), 3.32-3.36 (1H, m), 3.66-3.71 (1H, m), 3.83-3.87 (1H, m), 7.83-4.88 (1H, m), 5.05 (1H, d, J=8.8 Hz), 6.56 (1H, br), 7.03 (1H, d), 7.57-7.60 (1H, m), 7.77 (1H, d, J=7.8 Hz), 8.03 (1H, d, J=7.8 Hz), 8.15 (1H, s). white solid
506	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86-1.05 (12H, m), 1.18-1.22 (6H, m), 1.88-1.98 (1H, m), 2.13-2.22 (1H, m), 3.47-3.68 (2H, m), 3.88-4.13 (2H, m), 4.78-4.85 (1H, m), 4.98 (1/3H, d), 5.06 (2/3H, d, J=8.8 Hz), 6.28 (1/3H, d), 6.51 (2/3H, d, J=8.8 Hz), 6.65 (2/3H, s), 6.85 (1/3H, s), 7.23-7.74 (3H, m). white solid
510	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-1.08 (12H, m), 1.18-1.23 (6H, m), 1.94-2.01 (1H, m), 2.20-2.31 (1H, m), 3.09-4.08 (4H, m), 4.76-5.03 (2H, m), 6.01 (2/3H, d), 6.27 (1/3H, d), 6.68-6.75 (1H, m), 7.22-7.34 (3H, m). white solid
514	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84-1.04 (12H, m), 1.18-1.22 (6H, m), 1.88-2.14 (2H, m), 3.47-3.68 (2H, m), 3.87-4.13 (2H, m), 4.77-4.85 (1H, m), 5.05-5.13 (1H, m), 6.28 (2/3H, d, J=9.3 Hz), 6.35 (1/3H, d), 6.71 (1H, br), 6.83-6.96 (2H, m), 7.34-7.39 (1H, m). white solid
518	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-1.04 (12H, m), 1.14-1.24 (6H, m), 1.88-1.94 (1H, m), 2.12-2.18 (1H, m), 2.27-2.31 (6H, m), 3.40-3.66 (2H, m), 3.91-4.10 (2H, m), 4.77-4.83 (1H, m), 5.03 (1/3H, d), 5.12 (2/3H, d, J=8.8 Hz), 5.97 (2/3H, d, J=8.8 Hz), 6.32 (1/3H, d), 6.42 (1/3H, br), 6.84 (2/3H, br), 7.07-7.21 (3H, m). white solid
522	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80-1.02 (12H, m), 1.18-1.23 (6H, m), 1.89-2.12 (2H, m), 3.45-3.67 (1H, m), 3.80-4.08 (9H, m), 4.83-4.90 (1H, m), 5.02-5.08 (1H, m), 6.48 (1H, d), 6.05-6.11 (2H, m), 6.91 (1H, s), 7.24

	(1H, s). white solid
526	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-1.03 (12H, m), 1.17-1.23 (6H, m), 1.88-2.18 (2H, m), 3.10-4.11 (4H, m), 4.82-4.88 (1H, m), 4.98-5.06 (1H, m), 6.21 (1H, d), 6.53 (1/2H, br), 6.72 (1/2H, br), 7.24-7.29 (2H, m), 7.83-7.89 (2H, m). white solid
530	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.18 (3H, d, J=6.3 Hz), 1.21 (3H, d, J=6.3 Hz), 1.93-1.96 (1H, m), 2.16-2.22 (1H, m), 2.26 (9H, s), 3.60 (1H, m), 3.70 (1H, m), 3.89-3.91 (1H, m), 4.04-4.06 (1H, m), 4.75 (1H, m), 5.20 (1H, m), 6.15 (1H, m), 6.78-6.79 (1H, m), 6.83-6.84 (1H, m), 7.25 (1H, m). white solid

Properties of Compound (37) in Table 2

Compound No.	Properties
534	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.16 (3H, d, J=6.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.32 (3H, s), 1.33 (3H, s), 1.35 (3H, s), 1.94-1.96 (2H, m), 3.37 (1H, m), 3.56-3.57 (1H, m), 3.92-3.95 (2H, m), 4.81-4.85 (1H, m), 5.20 (1H, m), 6.60 (1H, m), 6.85 (1H, m), 7.36-7.49 (2H, m), 7.71-7.74 (2H, m). white solid
538	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J=6.3 Hz), 0.94 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.19 (3H, d, J=7.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.86-1.97 (1H, m), 2.17-2.19 (1H, m), 3.40-3.60 (2H, m), 3.90-4.00 (2H, m), 4.80 (1H, m), 5.08 (1H, m), 6.20 (1H, m), 6.75 (1H, m), 7.27-7.30 (1H, m), 7.33-7.38 (1H, m), 7.48-7.60 (2H, m). white solid
542	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.90 (3H, t, J=6.8 Hz), 1.00 (6H, d, J=6.8 Hz), 1.18 (3H, d, J=6.3 Hz), 1.21 (3H, d, J=6.3 Hz), 1.32-1.35 (4H, m), 1.45 (2H, m), 1.77-1.79 (2H, m), 1.92-1.97 (2H, m), 3.30-3.33 (1H, m), 3.56-3.58 (1H, m), 3.96 (1H, m), 3.98 (2H, t, J=6.3 Hz), 4.10 (1H, m), 4.82-4.87 (1H, m), 5.24 (1H, m), 6.64 (1H, d, J=8.3 Hz), 6.88-6.90 (2H, m), 7.10 (1H, m), 7.73-7.77 (2H, m). white solid
546	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.3 Hz), 1.22 (3H, d, J=6.3 Hz), 1.88-1.89 (1H, m), 2.09-2.17 (1H, m), 3.47-3.57 (2H, m), 3.97-4.01 (2H, m), 4.79-4.85 (1H, m), 5.75 (1H, d, J=8.8 Hz), 7.44 (1H, m), 8.18-8.20 (1H, d, J=8.8 Hz). white solid
550	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.3 Hz), 0.94 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H,

	d, J=6.8 Hz), 1.05 (3H, d, J=6.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.95–1.98 (1H, m), 2.18–2.20 (1H, m), 3.53 (2H, m), 3.93 (1H, m), 4.01–4.05 (1H, m), 4.75 (1H, m), 5.20 (1H, m), 6.16 (1H, d, J=8.3 Hz), 6.90 (1H, m), 7.07–7.10 (1H, m), 7.35–7.39 (2H, m), 7.83–7.87 (1H, m). white solid
554	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.18 (3H, d, J=6.3 Hz), 1.22 (3H, d, J=6.8 Hz), 1.88–1.99 (2H, m), 3.25–3.31 (1H, m), 3.63–3.70 (1H, m), 3.89–3.92 (2H, m), 4.80–4.85 (1H, m), 5.23 (1H, d, J=7.3 Hz), 6.89 (1H, d, J=8.3 Hz), 7.40 (1H, m), 7.51–7.56 (2H, m), 7.74–7.79 (2H, m). white solid

Properties of Compound (38) in Table 2

Compound No.	Properties
558	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.3 Hz), 1.17 (3H, d, J=6.3 Hz), 1.19 (3H, d, J=6.3 Hz), 1.80-2.00 (1H, m), 2.00-2.10 (1H, m), 3.43-3.45 (2H, m), 3.96 (2H, m), 3.98 (3H, s), 4.82-4.85 (1H, m), 5.20 (1H, m), 6.97-6.99 (1H, m), 7.06-7.09 (2H, m), 7.45-7.47 (1H, m), 8.14 (1H, m), 8.17-8.19 (1H, m). white solid
562	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.18 (3H, d, J=6.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.87-1.92 (1H, m), 2.16-2.21 (1H, m), 3.80-3.81 (2H, m), 3.81 (3H, s), 3.82 (3H, s), 3.85-3.93 (1H, m), 3.99-4.01 (1H, m), 4.75 (1H, m), 5.20 (1H, m), 5.91 (1H, d, J=8.8 Hz), 6.54-6.61 (2H, m), 6.90 (1H, m), 7.27-7.31 (1H, m). white solid
565	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=7.3 Hz), 0.88 (3H, d, J=6.8 Hz), 0.94 (3H, t, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.18-1.20 (1H, m), 1.50-1.57 (1H, m), 2.09-2.14 (1H, m), 3.48-3.53 (2H, m), 3.64-3.66 (1H, m), 3.87-3.92 (1H, m), 4.01-4.03 (1H, m), 5.04 (1H, br), 6.23 (1H, br), 7.07-7.12 (3H, m), 7.80-7.84 (2H, m). white crystal: m.p. 204.3°C
566	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89-1.04 (12H, m), 1.20-1.27 (3H, m), 1.88-1.94 (1H, m), 2.16-2.20 (1H, m), 3.07 (3H, s), 3.37-3.42 (1H, m), 3.74-4.02 (3H, m), 4.10-4.16 (2H, m), 5.05 (1H, d, J=6.8 Hz), 6.21 (1H, d, J=8.3 Hz), 7.55 (1H, br), 7.99-8.05 (4H, m). white crystal m.p. 220.6°C
567	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89-1.05 (12H, m), 1.18-1.23 (6H, m), 1.89-1.94 (1H, m), 2.17-2.22 (1H, m), 3.07 (3H, s), 3.32-3.38 (1H, m), 3.77-4.02 (3H, m), 4.84-4.88 (1H, m), 4.97 (1H, d, J=6.8 Hz), 6.18 (1H, d), 7.58 (1H, br), 7.99-8.05 (4H, m).

	white crystal m.p. 187.0°C
571	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76-0.89 (6H, m), 0.98-1.02 (6H, m), 1.18-1.26 (6H, m), 1.52 (9H, s), 1.86-2.11 (2H, m), 3.50-3.64 (2H, m), 3.87-3.98 (2H, m), 4.83-4.88 (1H, m), 5.04-5.11 (1H, m), 6.22 (2/3H, d, J=7.8 Hz), 6.45 (1/3H, d), 6.62 (1H, s), 6.64 (1/3H, br), 7.03 (2/3H, br), 7.42 (2H, t, J=8.8 Hz), 7.72 (1H, d, J=8.8 Hz), 7.75 (1H, d, J=8.8 Hz). white crystal m.p. 228.8°C
575	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79-0.90 (6H, m), 0.98-1.03 (6H, m), 1.17-1.23 (6H, m), 1.46 (9H, s), 1.87-2.16 (2H, m), 3.28 (3H, s), 3.46-3.66 (2H, m), 3.89-4.10 (2H, m), 4.86-4.92 (1H, m), 5.03-5.12 (1H, m), 6.23 (1/2H, d), 6.53 (1/2H, d), 7.12 (1H, br), 7.29-7.33 (2H, m), 7.73-7.78 (2H, m). white crystal m.p. 167.0°C
579	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80-0.88 (6H, m), 0.96-1.04 (6H, m), 1.16-1.22 (6H, m), 1.55 (9H, s), 1.88-2.17 (2H, m), 3.42-3.60 (2H, m), 3.93-4.07 (2H, m), 4.86-4.90 (1H, m), 5.26 (1/2H, br), 5.38 (1/2H, br), 6.33 (1/2H, d), 6.63 (1/2H, d), 7.03-7.08 (2H, m), 7.37-7.47 (2H, m), 8.53 (1H, s). white crystal m.p. 167.0°C

Properties of Compound (39) in Table 2

Compound No.	Properties
583	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88-1.03 (12H, m), 1.18 (3H, d, J=6.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.85-1.92 (1H, m), 2.15-2.21 (1H, m), 2.43 (3H, s), 3.38-3.42 (1H, m), 3.65-3.70 (1H, m), 3.85-3.96 (2H, m), 4.75-4.80 (1H, m), 4.93 (1H, d), 6.16 (1H, d, J=8.3 Hz), 6.64 (1H, br), 7.15-7.22 (2H, m), 7.33 (1H, d, J=8.3 Hz). white crystal m.p. 235.5°C.
587	ESI-MS M^+: 464. white solid
590	^{1}H-NMR δ ($CDCl_3$, ppm):1.17-1.20 (9H, m), 3.47-3.53 (4H, m), 3.84-3.88 (1H,m), 4.00 (2H, d, J=4.4 Hz), 4.06 (2H, q, J=7.3 Hz), 5.70 (1H, br), 7.27-7.30 (1H, m), 7.39-7.50 (3H, m), 7.65-7.67 (1H, m). yellow oil
591	^{1}H-NMR δ ($CDCl_3$, ppm): 1.21-1.28 (12H, m), 3.56-3.60 (4H, m), 3.93-3.95 (1H, m), 4.07 (2H, d, J=3.9 Hz), 4.89-4.96 (1H, m), 5.69 (1H, br), 7.28-7.32 (1H, m), 7.39-7.50 (3H, m), 7.65-7.67 (1H, m). yellow oil
592	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (6H, d, J=6.8 Hz), 1.20 (6H, d, J=6.8 Hz), 1.81-1.92 (1H, m), 3.46-3.54 (4H, m), 3.79 (2H, d, J=6.8 Hz), 3.84-3.93 (1H, m), 4.01 (2H, d, J=4.4 Hz), 5.73 (1H, br), 7.27-7.30 (1H, m), 7.39-7.51 (3H, m), 7.65-7.67 (1H, m). yellow oil
593	^{1}H-NMR δ ($CDCl_3$, ppm):1.24 (6H, d, J=6.8 Hz), 1.44 (9H, s), 3.53-3.59 (4H, m), 3.90-3.93 (1H, m), 4.02 (2H, d, J=4.4 Hz), 5.51 (1H, br), 7.27-7.30 (1H, m), 7.39-7.50 (3H, m), 7.65-7.67 (1H, m). yellow oil
594	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.22 (3H, t, J=6.8 Hz), 1.86-1.91 (1H, m), 3.47-3.51 (1H, m), 3.68-3.77 (2H, m), 3.86-3.87 (1H, m), 3.90-3.91 (1H, m), 3.96-4.14 (2H, m), 5.33 (1H, m), 6.48 (1H, d, J=8.8 Hz), 7.14 (1H, m), 7.28-7.30 (1H, m), 7.38-7.44 (2H, m), 7.48-7.50 (1H,

	m), 7.64-7.65 (1H, m). white crystal m.p. 157.7°C
595	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=5.8 Hz), 1.86-1.89 (1H, m), 3.54-3.55 (1H, m), 3.61-3.64 (1H, m), 3.73-3.78 (1H, m), 3.85-3.91 (1H, m), 3.97-4.00 (1H, m), 4.89-4.91 (1H, m), 5.59 (1H, m), 6.78 (1H, d, J=8.3 Hz), 7.26-7.29 (1H, m), 7.38-7.43 (3H, m), 7.49-7.52 (1H, m), 7.64-7.66 (1H, m). white solid
597	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.86-1.91 (1H, m), 3.54-3.56 (1H, m), 3.68-3.72 (2H, m), 3.79-3.85 (1H, m), 3.98-4.01 (1H, m), 5.16 (1H, m), 6.49 (1H, d, J=8.8 Hz), 7.20 (1H, m), 7.28-7.30 (1H, m), 7.38-7.43 (2H, m), 7.50-7.52 (1H, m), 7.64-7.66 (1H, m). white crystal m.p. 175.3°C

Properties of Compound (40) in Table 2

Compound No.	Properties
598	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.13 (3H, d, J=6.3 Hz), 1.21 (3H, t, J=7.3 Hz), 1.86-1.91 (1H, m), 3.47-3.53 (1H, m), 3.67-3.74 (1H, m), 3.96-4.00 (1H, m), 4.10 (2H, q, J =7.3 Hz), 4.19 (1H, m), 5.22 (1H, m), 6.45 (1H, d, J=8.3 Hz), 7.12 (1H, m), 7.28-7.30 (1H, m), 7.38-7.44 (2H, m), 7.48-7.50 (1H, m), 7.64-7.66 (1H, m). white crystal m.p. 178.3°C
599	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.16 (3H, d, J=6.3 Hz), 1.25 (3H, d, J=7.3 Hz), 1.27 (3H, d, J=6.8 Hz), 1.86-1.91 (1H, m), 3.51-3.55 (1H, m), 3.63-3.67 (1H, m), 3.95-4.01 (1H, m), 4.12 (1H, m), 4.86-4.90 (1H, m), 5.09 (1H, m), 6.39 (1H, d, J=8.3 Hz), 7.11 (1H, m), 7.27-7.30 (1H, m), 7.38-7.44 (2H, m), 7.49-7.51 (1H, m), 7.64-7.66 (1H, m). white crystal m.p. 146.4°C
601	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.3 Hz), 1.12 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.85-1.89 (1H, m), 3.57-3.60 (2H, m), 3.97-4.01 (1H, m), 4.11-4.15 (1H, m), 5.03 (1H, d, J=5.3 Hz), 6.50 (1H, d, J=7.3 Hz), 7.19 (1H, d, J=5.3 Hz), 7.25-7.29 (1H, m), 7.37-7.40 (1H, m), 7.41-7.44 (1H, m), 7.48-7.51 (1H, m), 7.63-7.65 (1H, m). white crystal m.p. 163.1°C
602	^{1}H-NMR δ ($CDCl_3$, ppm): 0.97 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.19 (3H, t, J=6.8 Hz), 1.44 (3H, s), 1.50 (3H, s), 1.84-1.91 (1H, m), 3.59-3.63 (2H, m), 3.93-3.98 (1H, m), 4.05 (2H, q, J=6.8 Hz), 5.12 (1H, m), 6.55 (1H, d, J=8.8 Hz), 7.20 (1H, m), 7.28-7.30 (1H, m), 7.38-7.44 (2H, m), 7.49-7.51 (1H, m), 7.64-7.66 (1H, m). white crystal m.p. 141.8°C
603	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.17 (3H, d, J=5.8 Hz), 1.18 (3H, d, J=5.4 Hz), 1.44 (3H, s), 1.49 (3H, s), 1.85-1.92 (1H, m), 3.56-3.66 (2H, m), 3.93-4.00 (1H, m), 4.80-

	4.88 (1H, m), 5.04 (1H, m), 6.57 (1H, d, J=8.8 Hz), 7.27 (1H, m), 7.29 (1H, m), 7.37-7.44 (2H, m), 7.47-7.51 (1H, m), 7.46-7.66 (1H, m). white crystal m.p. 137.3°C
605	^{1}H-NMR δ ($CDCl_3$, ppm): 0.98 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.40 (9H, s), 1.42 (3H, s), 1.48 (3H, s), 1.83-1.88 (1H, m), 3.46-3.50 (1H, m), 3.68-3.71 (1H, m), 3.95-4.02 (1H, m), 4.94 (1H, m), 6.58 (1H, d, J=8.8 Hz), 7.25-7.29 (1H, m), 7.36-7.41 (2H, m), 7.44 (1H, m), 7.49-7.51 (1H, m), 7.63-7.65 (1H, m). white crystal m.p. 140.5°C
606	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, t, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.22 (3H, t, J=7.3 Hz), 1.56-1.62 (1H, m), 1.77-1.84 (1H, m), 1.87-1.92 (1H, m), 3.50-3.53 (1H, m), 3.66-3.68 (1H, m), 3.98-4.04 (2H, m), 4.10 (2H, q, J=7.3 Hz), 5.15 (1H, m), 6.29 (1H, d, J=8.8 Hz), 7.08 (1H, m), 7.29-7.30 (1H, m), 7.39-7.44 (2H, m), 7.48-7.51 (1H, m), 7.65-7.67 (1H, m). white crystal m.p. 168.2°C

Properties of Compound (41) in Table 2

Compound No.	Properties
607	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, t, J=7.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.3 Hz), 1.21 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.8 Hz), 1.54-1.62 (1H, m), 1.77-1.91 (2H, m), 3.52-3.55 (1H, m), 3.61-3.69 (1H, m), 3.97-4.06 (2H, m), 4.89 (1H, q, J=6.3 Hz), 5.10 (1H, d, J=5.8 Hz), 6.32 (1H, d, J=8.3 Hz), 7.11 (1H, m), 7.28-7.30 (1H, m), 7.38-7.44 (2H, m), 7.48-7.50 (1H, m), 7.65-7.67 (1H, m). white crystal m.p. 183.9°C
609	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.53-1.60 (1H, m), 1.77-1.91 (2H, m), 3.58-3.60 (2H, m), 3.96-4.04 (2H, m), 5.00 (1H, m), 6.35 (1H, d, J=8.3 Hz), 7.17 (1H, m), 7.28-7.30 (1H, m), 7.38-7.44 (2H, m), 7.48-7.50 (1H, m), 7.64-7.66 (1H, m). white crystal m.p. 185.7°C
618	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3/2H, d, J=6.8 Hz), 0.83 (3/2H, d, J=6.8 Hz), 0.95 (3/2H, d, J=6.8 Hz), 0.99 (3/2H, d, J=6.8 Hz), 1.14 (3/2H, t, J=6.8 Hz), 1.18 (3/2H, t, J=6.8 Hz), 1.77-1.78 (1/2H, m), 1.86-1.88 (1/2H, m), 3.40-3.50 (1H, m), 3.60 (1/2H, m), 3.70 (1/2H, m), 3.99 (2H, q, J=6.8 Hz), 4.05-4.08 (1H, m), 5.20 (1H, m), 5.91 (1H, m), 6.13 (1/2H, d, J=8.8 Hz), 6.25 (1/2H, m), 6.75 (1/2H, m), 6.94-6.96 (1/2H, m), 7.00-7.04 (3/2H, m), 7.20-7.26 (3/2H, m), 7.27 (1/2H, m), 7.28-7.33 (3H, m), 7.41 (1/2H, m), 7.43-7.49 (2H, m), 7.65-7.67 (1H, m). white crystal m.p.180.9°C
619	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3/2H, d, J=6.8 Hz), 0.83 (3/2H, d, J=6.8 Hz), 0.95 (3/2H, d, J=6.8 Hz), 0.99 (3/2H, d, J=6.8 Hz), 1.15 (3H, d, J=6.8 Hz), 1.17 (3/2H, d, J=6.3 Hz), 1.20 (3/2H, d, J=6.3 Hz), 1.77-1.78 (1/2H, m), 1.86-1.88 (1/2H, m), 3.42-3.46 (1H, m), 3.69 (1/2H, m), 3.71 (1/2H, m), 3.96-3.99 (1H, m), 4.77-4.80 (1H, m), 5.10 (1H, m), 5.81-5.82 (1H, m), 6.11 (1/2H, m), 6.13 (1/2H, m), 6.80 (1/2H, m), 6.95-6.97 (1/2H, m), 7.01-7.05 (3/2H, m), 7.19-7.22 (3/2H,

	m), 7.27 (1/2H, m), 7.28-7.33 (3H, m), 7.41 (1/2H, m), 7.43-7.50 (2H, m), 7.65-7.67 (1H, m). white crystal m.p. 187.7°C
621	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3/2H, d, J=6.8 Hz), 0.85 (3/2H, d, J=6.8 Hz), 0.94 (3/2H, d, J=6.8 Hz), 0.98 (3/2H, d, J=6.8 Hz), 1.35 (9/2H, s), 1.39 (9/2H, s), 1.78-1.79 (1/2H, m), 1.85-1.86 (1/2H, m), 3.42-3.46 (2H, m), 3.96-3.99 (1H, m), 5.20 (1H, m), 5.66 (1/2H, m), 5.67 (1/2H, m), 6.17 (1/2H, m), 6.19 (1/2H, m), 6.97 (1/2H, m), 6.98 (1/2H, m), 7.02-7.06 (1H, m), 7.14-7.17 (2H, m), 7.27-7.32 (3H, m), 7.38-7.49 (3H, m), 7.64-7.67 (1H, m). white crystal m.p. 90.5°C
638	^{1}H-NMR δ ($DMSO-d_6$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.21 (3H, t, J=6.8 Hz), 2.15 (1H, q, J=6.8 Hz), 3.51-3.57 (2H, m), 3.62-3.66 (2H, m), 3.97 (1H, q, J=6.8 Hz), 4.07-4.15 (2H, m), 5.22-5.24 (1H, m), 6.76 (1H, br), 7.23-7.29 (1H, m), 7.39-7.51 (3H, m), 7.66-7.68 (1H, m). white crystal m.p. 167.6°C

Properties of Compound (42) in Table 2

Compound No.	Properties
639	^{1}H-NMR δ (DMSO-d_6, ppm): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.12-1.23 (6H, m), 2.13 (1H, q, J=6.8 Hz), 3.53-3.57 (2H, m), 3.60-3.69 (2H, m), 3.96 (1H, q, J=6.8 Hz), 4.87 (1H, br), 5.15 (1H, br), 6.68 (1H, br), 7.22-7.32 (1H, m), 7.40-7.52 (3H, m), 7.66-7.69 (1H, m). white crystal m.p. 162.8°C
640	^{1}H-NMR δ (DMSO-d_6, ppm): 0.87 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 1.12 (3H, d, J=6.8 Hz), 1.86 (1H, q, J=6.8 Hz), 2.13-2.17 (1H, m), 3.55-3.57 (2H, m), 3.62-3.66 (2H, m), 3.75-3.89 (2H, m), 3.96 (1H, q, J=6.8 Hz), 5.22-5.25 (1H, m), 6.73 (1H, br), 7.27-7.32 (1H, m), 7.35-7.52 (3H, m), 7.65-7.68 (1H, m). white crystal m.p. 154.3°C
641	^{1}H-NMR δ (DMSO-d_6, ppm): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.42 (9H, s), 2.11-2.20 (1H, m), 3.49-3.68 (4H, m), 3.88-3.91 (1H, m), 4.99 (1H, br), 6.55 (1H, br), 7.27-7.31 (1H, m), 7.40-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal
642	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.25 (3H, d, J=6.3 Hz), 2.05-2.09 (1H, m), 3.47-3.52 (1H, m), 3.60-3.64 (1H, m), 3.68 (3H, s), 3.92-3.95 (1H, m), 4.20-4.24 (1H, m), 5.22-5.25 (1H, m), 6.47 (1H, br), 7.16 (1H, br), 7.28-7.32 (1H, m), 7.40-7.51 (3H, m), 7.66-7.68 (1H, m). white crystal m.p. 189.6°C
643	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=6.8 Hz), 1.25 (3H, d, J=6.8 Hz), 2.05-2.09 (1H, m), 3.48-3.53 (1H, m), 3.60-3.66 (1H, m), 3.92-3.95 (1H, m), 4.10 (2H, q, J=7.3 Hz), 4.21-4.25 (1H, m), 5.21 (1H, br), 6.48 (1H, br), 7.19 (1H, br), 7.28-7.32 (1H, m), 7.40-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal m.p. 197.2°C
644	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.89

	(3H, d, J=6.8 Hz), 1.21–1.24 (6H, m), 1.26–1.27 (3H, m), 2.05–2.09 (1H, m), 3.48–3.60 (2H, m), 3.87–3.92 (1H, m), 4.21–4.26 (1H, m), 4.88 (1H, q, J=6.8 Hz), 5.12 (1H, br), 6.48 (1H, br), 7.18 (1H, br), 7.28–7.32 (1H, m), 7.40–7.52 (3H, m), 7.66–7.68 (1H, m). white crystal m.p. 205.5°C
645	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (6H, d, J=6.8 Hz), 0.89 (6H, d, J=6.8 Hz), 1.26 (3H, d, J=6.8 Hz), 1.83–2.00 (1H, m), 2.03–2.09 (1H, m), 3.47–3.51 (1H, m), 3.53–3.67 (1H, m), 3.80–3.85 (2H, m), 3.87–3.93 (1H, m), 5.22 (1H, br), 6.42 (1H, br), 7.05 (1H, br), 7.27–7.30 (1H, m), 7.41–7.51 (3H, m), 7.65–7.68 (1H, m). white crystal m.p. 193.8°C
646	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.27 (3H, d, J=6.8 Hz), 1.43 (9H, s), 2.06–2.10 (1H, m), 3.53–3.57 (2H, m), 3.84–3.88 (1H, m), 4.20–4.27 (1H, m), 5.01 (1H, br), 6.32 (1H, br), 7.20 (1H, br), 7.27–7.31 (1H, m), 7.39–7.51 (3H, m), 7.66–7.68 (1H, m). white crystal m.p. 163.3°C

Properties of Compound (43) in Table 2

Compound No.	Properties
647	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.24-1.25 (3H, m), 2.05-2.08 (1H, m), 3.48-3.51 (1H, m), 3.54-3.58 (1H, m), 3.95-4.00 (1H, m), 4.12-4.25 (1H, m), 5.10-5.13 (2H, m), 5.30-5.35 (1H, m), 6.45 (1H, br), 7.05 (1H, br), 7.27-7.51 (9H, m), 7.65-7.67 (1H, m). white crystal m.p. 197.5°C
648	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.89 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 1.25 (3/2H, d, J=6.8 Hz), 1.26 (3/2H, d, J=6.8 Hz), 2.04 (1/2H, q, J=6.8 Hz), 2.15 (1/2H, q, J=6.8 Hz), 3.46-3.50 (1H, m), 3.61 (3/2H, s), 3.62-3.65 (1H, m), 3.67 (3/2H, s), 3.91-4.00 (1H, m), 4.10-4.15 (1H, m), 5.22 (1H, br), 6.52 (1/2H, br), 6.55 (1/2H, br), 7.27-7.31 (1H, m), 7.40-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal: m.p. 184.6°C
649	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3/2H, d, J=6.8 Hz), 0.82 (3/2H, d, J=6.8 Hz), 0.89 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 1.18 (3H, d, J=7.3 Hz), 1.25 (3/2H, d, J=6.8 Hz), 1.26 (3/2H, d, J=6.8 Hz), 2.04 (1/2H, q, J=6.8 Hz), 2.17 (1/2H, q, J=6.8 Hz), 3.46-3.52 (1H, m), 3.60-3.66 (1H, m), 3.91-3.97 (1H, m), 4.04-4.14 (2H, m), 4.22-4.24 (1H, m), 5.19 (1H, br), 6.46 (1H, br), 6.52 (1H, br), 7.28-7.32 (1H, m), 7.40-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal: m.p. 166.7°C
650	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3/2H, d, J=6.8 Hz), 0.83 (3/2H, d, J=6.8 Hz), 0.89 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 1.21 (3H, d, J=7.3 Hz), 1.24 (3H, d, J=6.8 Hz), 1.26 (3H, d, J=6.8 Hz), 2.04 (1/2H, q, J=6.8 Hz), 2.17 (1/2H, q, J=6.8 Hz), 3.46-3.52 (1H, m), 3.60-3.66 (1H, m), 3.93 (1H, q, J=5.9 Hz), 4.22-4.25 (1H, m), 4.79-4.91 (1H, m), 5.15 (1H, br), 6.43 (1H, br), 6.50 (1H, br), 7.27-7.31 (1H, m), 7.40-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal: m.p. 181.3°C

651	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82-0.95 (12H, m), 1.25-1.27 (3H, m), 1.80-1.93 (1H, m), 2.04 (1/2H, q, J=6.8 Hz), 2.17 (1/2H, q, J=6.8 Hz), 3.46-3.50 (1H, m), 3.53-3.60 (2H, m), 3.75-3.82 (2H, m), 3.90-3.95 (1H, m), 5.17 (1H, br), 6.38 (1/2H, br), 6.51 (1/2H, br), 7.27-7.31 (1H, m), 7.40-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal: m.p. 148.7°C
652	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3/2H, d, J=6.8 Hz), 0.84 (3/2H, d, J=6.8 Hz), 0.89 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 1.25 (3H, d, J=7.3 Hz), 1.39 (9/2H, s), 1.43 (9/2H, s), 2.05 (1/2H, q, J=6.8 Hz), 2.15 (1/2H, q, J=6.8 Hz), 3.46-3.66 (2H, m), 3.87 (1/2H, q, J=5.9 Hz), 4.24 (1/2H, q, J=6.8 Hz), 5.04 (1H, br), 6.43 (1/2H, br), 6.50 (1/2H, br), 7.27-7.31 (1H, m), 7.39-7.52 (3H, m), 7.66-7.68 (1H, m). white crystal: m.p. 149.4°C

Properties of Compound (44) in Table 2

Compound No.	Properties
665	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3/2H, d, J=7.3 Hz), 0.79 (3/2H, d, J=6.8 Hz), 0.86 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 0.98 (3/2H, d, J=6.8 Hz), 0.99 (3/2H, d, J=6.8 Hz), 1.01 (3/2H, d, J=6.3 Hz), 1.02 (3/2H, d, J=6.8 Hz), 1.87-1.88 (1H, m), 2.01-2.03 (1/2H, m), 2.04-2.06 (1/2H, m), 3.49-3.51 (2H, m), 3.53-3.63 (2H, m), 3.68 (3H, s), 3.85-4.02 (2H, m), 5.15 (1H, br), 6.12 (1/2H, br), 6.26 (1/2H, br), 7.05 (1H, br), 7.27-7.30 (1H, m), 7.41-7.51 (3H, m), 7.65-7.67 (1H, m). white crystal: m.p. 159.3°C
666	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3/2H, d, J=6.8 Hz), 0.79 (3/2H, d, J=6.8 Hz), 0.87 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 0.98 (3/2H, d, J=6.8 Hz), 0.99 (3/2H, d, J=6.8 Hz), 1.13-1.14 (3/2H, m), 1.14-1.15 (3/2H, m), 1.87-1.88 (1H, m), 2.01-2.03 (1/2H, m), 2.04-2.06 (1/2H, m), 3.47-3.52 (1H, m), 3.61-3.73 (1H, m), 3.92-4.12 (4H, m), 5.05 (1H, br), 6.12 (1/2H, br), 6.25 (1/2H, br), 7.03 (1/2H, br), 7.05 (1/2H, br), 7.27-7.30 (1H, m), 7.41-7.51 (3H, m), 7.65-7.67 (1H, m). white crystal: m.p. 142.3°C
667	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.83 Hz), 0.87 (3H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 0.98 (3/2H, d, J=6.8 Hz), 0.99 (3/2H, d, J=6.8 Hz), 1.03 (3/2H, d, J=6.3 Hz), 1.12-1.19 (6H, m), 1.88-1.90 (1H, m), 2.01-2.03 (1H, m), 3.48-3.55 (2H, m), 3.87-3.91 (1H, m), 3.99-4.02 (1H, m), 4.87-4.91 (1H, m), 5.02 (1H, br), 6.15-6.17 (1H, m), 7.05 (1H, br), 7.27-7.30 (1H, m), 7.41-7.51 (3H, m), 7.65-7.67 (1H, m). white crystal: m.p. 190.8°C
669	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3/2H, d, J=6.8 Hz), 0.87 (3/2H, d, J=6.8 Hz), 0.93 (3/2H, d, J=6.8 Hz), 0.99 (3/2H, d, J=6.8 Hz), 1.00 (3/2H, d, J=6.8 Hz), 1.01 (3/2H, d, J=6.8 Hz), 1.03 (3/2H, d, J=6.3 Hz), 1.05 (3/2H, d, J=6.8 Hz), 1.40 (9/2H, s), 1.43 (9/2H, s), 1.88-1.90 (1H, m), 2.01-2.03 (1/2H, m), 2.04-2.06

	(1/2H, m), 3.48-3.49 (1/2H, m), 3.55-3.58 (1H, m), 3.65-3.70 (1/2H, m), 3.80-3.90 (1H, m), 3.92-4.01 (1H, m), 5.00 (1H, br), 6.12 (1/2H, br), 6.21 (1/2H, br), 7.05 (1H, br), 7.27-7.30 (1H, m), 7.41-7.51 (3H, m), 7.65-7.67 (1H, m). white crystal: m.p. 144.3°C
674	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.05 (6H, d, J=6.8 Hz), 1.19-1.28 (3H, m), 1.94-2.05 (2H, m), 3.41-3.47 (1H, m), 3.54-3.60 (1H, m), 3.89-3.93 (1H, m), 4.12-4.14 (2H, m), 5.12-5.15 (1H, m), 6.54 (1H, br), 6.70-6.75 (1H, m), 6.91-6.92 (1H, m), 7.16-7.20 (1H, m), 7.41-7.46 (2H, m), 7.52-7.54 (1H, m), 7.67-7.68 (1H, m). white crystal m.p 156.8°C
675	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.05 (6H, d, J=6.8 Hz), 1.17-1.26 (6H, m), 1.93-2.04 (2H, m), 3.35-3.47 (1H, m), 3.58-3.65 (1H, m), 3.84-3.93 (1H, m), 4.08-4.15 (1H, m), 4.82-4.90 (1H, m), 5.08-5.15 (1H, m), 6.58 (1H, br), 6.74-6.76 (1H, m), 6.91-6.92 (1H, m), 7.14-7.20 (1H, m), 7.41-7.46 (2H, m), 7.52-7.54 (1H, m), 7.66-7.68 (1H, m). white crystal m.p 195.1°C

Properties of Compound (45) in Table 2

Compound No.	Properties
678	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.05 (3H, d, J=6.8 Hz), 1.13 (3H, d, J=6.8 Hz), 1.95-2.03 (2H, m), 3.35-3.49 (1H, m), 3.56-3.69 (1H, m), 3.81-3.98 (1H, m), 4.05-4.20 (1H, m), 5.06-5.09 (2H, m), 6.61 (1H, br), 6.71-6.73 (1H, m), 7.28-7.40 (6H, m), 7.42-7.44 (2H, m), 7.49-7.53 (1H, m), 7.63-7.66 (1H, m). white crystal
683	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.92-1.00 (6H, m), 1.16-1.24 (1H, m), 1.50-1.67 (2H, m), 2.04-2.09 (1H, m), 3.43-3.52 (1H, m), 3.68-3.78 (4H, m), 3.89-3.94 (1H, m), 4.07-4.10 (1H, m), 5.17 (1H, br), 6.23 (1H, d, J=8.3 Hz), 7.07 (1H, br), 7.29-7.32 (1H, m), 7.39-7.50 (3H, m), 7.67 (1H, d, J=7.8 Hz). white crystal m.p. 202.5°C
684	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.90-0.97 (6H, m), 1.15-1.26 (4H, m), 1.47-1.67 (2H, m), 2.02-2.07 (1H, m), 3.46-3.49 (1H, m), 3.63-3.69 (1H, m), 3.89 (1H, t, J=7.8 Hz), 4.03-4.13 (3H, m), 5.11 (1H, br), 6.20 (1H, d, J=7.8 Hz), 7.07 (1H, br), 7.27 (1H, d, J=7.8 Hz), 7.37-7.48 (3H, m), 7.64 (1H, d, J=7.8 Hz). white crystal m.p. 179.5°C.
685	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.3 Hz), 0.85 (3H, d, J=6.3 Hz), 0.92 (3H, t, J=7.3 Hz), 0.97 (3H, d, J=6.3 Hz), 1.18-1.24 (7H, m), 1.48-1.67 (2H, m), 2.02-2.08 (1H, m), 3.48-3.67 (2H, m), 3.85-3.89 (1H, m), 4.03-4.09 (1H, m), 4.84-4.89 (1H, m), 5.03-5.07 (1H, m), 6.18 (1H, d), 7.08 (1H, br), 7.27-7.30 (1H, m), 7.35-7.42 (2H, m), 7.45-7.49 (1H, m), 7.64 (1H, d, J=7.8 Hz). white crystal m.p. 194.3°C.
686	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76-0.97 (18H, m), 1.14-1.20 (1H, m), 1.46-1.67 (2H, m), 1.83-1.92 (1H, m), 2.00-2.06 (1H, m), 3.46-3.52 (1H, m), 3.60-3.70 (1H, m), 3.78-3.90 (3H, m), 4.06-4.10 (1H, m), 5.18 (1H, d,

	J=8.3 Hz), 6.25 (1H, d, J=7.8 Hz), 7.10 (1H, d, J=7.8 Hz), 7.26-7.29 (1H, m), 7.36-7.51 (3H, m), 7.64 (1H, d, J=7.8 Hz). white crystal m.p. 169.8°C.
688	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74-0.99 (12H, m), 1.17-1.22 (1H, m), 1.49-1.70 (2H, m), 2.04-2.09 (1H, m), 3.48-3.56 (1H, m), 3.64-3.78 (4H, m), 3.90-3.96 (1H, m), 4.10-4.17 (1H, m), 5.20 (1H, d), 6.26 (1H, d, J=8.8 Hz), 7.48-7.57 (2H, m), 7.74 (1H, br), 7.97 (2H, d, J=7.8 Hz), 8.05 (2H, d, J=7.8 Hz). white crystal m.p. 172.5°C
689	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.90-1.01 (6H, m), 1.19-1.28 (4H, m), 1.52-1.68 (2H, m), 2.03-2.09 (1H, m), 3.48-3.56 (1H, m), 3.68-3.76 (1H, m), 3.90-3.96 (1H, m), 4.08-4.16 (3H, m), 5.15 (1H, d), 6.24 (1H, d, J=8.8 Hz), 7.47-7.57 (2H, m), 7.75 (1H, br), 7.97 (1H, d, J=7.8 Hz), 8.05 (1H, d, J=7.8 Hz). white crystal m.p. 141.1°C.

Properties of Compound (46) in Table 2

Compound No.	Properties
690	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.4 Hz), 0.84 (3H, d, J=6.4 Hz), 0.89-0.98 (6H, m), 1.14-1.26 (6H, m), 1.47-1.67 (2H, m), 2.00-2.08 (1H, m), 3.47-3.54 (1H, m), 3.64-3.72 (1H, m), 3.86-3.90 (1H, m), 4.06-4.13 (1H, m), 4.85-4.92 (1H, m), 5.06 (1H, br), 6.19 (1H, d, J=8.8 Hz), 7.45-7.55 (2H, m), 7.73 (1H, br), 7.94 (1H, d, J=7.3 Hz), 8.03 (1H, d, J=7.3 Hz). white crystal m.p. 189.1°C.
691	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.3 Hz), 0.85-1.00 (15H, m), 1.16-1.28 (1H, m), 1.50-1.68 (2H, m), 1.85-1.93 (1H, m), 2.03-2.08 (1H, m), 3.49-3.56 (1H, m), 3.66-3.93 (4H, m), 4.10-4.16 (1H, m), 5.17 (1H, d), 6.20 (1H, d, J=8.3 Hz), 7.47-7.57 (2H, m), 7.75 (1H, br), 7.97 (1H, d, J=7.8 Hz), 8.06 (1H, d, J=7.8 Hz). white crystal m.p. 153.7°C.
693	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.21-1.27 (2H, m), 1.50-1.56 (1H, m), 2.04-2.07 (1H, m), 3.49-3.53 (1H, m), 3.68 (3H, s), 3.70-3.76 (1H, m), 3.93-3.95 (1H, m), 4.08-4.15 (1H, m), 5.25 (1H, d, J=7.8 Hz), 6.34 (1H, d, J=8.3 Hz), 7.27-7.31 (1H, m), 7.61-7.64 (1H, m), 7.74 (1H, m), 7.98-8.02 (1H, m). white solid
694	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.3 Hz), 0.93 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 0.96-1.20 (1H, m), 1.23 (3H, t, J=6.8 Hz), 1.50-1.56 (1H, m), 1.64-1.66 (1H, m), 2.03-2.08 (1H, m), 3.49-3.55 (1H, m), 3.64-3.74 (1H, m), 3.91-3.95 (1H, m), 4.09-4.14 (3H, m), 5.20 (1H, d, J=7.8 Hz), 6.32 (1H, d, J=8.3 Hz), 7.25-7.30 (1H, m), 7.62 (1H, dd, J=2.4,8.3 Hz), 7.74 (1H, m), 7.99 (1H, dd, J=4.9,8.8 Hz). white crystal m.p. 197.7°C
695	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.3 Hz), 0.85 (3H, d, J=6.3 Hz), 0.94 (3H, t, J=7.3 Hz), 0.98 (3H,

	d, J=6.8 Hz), 1.22 (6H, d, J=6.3 Hz), 1.53-1.57 (1H, m), 1.62 (2H, m), 2.04-2.09 (1H, m), 3.50-3.56 (1H, m), 3.63-3.68 (1H, m), 3.87-3.91 (1H, m), 4.10-4.12 (1H, m), 4.86-4.93 (1H, m), 5.06 (1H, m), 6.20 (1H, d, J=8.8 Hz), 7.28-7.31 (1H, m), 7.62 (1H, dd, J=2.4,7.8 Hz), 8.01 (1H, dd, J=4.9,8.8 Hz). white crystal m.p. 224.9°C
696	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=7.3 Hz), 0.98 (6H, d, J=6.8 Hz), 1.20-1.25 (1H, m), 1.51-1.53 (1H, m), 1.54 (1H, m), 1.86-1.91 (1H, m), 2.05-2.07 (1H, m), 3.51-3.54 (1H, m), 3.67-3.69 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.90 (1H, dd, J=6.3,8.8 Hz), 4.10-4.11 (1H, m), 5.16 (1H, m), 6.21 (1H, d, J=8.8 Hz), 7.28-7.31 (1H, m). white crystal m.p. 207.0°C
697	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.93 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.22-1.26 (1H, m), 1.40 (9H, s), 1.51-1.54 (1H, m), 1.62 (1H, m), 2.04-2.06 (1H, m), 3.57-3.64 (2H, m), 3.79-3.83 (1H, m), 4.07-4.12 (1H, m), 4.98 (1H, m), 6.17 (1H, d, J=9.3 Hz), 7.25-7.30 (1H, m), 7.62 (1H, dd, J=2.4,7.8 Hz), 7.72 (1H, m), 8.00 (1H, dd, J=4.9,9.3 Hz). white crystal m.p. 208.8°C

Properties of Compound (47) in Table 2

Compound No.	Properties
698	^{1}H-NMR δ ($CDCl_3$, ppm): 0.64-0.80 (6H, m), 0.94-1.01 (6H, m), 1.16-1.25 (1H, m), 1.55-1.76 (2H, m), 1.97-2.07 (1H, m), 3.46-3.57 (1H, m), 3.60 (3H x 1/3, s), 3.66 (3H x 2/3, s), 3.78-3.96 (2H, m), 4.14-4.22 (1H, m), 5.21 (1H, br), 6.34 (1H x 2/3, d), 6.73 (1H x 1/3, d), 7.60-7.65 (1H, m), 7.75-7.79 (1H, m), 7.87-7.89 (1H, m), 8.07-8.15 (1H, m), 8.28-8.35 (1H, m), 8.42 (1H x 1/3, d), 8.49 (1H x 2/3, br). white crystal m.p. 174.6°C
699	^{1}H-NMR δ ($CDCl_3$, ppm): 0.66-0.80 (6H, m), 0.93-1.01 (6H, m), 1.16-1.26 (4H, m), 1.52-1.81 (2H, m), 1.97-2.04 (1H, m), 3.47-3.56 (1H, m), 3.80-3.96 (2H, m), 4.02-4.20 (3H, m), 5.20 (1H, d), 6.37 (1H, d), 7.60-7.64 (1H, m), 7.74-7.79 (1H, m), 7.84-7.88 (1H, m), 8.07-8.14 (1H, m), 8.26-8.33 (2H, m), 8.49 (1H, br). white crystal m.p. 170.7°C
700	^{1}H-NMR δ ($CDCl_3$, ppm): 0.67 (3H, d, J=6.8 Hz), 0.78 (3H, d, J=6.8 Hz), 0.93-1.02 (6H, m), 1.14-1.26 (7H, m), 1.56-1.81 (2H, m), 1.98-2.04 (1H, m), 3.49-3.55 (1H, m), 3.76-3.94 (2H, m), 4.13-4.21 (1H, m), 4.84-4.89 (1H, m), 5.12 (1H, d), 6.27 (1H, d), 7.60-7.65 (1H, m), 7.75-7.79 (1H, m), 7.87-7.90 (1H, m), 8.07-8.12 (1H, m), 8.25-8.32 (2H, m), 8.50 (1H, br). white crystal m.p. 208.0°C
701	^{1}H-NMR δ ($CDCl_3$, ppm): 0.66-1.01 (18H, m), 1.18-1.25 (1H, m), 1.54-2.04 (4H, m), 3.48-3.56 (2H, m), 3.74-3.94 (3H, m), 4.11-4.21 (1H, m), 5.20 (1H, d), 6.27 (1H, d), 7.60-7.65 (1H, m), 7.74-7.79 (1H, m), 7.87-7.90 (1H, m), 8.07-8.12 (1H, m), 8.25-8.33 (2H, m), 8.48 (1H, br). white crystal m.p. 180.8°C
702	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3H, d, J=6.8 Hz), 0.78 (3H, d, J=6.8 Hz), 0.93-1.08 (6H, m), 1.21-1.26 (1H, m), 1.38 (9H, s), 1.42 (9H, s), 1.55-1.68 (2H, m), 1.98-2.02 (1H, m), 3.53-3.58 (1H, m), 3.74-3.92 (2H, m), 4.13-4.19 (1H, m), 5.03 (1H, d, J=8.8 Hz), 6.25 (1H, d, J=8.3 Hz), 7.60-7.65 (1H, m), 7.74-7.78 (1H,

	m), 7.87–7.90 (1H, m), 8.07–8.14 (1H, m), 8.25–8.34 (2H, m), 8.49 (1H, br). white crystal m.p. 173.2°C
703	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72–0.80 (6H, m), 0.94–1.05 (6H, m), 1.20–1.32 (1H, m), 1.56–1.74 (2H, m), 2.03–2.08 (1H, m), 3.48–3.94 (6H, m), 4.13–4.24 (1H, m), 5.18 (1H, br), 6.29 (1H, d, J=8.3 Hz), 7.84–7.90 (2H, m), 8.09–8.20 (2H, m), 8.27 (1H, d), 9.64 (1H, d, J=5.9 Hz). white crystal m.p. 177.7°C
704	^{1}H-NMR δ ($CDCl_3$, ppm): 0.71–0.83 (6H, m), 0.94–1.06 (6H, m), 1.17–1.32 (4H, m), 1.55–1.72 (2H, m), 2.02–2.08 (1H, m), 3.48–4.24 (6H, m), 5.12 (1H, br), 6.26 (1H, d, J=8.8 Hz), 7.84–7.90 (2H, m), 8.08–8.22 (2H, m), 8.26 (1H, br), 9.64 (1H, d, J=5.4 Hz). white crystal m.p. 179.5°C

Properties of Compound (48) in Table 2

Compound No.	Properties
705	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72-0.82 (6H, m), 0.94-1.26 (13H, m), 1.55-1.83 (2H, m), 2.03-2.08 (1H, m), 3.48-3.93 (3H, m), 4.16-4.26 (1H, m), 4.84-4.93 (1H, m), 5.06 (1H, br), 6.23 (1H, d, J=8.8 Hz), 7.84-7.92 (2H, m), 8.08-8.21 (2H, m), 8.24 (1H, br), 9.64 (1H, d, J=5.4 Hz). white crystal m.p. 211.4°C
708	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.95 (3H, t, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.12-1.22 (1H, m), 1.49-1.55 (1H, m), 1.64-1.71 (1H, m), 2.00-2.05 (1H, m), 3.41-3.51 (1H, m), 3.64-3.66 (1H, m), 3.67 (3H, s), 3.89-3.93 (1H, m), 4.05-4.12 (1H, m), 5.22 (1H, br), 6.26 (1H, br), 7.44-7.49 (1H, m), 7.80-7.85 (1H, m), 8.05-8.11 (2H, m). white crystal: m.p. 174.7°C
709	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.97 (3H, t, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.50-1.53 (1H, m), 1.55-1.67 (2H, m), 1.99-2.05 (1H, m), 3.43-3.49 (1H, m), 3.70-3.75 (1H, m), 3.88-3.91 (1H, m), 4.05-4.14 (3H, m), 5.15 (1H, br), 6.22-6.24 (1H, m), 7.44-7.49 (1H, m), 7.81-7.85 (1H, m), 8.04 (1H, br), 8.08-8.11 (1H, m). white crystal: m.p. 161.8°C
710	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, t, J=6.8 Hz), 1.22 (6H, d, J=6.8 Hz), 1.52-1.58 (2H, m), 1.59-1.65 (1H, m), 1.99-2.06 (1H, m), 3.45-3.50 (1H, m), 3.55-3.69 (1H, m), 3.85-3.89 (1H, m), 4.05-4.12 (1H, m), 4.83-4.91 (1H, m), 5.10 (1H, br), 6.19-6.20 (1H, m), 7.44-7.52 (1H, m), 7.79-7.85 (1H, m), 8.04 (1H, br), 8.07-8.11 (1H, m). white crystal: m.p. 201.8°C
711	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.94 (6H,

	d, J=6.8 Hz), 0.96 (3H, t, J=6.8 Hz), 1.15-1.23 (1H, m), 1.60-1.71 (2H, m), 1.86-1.91 (1H, m), 1.96-2.05 (1H, m), 3.40-3.48 (1H, m), 3.66-3.71 (1H, m), 3.83-3.90 (3H, m), 4.07-4.09 (1H, m), 5.21 (1H, br), 6.21-6.23 (1H, m), 7.44-7.47 (1H, m), 7.81-7.83 (1H, m), 8.05 (1H, br), 8.06-8.10 (1H, m). white crystal: m.p. 171.8°C
712	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, t, J=6.8 Hz), 1.12-1.27 (1H, m), 1.43 (9H, s), 1.47-1.59 (1H, m), 1.65-1.67 (2H, m), 1.97-2.01 (1H, m), 3.48-3.54 (1H, m), 3.56-3.68 (1H, m), 3.78-3.81 (1H, m), 4.05-4.12 (1H, m), 5.02 (1H, br), 6.21 (1H, br), 7.44-7.48 (1H, m), 7.79-7.83 (1H, m), 8.04 (1H, br), 8.08-8.10 (1H, m). white crystal: m.p. 173.0°C
713	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 1.07 (9H, s), 1.96-2.04 (1H, m), 3.44-3.49 (1H, m), 3.56-3.67 (1H, m), 3.62 (3H, s), 3.87-3.91 (1H, m), 4.08-4.15 (1H, m), 5.18-5.20 (1H, m), 6.52 (1H, br), 6.64-6.66 (1H, m), 7.30 (1H, t, J=8.3 Hz), 7.41-7.47 (2H, m), 7.53 (1H, d, J=8.3 Hz), 7.67 (1H, d, J=8.3 Hz). white crystal: m.p. 189.5°C

Properties of Compound (49) in Table 2

Compound No.	Properties
714	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 1.01 (9/3H, s), 1.07 (9/3Hx2, s), 1.20-1.26 (3H, m), 1.96-1.98 (1/2H, m), 2.03-2.06 (1/2H, m), 3.55-3.66 (1H, m), 3.85-3.89 (1H, m), 4.04-4.14 (2H, m), 5.12-5.14 (1H, m), 6.45 (1H, br), 6.63-6.65 (1H, m), 7.28-7.32 (1H, m), 7.40-7.48 (2H, m), 7.52-7.54 (1H, m), 7.65-7.68 (1H, m). white crystal: m.p. 173.0°C
715	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3/2H, d, J=6.8 Hz), 0.73 (3/2H, d, J=6.8 Hz), 0.77 (3/2H, d, J=6.3 Hz), 0.82 (3/2H, d, J=6.8 Hz), 1.01 (9/2H, s), 1.06 (9/2H, s), 1.13 (3/2H, d, J=5.8 Hz), 1.17 (3/2H, d, J=6.3 Hz), 1.19 (3/2H, d, J=5.8 Hz), 1.22 (3/2H, d, J=6.8 Hz), 1.93-1.98 (1/2H, m), 2.01-2.05 (1/2H, m), 3.59-3.65 (1/2H, m), 3.84-3.88 (1H, m), 4.00-4.05 (1/2H, m), 4.07-4.14 (1/2H, m), 6.06 (1/2H, br), 6.45 (1/2H, br), 6.63-6.65 (1/2H, br), 7.00 (1/2H, br), 7.28-7.32 (1H, m), 7.40-7.48 (2H, m), 7.52-7.54 (1H, m), 7.65-7.68 (1H, m). white crystal: m.p. 153.5°C
717	^{1}H-NMR δ ($CDCl_3$, ppm): 0.68 (3/2H, d, J=6.8 Hz), 0.72 (3/2H, d, J=6.8 Hz), 0.80 (3/2H, d, J=6.8 Hz), 0.83 (3/2H, d, J=6.8 Hz), 1.01 (9/2H, s), 1.06 (9/2H, s), 1.42 (9/2H, s), 1.45 (9/2H, s), 1.96-1.98 (1/2H, m), 2.03-2.06 (1/2H, m), 3.43-3.61 (2H, m), 3.76-3.80 (1H, m), 4.00-4.11 (1H, m), 5.00 (1H, br), 6.45 (1/2H, br), 6.63 (1/2H, br), 7.29-7.32 (1H, m), 7.40-7.48 (2H, m), 7.52-7.54 (1H, m), 7.64-7.68 (1H, m). white crystal: m.p. 132.3°C
718	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=7.3 Hz), 0.85 (3H, d, J=6.8 Hz), 0.95 (3H, t, J=6.8 Hz), 1.00 (3H, t, J=6.8 Hz), 1.33-1.49 (5H, m), 2.04-2.07 (1H, m), 3.41-3.50 (1H, m), 3.60-3.64 (1H, m), 3.67 (3H, s), 3.87-3.91 (1H, m), 4.25-4.39 (1H, m), 5.18 (1H, br), 6.20 (1H, br), 6.60 (1H, br), 7.28-7.39 (1H, m), 7.43-7.51 (3H, m), 7.65-7.68 (1H, m).

	white crystal
719	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=7.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.96 (3H, t, J=6.8 Hz), 0.99 (3H, t, J=6.8 Hz), 1.19-1.25 (3H, m), 1.37-1.48 (4H, m), 1.60-1.75 (1H, m), 2.00-2.09 (1H, m), 3.41-3.50 (1H, m), 3.60-3.70 (1H, m), 3.91-3.99 (1H, m), 4.01-4.11 (1H, m), 4.25-4.39 (1H, m), 5.16 (1H, br), 6.18 (1H, br), 6.61 (1H, br), 7.28-7.39 (1H, m), 7.43-7.51 (1H, m), 7.65-7.68 (1H, m). white crystal

Properties of Compound (50) in Table 2

Compound No.	Properties
733	^{1}H-NMR δ ($CDCl_3$, ppm): 0.73 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 1.17 (3H, d, J=6.3 Hz), 1.22 (3H, d, J=5.9 Hz), 2.05 (1H, q, J=6.8 Hz), 2.81 (1H, q, J=6.8 Hz), 3.01 (1H, q, J=6.3 Hz), 3.49-3.54 (1H, m), 3.59-3.63 (1H, m), 3.89-3.93 (1H, m), 4.35-4.38 (1H, m), 4.86-4.91 (1H, m), 5.02-5.04 (1H, m), 7.05 (1H, br), 7.22-7.32 (5H, m), 7.34-7.50 (3H, m), 7.66-7.68 (1H, m). white crystal: m.p. 213.4°C
735	^{1}H-NMR δ ($CDCl_3$, ppm): 0.73 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 1.43 (9H, s), 2.04 (1H, q, J=6.3 Hz), 2.83 (1H, q, J=7.8 Hz), 3.01 (1H, q, J=6.3 Hz), 3.56-3.58 (2H, m), 3.86 (1H, t, J=6.8 Hz), 4.36 (1H, q, J=6.8 Hz), 4.96 (1H, br), 6.50 (1H, br), 7.09 (1H, br), 7.23-7.39 (5H, m), 7.41-7.50 (3H, m), 7.65-7.67 (1H, m). white crystal: m.p. 193.7°C
737	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91-1.00 (6H, m), 1.16-1.28 (6H, m), 1.39 (3H, s), 1.43 (3H, s), 2.04-2.12 (1H, m), 3.71 (2H, d, J=5.9 Hz), 3.81 (1H, dd, J=6.4, 7.8 Hz), 4.85-4.92 (1H, m), 5.18 (1H, d, J=7.8 Hz), 6.33 (1H, br), 7.27-7.31 (1H, m), 7.42 (1H, dt, J=1.5, 7.3 Hz), 7.51-7.54 (2H, m), 7.62 (1H, t, J=6.3 Hz), 7.67 (1H, d, J=7.8 Hz). white crystal m.p. 106.1°C
752	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78-0.95 (6H, m), 1.18 (3H, t, J=7.3 Hz), 2.11-2.20 (1H, m), 3.82-4.10 (5H, m), 4.80-4.86 (1H, m), 5.07 (1H, br), 6.04-6.10 (1H, m), 7.10 (1H, br), 7.28-7.50 (4H, m), 7.66 (1H, d, J=7.8 Hz). white solid
765	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 1.00 (6H, d, J=6.8 Hz), 1.22 (6H, d, J=6.3 Hz), 1.89 (1H, m), 1.91 (1H, m), 3.52-3.69 (2H, m), 3.89-3.91 (1H, m), 4.05-4.07 (1H, m), 4.88-4.90 (1H, m), 5.10 (1H, m), 6.18 (1H, d, J=9.3 Hz), 7.47-7.56 (2H, m), 7.75 (1H, m), 7.96 (1H, d, J=7.8

	Hz), 8.05 (1H, d, J=7.8 Hz). white solid

Properties of Compound (51) in Table 2

Compound No.	Properties
766	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.99 (6H, d, J=6.8 Hz), 1.89-1.91 (2H, m), 2.05 (1H, m), 3.11 (2H, dd, J=7.3,4.4 Hz), 3.50 (1H, m), 3.85 (2H, d, J=6.3 Hz), 4.10 (1H, m), 5.15 (1H, m), 6.20 (1H, m), 7.49-7.55 (2H, m), 7.75 (1H, m), 7.96 (1H, d, J=7.8 Hz), 8.06 (1H, d, J=8.9 Hz). white solid
767	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.87-1.92 (1H, m), 2.06 (1H, m), 3.59 (1H, dd, J=9.8,4.4 Hz), 3.62-3.66 (1H, m), 3.79-3.83 (1H, m), 4.05-4.07 (1H, m), 5.00 (1H, m), 6.17 (1H, d, J=9.3 Hz), 7.47-7.57 (2H, m), 7.76 (1H, m), 7.96 (1H, d, J=7.8 Hz), 8.05 (1H, d, J=8.3 Hz). white solid
771	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 1.00 (6H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.03-2.10 (1H, m), 3.48-3.56 (1H, m), 3.65-3.74 (4H, m), 3.91-4.06 (2H, m), 5.19 (1H, d), 6.18 (1H, d, J=9.3 Hz), 7.06 (1H, br), 7.27-7.31 (1H, m), 7.39-8.52 (3H, m), 7.67 (1H, d, J=7.8 Hz). white crystal m.p. 264.4°C
772	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.21-1.25 (3H, m), 1.87-1.92 (1H, m), 2.05-2.10 (1H, m), 3.49-3.55 (1H, m), 3.64-3.69 (1H, m), 3.90-3.94 (1H, m), 4.00-4.14 (3H, m), 5.30 (1H, br), 6.22-6.24 (1H, br), 7.08-7.10 (1H, m), 7.27-7.32 (1H, m), 7.39-7.54 (3H, m), 7.65-7.68 (1H, m). white crystal m.p. 179.4°C
773	^{1}H-NMR δ ($CDCl_3$, ppm): 0.65 (3H, d, J=6.8 Hz), 0.71 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 1.73-1.77 (1H, m), 1.91-1.99 (1H, m), 3.30-3.37 (1H, m), 3.78-3.82 (1H, m), 3.92-3.97 (2H, m), 4.59-4.66 (2H, m), 7.31-7.34 (1H, m), 7.41-7.51

	(2H, m), 7.61–7.64 (1H, m), 7.65–7.69 (2H, m), 7.75–7.77 (1H, m), 8.42–8.48 (1H, m). white crystal m.p. 259.8°C
774	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.91 (3H, t, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.59–1.64 (2H, m), 1.86–1.93 (1H, m), 2.03–2.08 (1H, m), 3.50–3.53 (1H, m), 3.64–3.72 (1H, m), 3.90–3.94 (1H, m), 4.01 (2H, t, J=6.8 Hz), 4.04–4.07 (1H, m), 5.23 (1H, d, J=7.8 Hz), 6.36 (1H, d, J=8.8 Hz), 7.13 (1H, m), 7.28–7.30 (1H, m), 7.38–7.49 (3H, m), 7.64–7.66 (1H, m). white crystal m.p. 191.0°C
775	^{1}H-NMR δ ($CDCl_3$): 0.80 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.21 (6H, d, J=7.3 Hz), 1.89 (1H, q, J=6.8 Hz), 3.52–3.63 (2H, m), 3.87–3.91 (1H, m), 4.01–4.04 (1H, m), 4.88 (1H, q, J=7.3 Hz), 5.06 (1H, br), 6.14–6.16 (1H, m), 7.09 (1H, br), 7.27–7.28 (1H, m), 7.39–7.50 (3H, m), 7.65–7.67 (1H, m). white crystal m.p. 199.8°C

Properties of Compound (52) in Table 2

Compound No.	Properties
776	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, t, J=7.3 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.34-1.37 (2H, m), 1.55-1.59 (2H, m), 1.86-1.93 (1H, m), 2.03-2.08 (1H, m), 3.49-3.53 (1H, m), 3.63-3.71 (1H, m), 3.89-3.93 (1H, m), 3.99-4.06 (3H, m), 5.20 (1H, d, J=8.3 Hz), 6.30 (1H, d, J=8.8 Hz), 7.12 (1H, m), 7.28-7.30 (1H, m), 7.38-7.49 (3H, m), 7.64-7.66 (1H, m). white crystal m.p. 163.6°C
777	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.87-1.92 (2H, m), 2.06-2.08 (1H, m), 3.50-3.54 (1H, m), 3.63-3.68 (1H, m), 3.71-3.84 (2H, m), 3.85-3.90 (1H, m), 3.99-4.07 (1H, m), 5.19 (1H, br), 6.20 (1H, br), 7.12 (1H, br), 7.27-7.32 (1H, m), 7.39-7.54 (3H, m), 7.65-7.67 (1H, m). white crystal m.p. 179.1°C
778	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.13 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.87-1.90 (1H, m), 2.03-2.10 (1H, m), 3.57-3.66 (2H, m), 3.82 (1H, q, J=6.8 Hz), 3.99-4.14 (1H, m), 5.00 (1H, br), 6.18 (1H, br), 7.09 (1H, br), 7.26-7.30 (1H, m), 7.38-7.50 (3H, m), 7.65-7.67 (1H, m). white crystal m.p. 148.5°C
779	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 1.73-1.79 (1H, m), 1.97-2.02 (1H, m), 3.36-3.41 (2H, m), 3.83-3.87 (1H, m), 3.94-3.96 (1H, m), 7.06-7.08 (2H, m), 7.18-7.20 (1H, m), 7.30-7.38 (3H, m), 7.43-7.47 (2H, m), 7.61-7.63 (1H, m), 7.69-7.81 (3H, m), 8.47 (1H, m). white crystal m.p. 172.3°C
780	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.3 Hz), 0.88 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=7.3 Hz), 1.84-1.85 (1H, m), 2.02-2.04 (1H, m),

	3.49-3.50 (2H, m), 3.92-3.96 (2H, m), 5.04-5.05 (2H, m), 6.71 (1H, d, J=8.8 Hz), 7.27-7.33 (4H, m), 7.38-7.42 (2H, m), 7.52-7.49 (2H, m), 7.51-7.68 (1H, m), 7.84 (2H, m), 7.96-7.99 (1H, m). white crystal m.p. 234.1°C
781	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3H, d, J=6.8 Hz), 0.76 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 1.74-1.81 (1H, m), 1.83-1.95 (1H, m), 3.23 (3H, s), 3.45-3.48 (2H, m), 3.75-3.79 (1H, m), 3.89-3.99 (1H, m), 4.02-4.04 (2H, m), 7.11 (1H, d, J=8.8 Hz), 7.30-7.34 (1H, m), 7.43-7.49 (2H, m), 7.50-7.64 (2H, m), 7.75-7.77 (1H, m), 8.45 (1H, m). white crystal m.p. 245.3°C
782	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.3 Hz), 1.89 (1H, m), 2.05-2.06 (1H, m), 3.43-3.48 (1H, m), 3.71-3.79 (1H, m), 3.95-3.99 (1H, m), 4.05 (1H, m), 4.43-4.45 (1H, m), 4.76-4.78 (1H, m), 5.48 (1H, d, J=8.8 Hz), 6.33 (1H, d, J=8.8 Hz), 7.06 (1H, m), 7.13-7.18 (1H, m), 7.27-7.31 (1H, m), 7.39-7.49 (3H, m), 7.65-7.67 (1H, m). white crystal m.p. 192.7°C

Properties of Compound (53) in Table 2

Compound No.	Properties
783	^{1}H-NMR δ ($CDCl_3$, ppm): 0.65 (3H, d, J=6.8 Hz), 0.70 (3H, d, J=6.8 Hz), 0.75 (3H, d, J=6.8 Hz), 0.77 (3H, d, J=6.8 Hz), 1.73-1.78 (1H, m), 1.91-1.92 (1H, m), 3.86-3.87 (2H, m), 3.89-3.93 (2H, m), 4.44-4.45 (2H, d, J=4.9 Hz), 5.13-5.15 (1H, m), 5.24-5.29 (1H, m), 5.85-5.89 (1H, m), 7.14-7.16 (1H, m), 7.30-7.34 (1H, m), 7.43-7.51 (2H, m), 7.62-7.64 (2H, m), 7.75-7.77 (1H, m), 8.45 (1H, m). white crystal m.p. 238.4°C
784	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3H, d, J=6.8 Hz), 0.76 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.3 Hz), 0.88 (3H, d, J=6.3 Hz), 1.74-1.78 (1H, m), 1.89-1.94 (1H, m), 3.47-3.48 (1H, m), 3.77-3.81 (1H, m), 3.89-3.97 (2H, m), 4.60-4.61 (2H, m), 7.31-7.34 (2H, m), 7.43-7.44 (1H, m), 7.47-7.51 (1H, m), 7.62-7.65 (2H, m), 7.75-7.77 (1H, m), 8.46 (1H, m). white crystal m.p. 200.4°C
785	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 1.99-2.05 (1H, m), 2.06-2.17 (2H, m), 3.45-3.51 (1H, m), 3.63-3.75 (1H, m), 3.79-3.99 (5H, m), 4.00-4.06 (1H, m), 5.22-5.23 (1H, m), 6.24 (1H, d, J=8.8 Hz), 7.05 (1H, m), 7.27-7.31 (1H, m), 7.39-7.52 (3H, m), 7.65-7.67 (1H, m). white crystal m.p. 203.2°C
786	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.52-1.59 (1H, m), 1.86-1.98 (4H, m), 2.09-2.13 (1H, m), 3.54-3.56 (1H, m), 3.60-3.68 (1H, m), 3.77-3.79 (1H, m), 3.85-3.87 (1H, m), 3.91-3.99 (3H, m), 4.08-4.10 (1H, m), 4.15-4.18 (1H, m), 5.30 (1H, d, J=5.3 Hz), 6.26 (1H, m), 7.11 (1H, m), 7.28-7.30 (1H, m), 7.38-7.44 (2H, m), 7.48-7.50 (1H, m), 7.65-7.67 (1H, m). white crystal m.p. 178.8°C
787	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=4.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H,

	d, J=6.3 Hz), 1.61 (1H, m), 1.89-1.90 (1H, m), 2.01-2.09 (2H, m), 2.54 (1H, m), 3.51-3.54 (1H, m), 3.56-3.57 (1H, m), 3.73 (2H, d, J=7.8 Hz), 3.83 (2H, d, J=6.8 Hz), 3.95 (2H, t, J=7.8 Hz), 4.04-4.09 (2H, m), 5.25 (1H, m), 6.31 (1H, m), 7.08 (1H, m), 7.27-7.31 (1H, m), 7.39-7.52 (1H, m), 7.65-7.67 (1H, m). white crystal m.p. 171.0°C
788	^{1}H-NMR δ ($CDCl_3$, ppm): 0.02-0.05 (2H, m), 0.52-0.54 (2H, m), 0.80 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.04-1.09 (1H, m), 1.00 (3H, d, J=6.8 Hz), 1.86-1.91 (1H, m), 2.04-2.10 (1H, m), 3.49-3.55 (1H, m), 3.63-3.69 (1H, m), 3.87-3.94 (3H, m), 3.99-4.05 (1H, m), 5.21 (1H, d, J=7.8 Hz), 6.25 (1H, d, J=8.8 Hz), 7.09-7.12 (1H, m), 7.27-7.30 (1H, m), 7.38-7.44 (2H, m), 7.47-7.50 (1H, m), 7.64-7.66 (1H, m). white crystal m.p. 197.5°C

Properties of Compound (54) in Table 2

Compound No.	Properties
789	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.33 (6H, t, J=7.3 Hz), 1.85-1.90 (1H, m), 2.13-2.17 (1H, m), 3.57-3.64 (2H, m), 3.95-4.03 (2H, m), 4.24 (4H, q, J=7.3 Hz), 5.07-5.08 (2H, m), 5.49 (1H, d, J=7.3 Hz), 5.81 (1H, s), 6.30 (1H, d, J=8.8 Hz), 7.05 (1H, m), 7.27-7.29 (1H, m), 7.37-7.41 (2H, m), 7.47-7.49 (1H, m), 7.63-7.65 (1H, m). white crystal m.p. 188.1°C
790	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=7.3 Hz), 1.85-1.90 (1H, m), 2.03-2.09 (1H, m), 3.48-3.51 (1H, m), 3.63-3.71 (1H, m), 3.91-3.95 (1H, m), 4.01-4.03 (1H, m), 4.97 (2H, s), 5.24 (1H, d, J=7.8 Hz), 6.20 (1H, d, J=8.8 Hz), 6.42 (1H, m), 7.07 (1H, m), 7.28-7.30 (1H, m), 7.38-7.49 (5H, m), 7.64-7.66 (1H, m). white crystal m.p. 184.3°C
791	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.3 Hz), 0.91 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=7.3 Hz), 1.05 (3H, d, J=7.3 Hz), 2.15-2.20 (1H, m), 2.50-2.60 (1H, m), 3.40-3.45 (1H, m), 3.85-3.88 (2H, m), 4.02-4.03 (1H, m), 4.43-4.47 (2H, m), 5.45 (1H, m), 7.20 (1H, m), 7.28-7.30 (2H, m), 7.39-7.49 (3H, m), 7.62-7.64 (1H, m). white solid
793	^{1}H-NMR δ ($CDCl_3$): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.99 (6H, d, J=6.8 Hz), 1.24-1.29 (3H, m), 1.86-1.92 (1H, m), 2.03-2.07 (1H, m), 2.84-2.93 (2H, m), 3.47-3.53 (1H, m), 3.64-3.73 (1H, m), 3.99-4.06 (1H, m), 4.11-4.17 (1H, m), 5.87 (1H, d, J=8.3 Hz), 6.14 (1H, d, J=8.3 Hz), 7.05 (1H, br), 7.27-7.31 (1H, m), 7.39-7.50 (3H, m), 7.66 (1H, d, J=7.8 Hz). white crystal m.p. 182.1°C
794	^{1}H-NMR δ ($CDCl_3$): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.8 Hz), 1.31 (3H, d, J=6.8 Hz), 1.32 (3H, d, J=6.8 Hz), 1.85-1.94 (1H, m), 2.02-

	2.07 (1H, m), 3.48–3.71 (3H, m), 3.99–4.07 (1H, m), 4.13–4.18 (1H, m), 5.81 (1H, d, J=8.3 Hz), 6.13 (1H, d, J=8.3 Hz), 7.06 (1H, br), 7.27–7.31 (1H, m), 7.38–7.50 (3H, m), 7.66 (1H, d, J=7.8 Hz). white crystal m.p. 202.1°C
798	^{1}H–NMR δ ($CDCl_3$): 0.85 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.20–1.25 (3H, m), 1.88–1.90 (1H, m), 2.11–2.15 (1H, m), 3.48–3.52 (2H, m), 3.88–3.91 (2H, m), 4.08–4.13 (2H, m), 5.05 (1H, br), 6.02 (2H, s), 6.18 (1H, br), 6.81 (2H, d, J=7.8 Hz), 6.94 (1H, br), 7.31–7.34 (2H, m). white crystal m.p. 195.0°C
799	^{1}H–NMR δ ($CDCl_3$): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.20–1.24 (6H, m), 1.88–1.90 (1H, m), 2.12–2.14 (1H, m), 3.45–3.50 (1H, m), 3.52–3.60 (1H, m), 3.87–3.95 (2H, m), 4.86–4.89 (1H, m), 5.02 (1H, br), 6.02 (2H, s), 6.18 (1H, br), 6.81 (1H, d, J=7.8 Hz), 6.97–6.99 (1H, m), 7.33–7.35 (2H, m). white crystal m.p. 217.9°C

Properties of Compound (55) in Table 2

Compound No.	Properties
800	^{1}H-NMR δ ($CDCl_3$): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.87-1.90 (2H, m), 2.11-2.13 (1H, m), 3.53-3.57 (2H, m), 3.82-3.94 (4H, m), 5.07 (1H, br), 6.01 (2H, s), 6.18 (1H, br), 6.81 (1H, d, J=7.8 Hz), 6.94 (1H, br), 7.31-7.34 (2H, m). white crystal m.p. 203.9°C
801	^{1}H-NMR δ ($CDCl_3$): 0.87 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.88-1.90 (1H, m), 2.12-2.14 (1H, m), 3.40-3.45 (1H, m), 3.60-3.70 (1H, m), 3.83 (1H, t, J=7.3 Hz), 3.80-4.00 (1H, m), 4.97 (1H, br), 6.01 (2H, s), 6.18 (1H, br), 6.81 (1H, d, J=7.8 Hz), 7.05 (1H, br), 7.34-7.36 (2H, m). white crystal m.p. 170.1°C
802	^{1}H-NMR δ ($CDCl_3$): 0.89 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.22-1.25 (3H, m), 1.87-1.92 (1H, m), 2.14-2.19 (1H, m), 3.38-3.45 (1H, m), 3.67-3.75 (1H, m), 3.93-4.01 (2H, m), 4.08-4.14 (2H, m), 5.06 (1H, br), 6.18 (1H, br), 7.08-7.12 (1H, m), 7.59-7.62 (2H, m). white crystal m.p. 195.6°C
803	^{1}H-NMR δ ($CDCl_3$): 0.90 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.22 (3H, d, J=6.8 Hz), 1.23 (3H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.15-2.20 (1H, m), 3.27-3.45 (1H, m), 3.70-3.87 (1H, m), 3.89-3.97 (3H, m), 4.83-4.90 (1H, m), 4.99 (1H, br), 6.18 (1H, br), 7.08 (1H, d, J=8.3 Hz), 7.30 (1H, br), 7.61 (2H, d, J=8.3). white crystal m.p. 215.2°C
804	^{1}H-NMR δ ($CDCl_3$): 0.90 (6H, d, J=6.8 Hz), 0.92 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.87-1.92 (2H, m), 2.15-2.17 (1H, m), 3.25-3.45 (1H, m), 3.60-3.70 (1H, m), 3.83-3.97 (4H, m), 5.08 (1H, br), 6.19 (1H, br), 7.08 (1H, d, J=7.8 Hz), 7.29 (1H, br), 7.59-7.61 (2H, m). white crystal m.p. 199.9°C

806	^{1}H-NMR δ ($CDCl_3$): 0.82 (3H, d, J=6.4 Hz), 0.87 (3H, d, J=6.4 Hz), 0.99 (6H, t, J=6.8 Hz), 1.21-1.25 (3H, m), 1.84-1.90 (1H, m), 2.08-2.14 (1H, m), 3.53-3.61 (2H, m), 3.86-3.90 (1H, m), 3.98-4.06 (1H, m), 4.09-4.14 (2H, m), 5.07 (1H, br), 6.14 (1H, d, J=8.3 Hz), 7.30 (1H, br), 7.54 (1H, s), 7.60 (1H, d, J=9.3 Hz), 8.31 (1H, dd, J=2.4, 9.3 Hz), 8.60 (1H, d, J=2.4 Hz). white crystal m.p. 233.3°C
807	^{1}H-NMR δ ($CDCl_3$): 0.83 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.99 (6H, t, J=6.8 Hz), 1.21 (6H, t, J=6.3 Hz), 1.87-1.91 (1H, m), 2.08-2.14 (1H, m), 3.48-3.67 (2H, m), 3.85-3.89 (1H, m), 3.98-4.04 (1H, m), 4.87-4.92 (1H, m), 4.97-5.00 (1H, m), 6.12 (1H, d, J=8.3 Hz), 7.34 (1H, br), 7.54 (1H, s), 7.60 (1H, d, J=9.3 Hz), 8.31 (1H, dd, J=2.4, 9.3 Hz), 8.60 (1H, d, J=2.4 Hz). white crystal m.p. 261.5°C

Properties of Compound (56) in Table 2

Compound No.	Properties
808	^{1}H-NMR δ ($CDCl_3$): 0.83 (3H, d, J=6.8 Hz), 0.87-0.90 (9H, m), 0.99 (6H, t, J=7.3 Hz), 1.87-1.92 (1H, m), 2.08-2.13 (1H, m), 3.52-3.64 (2H, m), 3.82-3.90 (4H, m), 3.97-4.02 (1H, m), 5.08-5.10 (1H, m), 6.11 (1H, d, J=7.8 Hz), 7.30 (1H, br), 7.54 (1H, s), 7.60 (1H, d, J=9.3 Hz), 8.32 (1H, dd, J=2.4, 9.3 Hz), 8.60 (1H, d, J=2.4 Hz). white crystal m.p. 240.1°C
810	^{1}H-NMR δ ($CDCl_3$): 0.79 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.99 (6H, t, J=6.8 Hz), 1.22-1.28 (3H, m), 1.85-1.93 (1H, m), 2.03-2.11 (1H, m), 3.47-3.53 (1H, m), 3.63-3.71 (1H, m), 3.85 (3H, s), 3.89-4.15 (4H, m), 5.15 (1H, d, J=7.8 Hz), 6.19 (1H, d, J=8.8 Hz), 7.00-7.07 (3H, m), 7.36-7.38 (2H, m). white crystal m.p. 206.3°C
811	^{1}H-NMR δ ($CDCl_3$): 0.80 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.8 Hz), 1.22 (6H, t, J=6.8 Hz), 1.86-1.91 (1H, m), 2.05-2.10 (1H, m), 3.50-3.68 (2H, m), 3.85 (3H, s), 3.86-3.91 (1H, m), 3.97-4.05 (1H, m), 4.86-4.92 (1H, m), 5.05 (1H, br-d), 6.14 (1H, d, J=9.3 Hz), 7.00-7.07 (3H, m), 7.36-7.38 (2H, m). white crystal m.p. 227.2°C
812	^{1}H-NMR δ ($CDCl_3$): 0.80 (6H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.99 (6H, t, J=6.8 Hz), 1.85-1.92 (2H, m), 2.04-2.08 (1H, m), 3.48-3.53 (1H, m), 3.62-3.70 (1H, m), 3.85 (3H, s), 3.88-3.92 (3H, m), 4.00-4.06 (1H, m), 5.16 (1H, br-d), 6.16 (1H, d, J=8.3 Hz), 7.00-7.07 (3H, m), 7.36-7.38 (2H, m). white crystal m.p. 203.9°C
814	^{1}H-NMR □δ ($CDCl_3$): 0.81 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.8 Hz), 1.22-1.28 (3H, m), 1.86-1.92 (1H, m), 2.06-2.12 (1H, m), 3.52-3.65 (2H, m), 3.87-3.92 (1H, m), 3.99-4.20 (3H, m), 5.11 (1H, d), 6.12 (1H, d, J=8.3 Hz), 7.12 (1H, br), 7.35-7.44 (3H, m), 7.64 (1H, s). white crystal m.p. 217.6°C
815	^{1}H-NMR δ ($CDCl_3$): 0.82 (3H, d, J=6.8 Hz), 0.87 (3H, d,

	J=6.8 Hz), 1.00 (6H, t, J=6.8 Hz), 1.18-1.24 (6H, m), 1.84-1.93 (1H, m), 2.05-2.12 (1H, m), 3.53-3.62 (2H, m), 3.86-3.93 (1H, m), 3.97-4.05 (1H, m), 4.85-4.93 (1H, m), 5.04 (1H, d, J=7.3 Hz), 6.14 (1H, d, J=8.8 Hz), 7.15 (1H, br), 7.35-7.45 (3H, m), 7.64 (1H, s). white crystal m.p. 243.3°C
816	^{1}H-NMR δ ($CDCl_3$): 0.82 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.89-1.01 (12H, m), 1.86-1.98 (2H, m), 2.05-2.11 (1H, m), 3.52-3.67 (2H, m), 3.84-3.92 (3H, m), 3.98-4.05 (1H, m), 5.14 (1H, d, J=7.3 Hz), 6.15 (1H, d, J=7.8 Hz), 7.14 (1H, br), 7.35-7.45 (3H, m), 7.64 (1H, s). white crystal m.p. 225.9°C
818	^{1}H-NMR δ ($CDCl_3$): 0.74 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.99 (6H, t, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.85-1.94 (1H, m), 2.01-2.09 (1H, m), 2.61 (3H, s), 3.42-3.48 (1H, m), 3.67-3.75 (1H, m), 3.91-4.16 (4H, m), 5.18 (1H, d, J=8.3 Hz), 6.19 (1H, d, J=9.3 Hz), 6.97 (1H, bt-t, J=5.9 Hz), 7.27-7.33 (1H, m), 7.40-7.45 (2H, m), 7.61 (1H, d, J=7.8 Hz). white crystal m.p. 197.8°C

Properties of Compound (57) in Table 2

Compound No.	Properties
819	^{1}H-NMR δ ($CDCl_3$): 0.75 (3H, d, J=6.3 Hz), 0.85 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=5.9 Hz), 1.00 (3H, d, J=5.9 Hz), 1.21 (6H, t, J=6.8 Hz), 1.87-1.92 (1H, m), 2.02-2.08 (1H, m), 2.61 (3H, s), 3.43-3.50 (1H, m), 3.64-3.72 (1H, m), 3.90 (1H, dd, J=6.3, 8.8 Hz), 3.98-4.06 (1H, m), 4.85-4.91 (1H, m), 5.10 (1H, d, J=7.8 Hz), 6.14 (1H, d, J=8.8 Hz), 6.98 (1H, br-t), 7.27-7.31 (1H, m), 7.38-7.44 (2H, m), 7.61 (1H, d, J=7.8 Hz). white crystal m.p. 201.9°C
820	^{1}H-NMR δ ($CDCl_3$): 0.75 (3H, d, J=6.8 Hz), 0.84-0.96 (9H, m), 0.99 (6H, t, J=6.8 Hz), 1.86-1.93 (2H, m), 2.03-2.07 (1H, m), 2.61 (3H, s), 3.42-3.47 (1H, m), 3.66-3.74 (1H, m), 3.82-3.94 (3H, m), 3.98-4.06 (1H, m), 5.19 (1H, d, J=8.8 Hz), 6.15 (1H, d, J=7.3 Hz), 6.97 (1H, br), 7.27-7.31 (1H, m), 7.39-7.44 (2H, m), 7.61 (1H, d, J=7.8 Hz). white crystal m.p. 179.9°C
821	^{1}H-NMR δ ($CDCl_3$): 0.77 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.3 Hz), 1.42 (9H, s), 1.85-1.92 (1H, m), 2.01-2.06 (1H, m), 2.61 (3H, s), 3.48-3.54 (1H, m), 3.59-3.67 (1H, m), 3.81-3.85 (1H, m), 3.98-4.06 (1H, m), 5.00 (1H, br), 6.14 (1H, d, J=8.8 Hz), 7.00 (1H, br), 7.27-7.31 (1H, m), 7.38-7.45 (2H, m), 7.60 (1H, d, J=7.8 Hz). white crystal m.p. 188.7°C
823	white crystal m.p. 181.3°C APCI-MS M^+: 434.
826	^{1}H-NMR δ ($CDCl_3$): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.20-1.27 (3H, m), 1.88-1.91 (1H, m), 2.10-2.15 (1H, m), 3.47-3.66 (2H, m), 3.87-3.97 (2H, m), 4.06-4.12 (2H, m), 5.08 (1H, br), 6.16 (1H, d, J=7.8 Hz), 7.18 (1H, br), 7.34-7.41 (2H, m), 7.77 (1H, s), 7.80-7.84 (2H, m). white crystal m.p. 204.0°C
827	^{1}H-NMR δ ($CDCl_3$): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99-1.03 (6H, m), 1.19-1.28 (6H, m), 1.88-

	1.94 (1H, m), 2.12-2.18 (1H, m), 3.47-3.54 (1H, m), 3.65-3.72 (1H, m), 3.87-4.00 (2H, m), 4.84-4.92 (1H, m), 5.04 (1H, br), 6.18 (1H, d, J=8.3 Hz), 7.26 (1H, br), 7.36-7.43 (2H, m), 7.80 (1H, s), 7.82-7.86 (2H, m). white crystal m.p. 231.3°C
828	^{1}H-NMR δ ($CDCl_3$): 0.84-0.92 (12H, m), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.84-1.92 (2H, m), 2.12-2.16 (1H, m), 3.48-3.56 (1H, m), 3.62-3.67 (1H, m), 3.82 (2H, d, J=6.3 Hz), 3.87-3.99 (2H, m), 5.10 (1H, br), 6.17 (1H, d), 7.19 (1H, br), 7.34-7.40 (2H, m), 7.77 (1H, s), 7.80-7.84 (2H, m). white crystal m.p. 213.0°C
830	^{1}H-NMR δ ($CDCl_3$): 0.83 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.8 Hz), 1.25 (3H, t, J=6.8 Hz), 1.85-1.94 (1H, m), 2.04-2.14 (1H, m), 3.50-3.55 (1H, m), 3.61-3.69 (1H, m), 3.92-4.04 (2H, m), 4.11-4.16 (2H, m), 5.53 (1H, d, J=8.8 Hz), 6.98 (2H, br), 7.08-7.13 (1H, m), 7.22-7.27 (1H, m), 7.44 (1H, d, J=8.3 Hz), 7.46 (1H, br), 7.63 (1H, d, J=7.8 Hz), 9.89 (1H, br). white crystal m.p. 239.5°C

Properties of Compound (58) in Table 2

Compound No.	Properties
831	^{1}H-NMR δ ($CDCl_3$): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.22-1.28 (6H, m), 1.87-1.94 (1H, m), 2.13-2.19 (1H, m), 3.50-3.70 (2H, m), 3.91-4.00 (2H, m), 4.92-4.97 (1H, m), 5.05 (1H, br), 6.32 (1H, d, J=7.8 Hz), 6.94 (1H, br), 7.11-7.16 (2H, m), 7.24-7.29 (1H, m), 7.42 (1H, d, J=8.8 Hz), 7.65 (1H, d, J=7.3 Hz), 9.31 (1H, br). white crystal m.p. 251.6°C
832	^{1}H-NMR δ ($CDCl_3$): 0.82 (6H, d, J=6.8 Hz), 0.92 (6H, d), 1.01 (6H, t, J=6.8 Hz), 1.88-1.98 (2H, m), 2.05-2.17 (1H, m), 3.52-3.72 (2H, m), 3.86-4.04 (4H, m), 5.22 (1H, d, J=8.3 Hz), 6.65 (1H, d, J=8.8 Hz), 6.92 (1H, br), 7.08-7.15 (2H, m), 7.24-7.30 (1H, m), 7.43 (1H, d, J=8.3 Hz), 7.63 (1H, d, J=8.3 Hz), 9.63 (1H, br). white crystal m.p. 235.1°C
834	^{1}H-NMR δ ($CDCl_3$): 0.86 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.22-1.28 (3H, m), 1.86-1.95 (1H, m), 2.12-2.18 (1H, m), 3.46-3.68 (2H, m), 3.88-4.15 (7H, m), 5.10 (1H, br), 6.18 (1H, d, J=7.8 Hz), 6.92 (1H, s), 7.05 (1H, br), 7.10-7.15 (1H, m), 7.28-7.39 (2H, m), 7.63 (1H, d, J=7.8 Hz). white crystal m.p. 209.4°C
835	^{1}H-NMR δ ($CDCl_3$): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.16-1.28 (6H, m), 1.88-1.93 (1H, m), 2.12-2.17 (1H, m), 3.43-3.50 (1H, m), 3.61-3.68 (1H, m), 3.88-4.01 (2H, m), 4.06 (3H, m), 4.84-4.91 (1H, m), 5.05 (1H, br), 6.20 (1H, d, J=8.8 Hz), 6.93 (1H, s), 7.10-7.15 (2H, m). white crystal m.p. 229.1°C
836	^{1}H-NMR δ ($CDCl_3$): 0.84-1.14 (18H, m), 1.87-1.94 (2H, m), 2.15-2.19 (1H, m), 3.49-3.68 (2H, m), 3.82-4.03 (4H, m), 4.06 (3H, s), 5.15 (1H, br), 6.20 (1H, br), 6.92 (1H, s), 7.06 (1H, br), 7.10-7.15 (1H, m), 7.28-7.38 (2H, m), 7.63 (1H, d, J=7.8 Hz).

	white crystal m.p. 214.4°C
838	^{1}H-NMR δ ($CDCl_3$): 0.68 (6H, t, J=6.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.28 (3H, t, J=7.3 Hz), 1.89-1.95 (2H, m), 3.33-3.37 (1H, m), 4.04-4.24 (4H, m), 5.54 (1H, d, J=7.8 Hz), 7.30-7.36 (3H, m), 7.42 (1H, d, J=8.8 Hz), 7.54 (1H, d, J=8.3 Hz), 7.75 (1H, d, J=7.8 Hz), 8.15 (1H, br), 11.93 (1H, br).
839	^{1}H-NMR δ ($CDCl_3$): 0.65 (3H, d, J=6.8 Hz), 0.68 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.24 (3H, d, J=6.4 Hz), 1.30 (3H, d, J=6.4 Hz), 1.86-1.95 (2H, m), 3.32-3.38 (1H, m), 4.03-4.23 (3H, m), 4.95-5.02 (1H, m), 5.50 (1H, d, J=9.8 Hz), 7.28-7.35 (2H, m), 7.50-7.54 (2H, m), 7.74 (1H, d, J=7.8 Hz), 8.15 (1H, d, J=6.4 Hz), 12.03 (1H, s).
842	^{1}H-NMR δ ($CDCl_3$): 0.86 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.25 (3H, q, J=7.3 Hz), 1.88-1.95 (1H, m), 2.12-2.18 (1H, m), 3.50-3.60 (1H, m), 3.67-3.73 (1H, m), 3.88-4.13 (4H, m), 5.07 (1H, d), 6.21 (1H, d, J=8.8 Hz), 7.33 (1H, br), 7.91-7.94 (1H, m), 8.16 (1H, d, J=8.3 Hz), 8.53 (1H, d, J=1.5 Hz), 9.11 (1H, s). white crystal m.p. 205.7°C

Properties of Compound (59) in Table 2

Compound No.	Properties
843	^{1}H-NMR δ ($CDCl_3$): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.12-1.28 (6H, m), 1.89-1.95 (1H, m), 2.12-2.17 (1H, m), 3.47-3.54 (1H, m), 3.70-3.75 (1H, m), 3.90-4.03 (2H, m), 4.82-4.88 (1H, m), 5.05 (1H, br), 6.25 (1H, d, J=8.3 Hz), 7.39 (1H, br), 7.91-7.95 (1H, m), 8.16 (1H, d, J=8.8 Hz), 8.53 (1H, d, J=1.5 Hz), 9.11 (1H, s). white crystal m.p. 200.0°C
844	^{1}H-NMR δ ($CDCl_3$): 0.80-0.91 (12H, m), 1.01 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.88-1.97 (1H, m), 2.13-2.18 (1H, m), 3.50-4.03 (6H, m), 5.13 (1H, d), 6.27 (1H, d, J=7.8 Hz), 7.36 (1H, br), 7.89-7.94 (1H, m), 8.15 (1H, d, J=8.3 Hz), 8.52 (1H, d, J=1.5 Hz), 9.11 (1H, s). white crystal m.p. 180.3°C
846	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.86-1.91 (1H, m), 2.04-2.09 (1H, m), 3.50-3.55 (1H, m), 3.68 (3H, s), 3.70-3.75 (1H, m), 3.91-3.95 (1H, m), 4.05-4.07 (1H, m), 5.25 (1H, d, J=7.3 Hz), 6.32 (1H, d, J=8.8 Hz), 7.28-7.31 (1H, m), 7.61-7.64 (1H, m), 7.72-7.73 (1H, m), 7.98-8.02 (1H, m). white solid
847	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.21 (3H, t, J=6.8 Hz), 1.84-1.88 (1H, m), 2.03-2.05 (1H, m), 3.49-3.54 (1H, m), 3.65-3.67 (1H, m), 3.88-3.92 (1H, m), 4.03-4.12 (3H, m), 5.17 (1H, d, J=7.8 Hz), 6.24 (1H, d, J=8.3 Hz), 7.25-7.28 (1H, m), 7.60 (1H, dd, J=2.4,8.3 Hz), 7.70 (1H, m), 7.97 (1H, dd, J=4.9,9.3 Hz). white crystal m.p. 203.1°C
848	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.3 Hz), 0.83 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=7.3 Hz), 1.19 (6H, d, J=5.9 Hz), 1.83-1.89 (1H,

	m), 2.03-2.04 (1H, m), 3.50-3.54 (1H, m), 3.63-3.65 (1H, m), 3.86-3.90 (1H, m), 4.04 (1H, m), 4.84-4.89 (1H, m), 5.09 (1H, d, J=7.3 Hz), 6.22 (1H, d, J=8.3 Hz), 7.25-7.28 (1H, m), 7.60 (1H, dd, J=2.4,8.3 Hz), 7.70 (1H, m), 7.97 (1H, dd, J=4.9,8.8 Hz). white crystal m.p. 220.8°C
849	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.87 (6H, d, J=6.3 Hz), 0.95 (3H, d, J=7.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.85-1.88 (2H, m), 2.02-2.04 (1H, m), 3.50-3.53 (1H, m), 3.61-3.66 (1H, m), 3.82 (2H, d, J=6.3 Hz), 3.90 (1H, dd, J=6.3,8.3 Hz), 4.03 (1H, m), 5.20 (1H, d, J=7.3 Hz), 6.23 (1H, d, J=8.3 Hz), 7.22-7.27 (1H, m), 7.60 (1H, dd, J=2.4,7.8 Hz), 7.71 (1H, m), 7.97 (1H, dd, J=4.9,9.3 Hz). white crystal m.p. 187.6°C
850	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.86-1.91 (1H, m), 2.05-2.06 (1H, m), 3.55-3.59 (1H, m), 3.62-3.63 (1H, m), 3.79-3.83 (1H, m), 4.04-4.06 (1H, m), 4.97 (1H, m), 6.15 (1H, d, J=9.3 Hz), 7.29 (1H, dd, J=2.4,9.2 Hz), 7.61-7.64 (1H, m), 7.71 (1H, m), 8.10 (1H, dd, J=4.9,8.8 Hz). white crystal m.p. 204.7°C

Properties of Compound (60) in Table 2

Compound No.	Properties
853	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90-1.02 (12H, m), 1.20-1.25 (6H, m), 1.88-1.93 (1H, m), 2.17-2.23 (1H, m), 3.20-3.26 (1H, m), 3.76-3.94 (3H, m), 4.89-4.93 (1H, m), 5.01 (1H, br), 6.16 (1H, d), 7.06 (1H, s), 7.43-7.46 (2H, m), 8.20 (1H, s). white solid
857	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.21 (6H, d, J=6.3 Hz), 1.86-1.93 (1H, m), 2.02-2.10 (1H, m), 3.62-3.66 (2H, m), 3.86-3.91 (1H, m), 4.01-4.08 (1H, m), 4.87-4.93 (1H, m), 5.08 (1H, s), 6.17 (1H, d, J=8.8 Hz), 7.16-7.21 (1H, m), 7.34-7.42 (2H, m), 7.64 (1H, d, J=8.8 Hz), 8.03 (1H, d, J=7.8 Hz). white crystal m.p. 195.5°C
860	^{1}H-NMR δ ($CDCl_3$, ppm): 0.68 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.88-1.96 (1H, m), 2.03-2.08 (1H, m), 2.65 (3H, s), 2.79 (3H, s), 3.39-3.45 (1H, m), 3.80-3.88 (1H, m), 3.94-4.08 (2H, m), 4.09-4.13 (2H, m), 5.17-5.19 (1H, m), 6.56-6.57 (1H, m), 6.72 (1H, s), 8.23 (1H, br), 8.57 (1H, s). white crystal m.p 221.5°C
861	^{1}H-NMR δ ($CDCl_3$, ppm): 0.68 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.21 (6H, d, J=6.8 Hz), 1.89-1.93 (1H, m), 2.01-2.06 (1H, m), 2.65 (3H, s), 2.79 (3H, s), 3.40-3.46 (1H, m), 3.81-3.86 (1H, m), 3.92-4.05 (2H, m), 4.81-4.92 (1H, m), 6.51-6.53 (1H, m), 6.71-6.73 (1H, m), 8.22-8.26 (1H, m), 8.58 (1H, s). white crystal m.p 228.8°C
862	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.87-1.92 (2H, m), 2.02-2.06 (1H, m), 2.65 (3H, s), 2.79 (3H, s), 3.41-3.44 (1H, m), 3.83-3.87 (3H, m), 3.94-4.05 (2H, m), 5.20 (1H, d, J=8.8 Hz), 6.53 (1H, br), 6.71 (1H, s), 8.23 (1H, br), 8.58

	(1H, s). white crystal m.p 228.3°C
863	^{1}H-NMR δ ($CDCl_3$, ppm): 0.70 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.89-1.94 (1H, m), 1.97-2.04 (1H, m), 2.65 (3H, s), 2.79 (3H, s), 3.43-3.48 (1H, m), 3.76-3.88 (2H, m), 3.98-4.05 (1H, m), 5.02-5.04 (1H, m), 6.45 (1H, d, J=7.8 Hz), 7.00 (1H, s), 8.21 (1H, br), 8.58 (1H, s). white crystal m.p 216.3°C
864	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 1.04 (3H, d, J=6.8 Hz), 1.22 (3H, t, J=6.8 Hz), 1.95-2.01 (1H, m), 2.03-2.11 (1H, m), 2.71 (3H, s), 2.87 (3H, s), 3.46-3.50 (1H, m), 3.52-3.61 (1H, m), 3.89-4.00 (1H, m), 4.09 (2H, q, J=7.3 Hz), 4.12-4.14 (1H, m), 5.15-5.17 (1H, m), 6.73 (1H, br), 6.92 (1H, d, J=8.3 Hz), 7.54 (1H, br). white crystal m.p 190.1°C

Properties of Compound (61) in Table 2

Compound No.	Properties
865	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.98 (6H, d, J=6.8 Hz), 1.04 (3H, d, J=6.8 Hz), 1.22 (6H, d, J=6.8 Hz), 1.96-2.10 (2H, m), 2.70 (3H, s), 2.87 (3H, s), 3.56-3.61 (1H, m), 3.91-4.10 (2H, m), 4.85-4.90 (1H, m), 5.15-5.17 (1H, m), 6.73 (1H, br), 6.91 (1H, d, J=8.3 Hz), 7.63 (1H, d, J=8.8 Hz). white crystal m.p 207.0°C
866	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 1.04 (3H, d, J=6.8 Hz), 1.13 (3H, d, J=6.8 Hz), 1.83-1.93 (1H, m), 1.95-2.01 (1H, m), 2.03-2.10 (1H, m), 2.71 (3H, s), 2.87 (3H, s), 3.45-3.50 (1H, m), 3.52-3.61 (1H, m), 3.81-3.83 (1H, m), 3.85-4.01 (1H, m), 4.08-4.10 (1H, m), 5.26 (1H, br), 6.68 (1H, br), 6.92 (1H, d, J=8.3), 7.63 (1H, br). white crystal m.p 183.8°C
867	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 1.05 (6H, d, J=6.8 Hz), 1.40 (9H, s), 1.95-2.00 (1H, m), 2.03-2.11 (1H, m), 2.71 (3H, s), 2.87 (3H, s), 3.45-3.51 (1H, m), 3.52-3.61 (1H, m), 3.89-3.96 (1H, m), 4.05-4.08 (1H, m), 5.06 (1H, br), 6.68 (1H, br), 6.92 (1H, d, J=8.3 Hz), 7.55 (1H, br). white crystal m.p 148.5°C
868	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.04 (3H, d, J=6.8 Hz), 1.19-1.28 (3H, m), 1.90-1.95 (1H, m), 2.14-2.19 (1H, m), 3.48-4.13 (6H, m), 5.10 (1H, br), 6.24 (1H, d, J=7.7 Hz), 7.57-7.63 (2H, m), 7.77-7.82 (1H, m), 7.92 (1H, d, J=7.3 Hz), 8.14 (1H, d, J=8.8 Hz), 8.65 (1H, d, J=2.0 Hz), 9.34 (1H, d, J=2.4 Hz). white crystal m.p. 223.0°C
869	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88-1.22 (18H, m), 1.82-1.92 (1H, m), 2.16-2.21 (1H, m), 3.44-4.03 (4H, m), 4.82-4.87 (1H, m), 5.01 (1H, d), 6.21 (1H, d, J=7.3 Hz), 7.56-7.63 (2H, m), 7.76-7.93 (2H, m), 8.14 (1H, t,

	J=7.8 Hz), 8.65 (1H, s), 9.34 (1H, s). white crystal m.p. 224.0°C
870	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87-0.93 (12H, m), 1.01 (3H, d, J=6.8 Hz), 1.04 (3H, d, J=6.8 Hz), 1.82-1.95 (2H, m), 2.16-2.22 (1H, m), 3.47-4.05 (6H, m), 5.11 (1H, br), 6.22 (1H, d), 7.56-7.63 (2H, m), 7.77-7.82 (1H, m), 7.92 (1H, d, J=7.3 Hz), 8.15 (1H, d, J=8.3 Hz), 8.65 (1H, d, J=2.0 Hz), 9.34 (1H, d, J=2.4 Hz). white crystal m.p. 204.2°C
872	^{1}H-NMR δ ($CDCl_3$, ppm): 0.67 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.01 (6H, t, J=6.8 Hz), 1.90-2.06 (2H, m), 3.49-3.55 (1H, m), 3.66 (3H, s), 3.75-3.84 (1H, m), 3.92-3.96 (1H, m), 4.07-4.12 (1H, m), 5.20 (1H, d), 6.25 (1H, d), 7.60-7.65 (1H, m), 7.74-7.79 (1H, m), 7.88 (1H, d, J=7.3 Hz), 8.09 (1H, d, J=8.3 Hz). white crystal m.p. 214.7°C

Properties of Compound (62) in Table 2

Compound No.	Properties
873	^{1}H-NMR δ ($CDCl_3$, ppm): 0.68 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.01 (6H, t, J=6.8 Hz), 1.21-1.28 (3H, m), 1.89-2.05 (2H, m), 3.50-3.56 (1H, m), 3.74-3.83 (1H, m), 3.89-3.94 (1H, m), 4.05-4.13 (3H, m), 5.17 (1H, d, J=8.8 Hz), 6.25 (1H, d, J=8.3 Hz), 7.60-7.65 (1H, m), 7.74-7.79 (1H, m), 7.86-7.89 (1H, m), 8.08 (1H, d, J=8.3 Hz), 8.26 (1H, d, J=8.8 Hz), 8.31 (1H, d, J=8.3 Hz), 8.49 (1H, d, J=5.9 Hz). white crystal m.p. 180.1°C
874	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3H, d, J=6.8 Hz), 0.79 (3H, d, J=6.8 Hz), 1.02 (6H, t, J=6.8 Hz), 1.21 (6H, d, J=6.3 Hz), 1.89-2.05 (2H, m), 3.52-3.57 (1H, m), 3.72-3.81 (1H, m), 3.87-3.91 (1H, m), 4.05-4.13 (1H, m), 4.85-4.91 (1H, m), 5.09 (1H, d, J=9.3 Hz), 6.21 (1H, d, J=8.3 Hz), 7.60-7.65 (1H, m), 7.74-7.79 (1H, m), 7.88 (1H, d, J=6.8 Hz), 8.09 (1H, d, J=8.8 Hz), 8.26 (1H, d, J=8.8 Hz), 8.31 (1H, d, J=8.8 Hz), 8.49 (1H, br). white crystal m.p. 210.7°C
875	^{1}H-NMR δ ($CDCl_3$, ppm): 0.69 (3H, d, J=6.8 Hz), 0.79 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 1.01 (6H, d, J=6.8 Hz), 1.85-2.05 (2H, m), 3.51-3.57 (1H, m), 3.73-3.92 (4H, m), 4.05-4.10 (1H, m), 5.18 (1H, d, J=8.3 Hz), 6.21 (1H, d, J=9.8 Hz), 7.60-7.65 (1H, m), 7.74-7.79 (1H, m), 7.88 (1H, d, J=7.8 Hz), 8.09 (1H, d, J=8.8 Hz), 8.26 (1H, d, J=8.8 Hz), 8.31 (1H, d, J=8.3 Hz), 8.49 (1H, br). white crystal m.p. 195.7°C
876	^{1}H-NMR δ ($CDCl_3$, ppm): 0.71 (3H, d, J=6.8 Hz), 0.78 (3H, d, J=6.8 Hz), 1.02 (6H, t, J=6.8 Hz), 1.42 (9H, s), 1.87-2.02 (2H, m), 3.53-3.87 (3H, m), 4.06-4.13 (1H, m), 5.01 (1H, d, J=9.3 Hz), 6.20 (1H, d, J=8.8 Hz), 7.60-7.64 (1H, m), 7.74-7.79 (1H, m), 7.87 (1H, d, J=7.8 Hz), 8.08 (1H, d, J=7.8 Hz), 8.25-8.32 (2H, m), 8.49 (1H, br). white crystal m.p. 161.9°C
878	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72-0.83 (6H, m), 0.99-1.28

	(12H, m), 1.88-2.08 (2H, m), 3.54-3.58 (2H, m), 3.89-3.97 (1H, m), 4.06-4.15 (4H, m), 4.83-4.92 (1H, m), 5.09-5.17 (1H, d), 6.24 (1H x 1/3, d), 6.64 (1H x 2/3, br), 7.55-7.77 (3H, m), 7.98-8.07 (1H, m), 8.21-8.25 (1H, m), 8.41 (1H x 2/3, d, J=9.3 Hz), 8.52 (1H x 1/3, br). white crystal m.p. 202.5°C
881	^{1}H-NMR δ ($CDCl_3$, ppm): 0.63 (3H, d, J=6.8 Hz), 0.76 (3H, d, J=6.8 Hz), 0.99-1.28 (9H, m), 1.92-2.05 (2H, m), 3.50-3.55 (1H, m), 3.74-3.82 (1H, m), 3.92-4.13 (4H, m), 5.15 (1H, d), 6.26 (1H, d), 7.67-7.86 (4H, m), 8.44 (1H, d, J=5.4 Hz), 8.55 (1H, br), 9.61 (1H, d, J=8.3 Hz). white crystal m.p. 177.6°C
882	^{1}H-NMR δ ($CDCl_3$, ppm): 0.65 (3H, d, J=6.8 Hz), 0.76 (3H, d, J=6.8 Hz), 1.00-1.21 (12H, m), 1.90-2.05 (2H, m), 3.50-3.56 (1H, m), 3.70-3.78 (1H, m), 3.88-3.92 (1H, m), 4.05-4.11 (1H, m), 4.81-4.88 (1H, m), 5.10 (1H, d, J=8.8 Hz), 6.21 (1H, d, J=9.3 Hz), 7.67-7.87 (4H, m), 8.43-8.48 (1H, m), 8.54 (1H, br), 9.61 (1H, d, J=8.3 Hz). white crystal m.p. 201.1°C

Properties of Compound (63) in Table 2

Compound No.	Properties
883	^{1}H-NMR δ ($CDCl_3$, ppm): 0.64-1.09 (18H, m), 1.80-2.05 (3H, m), 3.49-3.56 (1H, m), 3.71-3.84 (3H, m), 3.90 (1H, dd, J=6.3, 8.8 Hz), 4.04-4.12 (1H, m), 5.19 (1H, d, J=8.3 Hz), 6.22 (1H, d, J=7.3 Hz), 7.67-7.87 (4H, m), 8.44 (1H, d, J=5.4 Hz), 8.55 (1H, br), 9.61 (1H, d, J=8.3 Hz). white crystal m.p. 188.1°C
886	^{1}H-NMR δ ($CDCl_3$, ppm): 0.70 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 1.01 (6H, t, J=7.3 Hz), 1.21 (6H, d, J=6.3 Hz), 1.89-2.04 (2H, m), 3.50-3.56 (1H, m), 3.73-3.81 (1H, m), 3.89-3.92 (1H, m), 4.03-4.10 (1H, m), 4.85-4.91 (1H, m), 5.12 (1H, d, J=7.8 Hz), 6.28 (1H, d, J=7.3 Hz), 7.69-7.80 (2H, m), 7.95-8.05 (2H, m), 8.48 (1H, br), 8.58 (1H, s), 9.14 (1H, s). white crystal m.p. 202.1°C
889	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72-0.83 (6H, m), 1.00-1.14 (6H, m), 1.91-2.09 (2H, m), 3.52-3.94 (6H, m), 4.08-4.14 (1H, m), 5.14-5.18 (1H, m), 6.22 (1H, d, J=8.3 Hz), 7.84-7.90 (2H, m), 8.09-8.27 (3H, m), 9.64 (1H, s). white crystal m.p. 185.3°C
890	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 1.00-1.10 (6H, m), 1.20-1.28 (3H, m), 1.89-2.10 (2H, m), 3.54-3.92 (3H, m), 4.07-4.15 (3H, m), 5.08-5.13 (1H, m), 6.19 (1H, d, J=8.8 Hz), 7.84-7.90 (2H, m), 8.09-8.28 (3H, m), 9.64 (1H, s). white crystal m.p. 186.3°C
891	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72-0.88 (6H, m), 1.00-1.28 (12H, m), 1.89-2.08 (2H, m), 3.50-3.78 (2H, m), 3.86-3.90 (1H, m), 4.09-4.14 (1H, m), 4.82-4.93 (1H, m), 5.05 (1H, br), 6.18 (1/2H , d, J=8.8 Hz), 6.54 (1/2H, br), 7.82-7.91 (2H, m), 8.06-8.28 (3H, m), 9.64 (1H, d, J=6.4 Hz). white crystal m.p. 190.9°C
895	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.06 (3H, d, J=6.8 Hz), 1.12 (3H, d, J=6.8 Hz), 1.16 (3H, d,

	J=6.8 Hz), 1.86–2.13 (2H, m), 3.45–3.60 (2H, m), 3.86–4.01 (2H, m), 4.68–4.75 (1H, m), 4.90 (1/2H, br), 5.02 (1/2H, br), 6.10 (1/2H, br), 6.54 (1/2H, br), 7.04 (1/2H, br), 7.52 (1/2H, br), 7.81–7.91 (2H, m), 8.36–8.44 (1H, m), 8.55–8.59 (1H, m), 9.39–9.40 (1H, m). pale yellow solid
899	^{1}H-NMR δ ($CDCl_3$): 0.87–0.97 (12H, m), 1.05–1.22 (1H, m), 1.24–1.26 (6H, m), 1.56–1.90 (3H, m), 3.25–3.51 (1H, m), 3.81–3.87 (1H, m), 4.43–4.51 (1H, m), 4.65–4.68 (1H, m), 4.90–5.05 (2H, m), 6.07 (1H, br), 6.87–7.00 (4H, m). white semisolid
902	^{1}H-NMR δ ($CDCl_3$): 0.91–1.01 (12H, m), 1.24 (3H, t, J=7.3 Hz), 1.84–1.90 (1H, m), 2.14–2.20 (1H, m), 3.37–3.41 (1H, m), 3.54–3.59 (1H, m), 3.87–3.94 (2H, m), 4.12 (2H, q, J=7.3 Hz), 4.99 (2H, m), 5.05 (1H, br), 6.11 (1H, d, J=7.8 Hz), 6.82–6.93 (3H, m), 7.05–7.22 (3H, m). white crystal m.p. 205.8°C

Properties of Compound (64) in Table 2

Compound No.	Properties
903	^{1}H-NMR δ ($CDCl_3$): 0.92-1.01 (12H, m), 1.23 (6H, t, J=6.3 Hz), 1.84-1.89 (1H, m), 2.15-2.20 (1H, m), 3.31-3.38 (1H, m), 3.56-3.62 (1H, m), 3.86-3.93 (2H, m), 4.86-4.92 (1H, m), 4.99 (2H, s), 6.10 (1H, d, J=7.3 Hz), 6.82-6.92 (3H, m), 7.06 (1H, s), 7.10 (1H, d, J=7.3 Hz), 7.17-7.23 (1H, m). white crystal m.p. 226.4°C
906	^{1}H-NMR δ ($CDCl_3$): 0.81-0.93 (6H, m), 1.00-1.04 (6H, m), 1.19-1.28 (3H, m), 1.88-2.02 (1H, m), 2.14-2.19 (1H, m), 3.30-3.49 (1H, m), 3.69-3.74 (1H, m), 3.84-3.92 (1H, m), 4.00-4.16 (3H, m), 5.05 (1H, d, J=7.3 Hz), 6.17 (1H, d, J=8.8 Hz), 7.12 (1H, s), 7.43-7.50 (1H, m), 7.61-7.66 (1H, m), 7.83-7.86 (1H, m), 7.97 (1H, br). white crystal m.p. 195.0°C
907	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81-0.93 (6H, m), 1.00-1.04 (6H, m), 1.19-1.28 (6H, m), 1.87-2.03 (1H, m), 2.15-2.20 (1H, m), 3.33-3.43 (1H, m), 3.69-3.74 (1H, m), 3.84-3.91 (1H, m), 4.00-4.04 (1H, m), 4.87-4.90 (1H, m), 5.00 (1H, d, J=6.8 Hz), 6.18 (1H, d, J=8.8 Hz), 7.12 (1H, s), 7.42-7.48 (1H, m), 7.62-7.66 (1H, m), 7.83-7.86 (1H, m), 8.02 (1H, br). white crystal m.p. 220.8°C
908	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81-0.93 (12H, m), 0.99-1.04 (6H, m), 1.87-1.98 (2H, m), 2.13-2.21 (1H, m), 3.31-3.46 (1H, m), 3.69-3.91 (4H, m), 3.98-4.05 (1H, m), 5.07 (1H, d, J=6.4 Hz), 6.18 (1H, d, J=8.8 Hz), 7.12 (1H, s), 7.43-7.50 (1H, m), 7.61-7.66 (1H, m), 7.83-7.86 (1H, m), 8.06 (1H, br). white crystal m.p. 198.3°C
910	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.3 Hz), 1.20 (3H, t, J=6.8 Hz), 1.88-1.96 (1H, m), 2.03-2.12 (1H, m), 3.52-3.66 (2H, m), 3.94-4.06 (4H, m), 5.47 (1H, d, J=7.3 Hz), 6.78 (1H, br), 6.85 (1H, d, J=8.3 Hz), 7.19-7.24 (2H, m), 7.38-7.44 (1H, m), 7.77 (1H, d, J=2.9 Hz), 8.09-8.12 (1H, m), 9.97 (1H, br).

	white crystal m.p. 240.2°C
911	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 1.00 (6H, t, J=6.8 Hz), 1.17 (6H, d, J=6.4 Hz), 1.89-1.96 (1H, m), 2.04-2.09 (1H, m), 3.58 (2H, br), 3.92-3.97 (2H, m), 4.81-4.87 (1H, m), 5.39 (1H, d, J=7.3 Hz), 6.80-6.85 (2H, m, J=8.3 Hz), 7.18-7.23 (2H, m), 7.40-7.43 (1H, m), 7.77 (1H, d, J=2.9 Hz), 8.10-8.13 (1H, m), 10.03 (1H, br). white crystal m.p. 247.1°C
912	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.85-0.90 (9H, m), 1.00 (6H, t, J=6.8 Hz), 1.85-1.96 (2H, m), 2.04-2.09 (1H, m), 3.52-3.65 (2H, m), 3.76-3.81 (2H, br), 3.92-4.00 (2H, m), 5.48 (1H, d), 6.80 (1H, br), 6.89 (1H, d, J=8.3 Hz), 7.17-7.23 (2H, m), 7.40-7.44 (1H, m), 7.77 (1H, d, J=2.9 Hz), 8.09-8.12 (1H, m), 10.05 (1H, br). white crystal m.p. 232.6°C

Properties of Compound (65) in Table 2

Compound No.	Properties
914	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.90-1.94 (1H, m), 2.05-2.08 (1H, m), 3.48-3.51 (1H, m), 3.59-3.62 (1H, m), 3.67 (3H, s), 3.89-4.01 (2H, m), 4.05 (3H, s), 5.05 (1H, br), 6.15 (1H, br), 6.85-6.87 (1H, m), 7.04-7.09 (2H, m), 7.27-7.31 (3H, m). white crystal m.p 224.7°C
915	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.12-1.25 (3H, m), 1.90-1.98 (1H, m), 2.15-2.17 (1H, m), 3.41-3.49 (1H, m), 3.62-3.70 (1H, m), 3.89-3.98 (1H, m), 4.05 (3H, s), 4.12-4.13 (1H, m), 5.05 (1H, br), 6.15 (1H, br), 6.87 (1H, br), 7.03-7.09 (1H, m), 7.13 (1H, br), 7.26-7.31 (3H, m). white crystal m.p 222.4°C
916	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.19-1.24 (6H, m), 1.90-1.98 (1H, m), 2.05-2.17 (1H, m), 3.45-3.48 (1H, m), 3.60-3.65 (1H, m), 3.89-4.01 (2H, m), 4.04 (3H, s), 4.86-4.88 (1H, m), 5.01 (1H, br), 6.12 (1H, br), 6.88 (1H, br), 7.06-7.07 (1H, m), 7.13 (1H, br), 7.26-7.30 (3H, m). white crystal m.p 240.1°C
917	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (6H, d, J=6.8 Hz), 1.81-1.97 (1H, m), 2.05-2.09 (1H, m), 3.41-3.51 (1H, m), 3.55-3.60 (1H, m), 3.80-4.02 (4H, m), 4.05 (3H, s), 5.09 (1H, br), 6.15 (1H, br), 6.87 (1H, s), 7.06-7.13 (2H, m), 7.27-7.30 (2H, m). white crystal m.p 210.0°C
918	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.90-1.98 (1H, m), 2.05-2.17 (1H, m), 3.31-3.37 (1H, m), 3.72-3.74 (1H, m), 3.83 (1H, q, J=6.8 Hz), 3.98-4.00 (1H, m), 4.05 (3H,

	s), 4.97 (1H, br), 6.12 (1H, br), 6.92 (1H, br), 7.03-7.08 (2H, m), 7.24-7.30 (2H, m). white crystal m.p 213.1°C
919	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82-1.06 (12H, m), 1.23-1.28 (3H, m), 1.85-1.91 (1H, m), 2.07-2.26 (1H, m), 3.47-3.54 (1H, m), 3.64-3.72 (1H, m), 3.90-4.02 (2H, m), 4.09-4.17 (2H, m), 5.18-5.26 (1H, m), 6.35 (1H, d, J=8.3 Hz), 7.37-7.42 (2H, m), 7.66-7.71 (2H, m), 8.89 (1H, s), 8.99 (1H, br). white crystal m.p. 211.9°C
920	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.3 Hz), 0.90 (3H, d, J=6.3 Hz), 0.98 (6H, t, J=7.3 Hz), 1.23 (6H, d, J=6.3 Hz), 1.85-1.90 (1H, m), 2.04-2.12 (1H, m), 3.49-3.55 (1H, m), 3.63-3.70 (1H, m), 3.88-3.93 (1H, m), 3.99-4.04 (1H, m), 4.86-4.93 (1H, m), 5.10 (1H, d, J=9.3 Hz), 6.29 (1H, d, J=9.3 Hz), 7.37-7.42 (2H, m), 7.65-7.71 (2H, m), 8.89 (1H, s), 8.98 (1H, br). white crystal m.p. 249.2°C

Properties of Compound (66) in Table 2

Compound No.	Properties
921	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83-1.02 (18H, m), 1.86-1.94 (2H, m), 2.08-2.15 (1H, m), 3.49-3.58 (1H, m), 3.63-3.72 (1H, m), 3.84-4.03 (4H, m), 5.21 (1H, d, J=9.3 Hz), 6.33 (1H, br), 7.37-7.42 (2H, m), 7.66-7.71 (2H, m), 8.89 (1H, s), 8.99 (1H, br). white crystal m.p. 225.5°C
924	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 1.01 (6H, t, J=6.8 Hz), 1.22 (6H, t, J=7.3 Hz), 1.87-1.93 (1H, m), 2.13-2.18 (1H, m), 3.43-3.49 (1H, m), 3.68-3.74 (1H, m), 3.88-3.94 (1H, m), 4.00-4.07 (1H, m), 4.86-4.92 (1H, m), 5.01 (1H, d, J=7.8 Hz), 6.17 (1H, d, J=7.8 Hz), 7.13 (1H, s), 7.42-7.48 (1H, m), 7.60 (1H, d, J=8.3 Hz), 7.71-7.76 (1H, m), 7.95 (1H, br), 8.21 (1H, d, J=7.8 Hz). white crystal m.p. 203.6°C
929	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84-1.28 (18H, m), 1.89-2.22 (2H, m), 3.28-3.42 (1H, m), 3.68-4.14 (3H, m), 4.83-4.92 (1H, m), 4.95-5.03 (1H, m), 6.17 (1H x 1/3, br), 6.47 (1H x 2/3, br), 7.23 (1H x 2/3, br), 7.74 (1H x 1/3, br), 7.85-7.93 (2H, m), 8.30 (1H x 2/3, s), 8.37 (1H x 1/3, s). white crystal m.p. 242.9°C
933	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=7.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.21 (3H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.14-2.16 (1H, m), 3.66-3.74 (2H, m), 3.84-3.97 (2H, m), 4.84 (1H, q, J=6.3 Hz), 5.06 (1H, d, J=7.3 Hz), 6.29 (1H, d, J=6.8 Hz), 7.65 (1H, m), 7.71-7.75 (2H, m), 8.73 (2H, m). white solid
934	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (6H, d, J=6.8 Hz), 0.88 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.3 Hz), 1.87-1.92 (2H, m), 2.04-2.15 (1H, m), 3.55 (2H, m), 3.81 (1H, m), 3.84 (3H, s), 3.88 (1H, m), 3.90-3.91 (2H, m), 5.15 (1H, m), 6.15 (1H, m), 6.89-6.90 (2H, m), 6.92 (1H, m), 7.75-7.77 (2H, m). white solid

935	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.95 (6H, d, J=6.3 Hz), 1.23 (3H, d, J=6.8 Hz), 1.25 (3H, d, J=6.3 Hz), 1.35-1.44 (1H, m), 1.67-1.75 (1H, m), 1.89-1.95 (1H, m), 2.25 (1H, m), 2.39 (3H, s), 2.82-2.88 (1H, m), 3.82-3.84 (1H, m), 3.85-3.95 (1H, m), 3.97-4.05 (1H, m), 4.91-4.92 (1H, m), 5.04 (1H, m), 6.00-6.03 (1H, m), 7.23-7.26 (2H, m), 7.52 (1H, m), 7.79-7.80 (2H, m). white solid
936	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (6H, d, J=6.8 Hz), 1.00 (6H, d, J=6.8 Hz), 1.02 (6H, d, J=6.8 Hz), 1.89-1.92 (1H, m), 2.15-2.17 (1H, m), 3.45 (1H, m), 3.75 (1H, m), 3.86-3.89 (1H, m), 3.95-3.97 (1H, m), 6.20 (1H, m), 7.35-7.37 (1H, m), 7.38 (1H, m), 8.13 (1H, d, J=8.3 Hz), 8.70-8.72 (1H, m), 9.06-9.07 (1H, m). white solid

Properties of Compound (67) in Table 2

Compound No.	Properties
937	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (6H, d, J=6.8 Hz), 0.91 (6H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.88-1.93 (1H, m), 2.15-2.17 (1H, m), 3.43 (1H, m), 3.69 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.87-3.90 (1H, t, J=6.8 Hz), 3.96-3.98 (1H, m), 5.08 (1H, m), 6.18 (1H, m), 7.35-7.38 (1H, m), 7.42 (1H, m), 8.13 (1H, d, J=7.8 Hz), 8.70-8.72 (1H, m), 9.06-9.07 (1H, m). white solid
939	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.41 (9H, s), 1.84-1.91 (1H, m), 2.14-2.19 (1H, m), 3.28 (1H, m), 3.83 (2H, t, J=6.3 Hz), 3.94-4.01 (1H, m), 4.92 (1H, m), 6.18 (1H, m), 7.34-7.37 (1H, m), 7.52 (1H, m), 8.15 (1H, d, J=7.8 Hz), 8.69-8.71 (1H, m), 9.08-9.09 (1H, m). white solid
940	^{1}H-NMR δ ($CDCl_3$, ppm): 0.71 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=7.3 Hz), 0.99 (3H, d, J=7.3 Hz), 1.23 (3H, t, J=7.3 Hz), 1.87-1.89 (1H, m), 2.00-2.01 (1H, m), 3.45-3.49 (1H, m), 3.69 (1H, m), 3.90 (1H, m), 4.01-4.03 (1H, m), 4.10 (2H, q, J=7.3 Hz), 5.16 (1H, d, J=7.3 Hz), 6.22 (1H, d, J=8.8 Hz), 7.39-7.43 (1H, m), 7.81-7.86 (1H, m), 8.14-8.16 (1H, m), 8.27 (1H, m), 8.52-8.53 (1H, m). white crystal m.p. 168.2°C
941	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.21 (6H, d, J=6.3 Hz), 1.87-1.89 (1H, m), 1.90-2.00 (1H, m), 3.45-3.50 (1H, m), 3.68-3.70 (1H, m), 3.88 (1H, dd, J=6.3,8.7 Hz), 4.01-4.03 (1H, m), 4.89 (1H, q, J=6.3 Hz), 5.08 (1H, m), 6.18 (1H, m), 7.40-7.43 (1H, m), 7.81-7.86 (1H, m), 8.14-8.16 (1H, m), 8.28 (1H, m), 8.52-8.53 (1H, m). white solid
942	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.97 (3H,

	d, J=7.3 Hz), 1.00 (3H, d, J=7.3 Hz), 1.87-1.90 (2H, m), 2.04 (1H, m), 3.48 (1H, m), 3.50 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.87-3.91 (1H, m), 4.01 (1H, m), 5.19 (1H, m), 6.20 (1H, m), 7.40-7.43 (1H, m), 7.82-7.86 (1H, m), 8.14-8.16 (1H, m), 8.27 (1H, m), 8.52-8.53 (1H, m). white solid
943	^{1}H-NMR δ ($CDCl_3$, ppm): 0.73 (3H, d, J=6.3 Hz), 0.80 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=7.3 Hz), 1.42 (9H, s), 1.97 (1H, m), 1.99 (1H, m), 3.51-3.53 (1H, m), 3.60 (1H, m), 3.80 (1H, dd, J=6.8,8.7 Hz), 4.01 (1H, m), 5.00 (1H, m), 6.20 (1H, m), 7.39-7.43 (1H, m), 7.81-7.85 (1H, m), 8.16 (1H, m), 8.25 (1H, m), 8.52 (1H, m). white solid
945	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.17 (6H, d, J=5.9 Hz), 1.84-1.86 (1H, m), 2.14-2.15 (1H, m), 3.41-3.47 (1H, m), 3.58-3.69 (1H, m), 3.86 (1H, m), 3.90-3.97 (1H, m), 4.76 (1H, m), 4.96 (1H, d, J=7.3 Hz), 6.25 (1H, d, J=7.3 Hz), 7.09 (1H, m), 7.29 (1H, dd, J=4.9,7.8 Hz), 7.98 (1H, dd, J=1.9,7.3 Hz), 8.41-8.42 (1H, m). white crystal m.p. 227.7°C

Properties of Compound (68) in Table 2

Compound No.	Properties
946	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (6H, d, J=6.8 Hz), 0.93 (6H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.85-1.92 (2H, m), 2.16-2.18 (1H, m), 3.50-3.51 (1H, m), 3.66 (1H, m), 3.77 (2H, d, J=6.3 Hz), 3.87-3.91 (1H, m), 3.95-3.99 (1H, m), 5.08 (1H, d, J=7.3 Hz), 6.29 (1H, d, J=7.3 Hz), 7.09 (1H, m), 7.30-7.33 (1H, m), 8.01 (1H, dd, J=1.9,7.8 Hz), 8.43-8.45 (1H, m). white crystal m.p. 207.0°C
947	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.36 (9H, s), 1.85-1.87 (1H, m), 2.13-2.15 (1H, m), 3.30 (1H, m), 3.78 (2H, m), 3.94 (1H, m), 4.84 (1H, m), 6.17 (1H, m), 7.12 (1H, m), 7.27-7.30 (1H, m), 7.97-7.99 (1H, m), 8.40-8.41 (1H, m). white crystal m.p. 192.5°C
948	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.3 Hz), 1.23 (3H, t, J=6.8 Hz), 1.83-1.90 (1H, m), 2.01-2.09 (1H, m), 2.71 (1H, m), 3.49-3.54 (1H, m), 3.93 (1H, q, J=6.3 Hz), 4.05-4.08 (2H, m), 5.90 (1H, d, J=8.3 Hz), 7.18 (1H, d, J=8.8 Hz), 7.39 (1H, d, J=8.3 Hz), 8.04 (1H, m), 8.15 (1H, dd, J=2.4,8.8 Hz), 8.87 (1H, d, J=1.9 Hz). white crystal m.p. 238.6°C
949	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=5.8 Hz), 1.23 (3H, d, J=6.3 Hz), 1.86-1.91 (1H, m), 2.14-2.19 (1H, m), 3.31 (1H, m), 3.75-3.79 (1H, m), 3.85-3.89 (1H, m), 3.92-3.99 (1H, m), 4.82-4.88 (1H, m), 5.01 (1H, d, J=6.8 Hz), 6.20 (1H, d, J=8.3 Hz), 7.39 (1H, d, J=8.3 Hz), 7.61 (1H, m), 8.11 (1H, dd, J=2.4,8.3 Hz), 8.85 (1H, d, J=2.4 Hz). white crystal m.p. 250.5°C
950	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (6H, d, J=6.3 Hz), 0.93 (6H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H,

	d, J=6.8 Hz), 1.86–1.93 (2H, m), 2.14–2.19 (1H, m), 3.34 (1H, m), 3.73–3.76 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.86–3.89 (1H, m), 3.91–3.99 (1H, m), 5.06 (1H, d, J=5.8 Hz), 6.17 (1H, d, J=6.8 Hz), 7.38 (1H, d, J=8.3 Hz), 7.56 (1H, m), 8.11 (1H, dd, J=2.4,8.3 Hz), 8.85 (1H, d, J=2.4 Hz). white crystal m.p. 227.9°C
951	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.41 (9H, s), 1.83–1.89 (1H, m), 2.13–2.21 (1H, m), 3.17 (1H, m), 3.80–3.83 (2H, m), 3.93–4.00 (1H, m), 4.92 (1H, m), 6.14 (1H, d, J=7.3 Hz), 7.37 (1H, d, J=8.3 Hz), 7.64 (1H, m), 8.13 (1H, dd, J=1.9,8.3 Hz), 8.87 (1H, d, J=2.4 Hz). white crystal m.p. 213.5°C
952	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=6.8 Hz), 1.86–1.88 (1H, m), 2.00–2.05 (1H, m), 3.46–3.52 (1H, m), 3.62–3.68 (1H, m), 3.88–3.91 (1H, m), 4.00–4.06 (1H, m), 4.11 (2H, q, J=6.8 Hz), 5.18 (1H, d, J=8.8 Hz), 6.20 (1H, d, J=8.3 Hz), 7.45 (1H, d, J=7.8 Hz), 7.81 (1H, t, J=7.8 Hz), 8.04 (1H, m), 8.08 (1H, d, J=7.3 Hz). white crystal m.p. 170.1°C

Properties of Compound (69) in Table 2

Compound No.	Properties
953	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.18 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.3 Hz), 1.86-1.89 (1H, m), 2.00-2.06 (1H, m), 3.48-3.53 (1H, m), 3.61-3.68 (1H, m), 3.85-3.89 (1H, dd, J=6.3,8.8 Hz), 4.01-4.06 (1H, m), 4.87-4.90 (1H, m), 5.09 (1H, d, J=7.8 Hz), 6.15 (1H, d, J=8.3 Hz), 7.42-7.49 (1H, m), 7.79-7.83 (1H, m), 8.04 (1H, m), 8.06-8.08 (1H, m). white crystal m.p. 204.9°C
954	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.86-1.91 (2H, m), 2.01-2.04 (1H, m), 3.48-3.51 (1H, m), 3.61-3.69 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.89 (1H, dd, J=6.3,8.8 Hz), 4.03 (1H, dd, J=5.4,9.3 Hz), 5.19 (1H, d, J=7.8 Hz), 6.16 (1H, d, J=8.8 Hz), 7.45 (1H, d, J=7.8 Hz), 7.81 (1H, t, J=7.3 Hz), 8.04 (1H, m), 8.08 (1H, d, J=7.8 Hz). white crystal m.p. 193.2°C
955	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.43 (9H, s), 1.86-1.87 (1H, m), 2.00-2.02 (1H, m), 3.50-3.55 (1H, m), 3.60-3.61 (1H, m), 3.79 (1H, dd, J=6.8,9.2 Hz), 4.01-4.04 (1H, m), 5.01 (1H, d, J=8.3 Hz), 6.13 (1H, d, J=9.3 Hz), 7.43-7.48 (1H, m), 7.78-7.84 (1H, m), 8.03 (1H, m), 8.07-8.11 (1H, m). white crystal m.p. 174.7°C
960	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.78 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.03 (3H, d, J=6.8 Hz), 1.18 (3H, d, J=6.8 Hz), 1.22 (3H, d, J=6.8 Hz), 1.96-2.04 (2H, m), 2.60 (3H, d, J=7.8 Hz), 3.47-3.50 (2H, m), 3.83-3.92 (1H, m), 4.00-4.05 (1H, m), 4.83-4.87 (1H, m), 5.17 (1H, br), 7.31-7.34 (1H, m), 7.83-7.85 (1H, m), 8.07-8.13 (1H, m). white crystal: m.p. 173.7°C

963	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=7.3 Hz), 0.81 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.3 Hz), 1.03 (3H, d, J=6.8 Hz), 1.25 (6H, d, J=7.3 Hz), 1.96-2.05 (2H, m), 3.37 (3H, s), 3.38-3.42 (1H, m), 3.51-3.57 (1H, m), 3.81-3.85 (1H, m), 4.02-4.04 (1H, m), 4.86 (1H, q, J=6.8 Hz), 5.14 (1H, br), 6.47 (1H, br), 8.12-8.18 (1H, m), 8.20-8.24 (1H, m), 8.40-8.43 (1H, m). APCI-MS: M^+ 471 white crystal
968	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.18 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.84-1.89 (1H, m), 2.13-2.19 (1H, m), 3.26 (1H, m), 3.75 (1H, m), 3.82-3.86 (1H, m), 3.90-3.92 (1H, m), 4.81-4.87 (1H, m), 4.95 (1H, d, J=5.9 Hz), 6.15 (1H, m), 7.58-7.59 (1H, m), 7.66 (1H, m), 7.76 (1H, m), 8.46-8.47 (1H, m). white crystal m.p. 227.1°C

Properties of Compound (70) in Table 2

Compound No.	Properties
969	^{1}H-NMR δ ($CDCl_3$, ppm): 0.92 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.99 (6H, d, J=6.8 Hz), 1.01 (6H, d, J=6.8 Hz), 1.87-1.92 (1H, m), 2.15-2.20 (1H, m), 3.34 (1H, m), 3.73-3.76 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.86-3.96 (2H, m), 5.09 (1H, d, J=6.3 Hz), 6.24 (1H, m), 7.59-7.60 (1H, m), 7.67 (1H, m), 7.78 (1H, m), 8.48-8.49 (1H, m). white crystal m.p. 207.3°C
970	^{1}H-NMR δ ($CDCl_3$, ppm): 0.95 (3H, d, J=7.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.83-1.91 (1H, m), 2.13-2.21 (1H, m), 3.17 (1H, m), 3.81-3.84 (2H, m), 3.93-3.99 (1H, m), 4.95 (1H, d, J=5.9 Hz), 6.22 (1H, m), 7.62-7.64 (1H, m), 7.73-7.75 (1H, m), 7.80 (1H, m), 8.47-8.48 (1H, m). white crystal m.p. 174.7°C
971	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.98 (6H, t, J=6.8 Hz), 1.85-1.90 (1H, m), 2.00-2.06 (1H, m), 3.43-3.49 (1H, m), 3.63-3.72 (4H, m), 3.87-3.93 (1H, m), 3.99-4.04 (1H, m), 5.19 (1H, d, J=8.3 Hz), 6.20 (1H, d, J=8.3 Hz), 7.81 (1H, dd, J=2.4, 8.3 Hz), 8.10-8.14 (2H, m), 8.47 (1H, d, J=2.4 Hz). white crystal m.p. 168.7°C
972	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.98 (6H, t, J=6.8 Hz), 1.24 (3H, t, J=7.3 Hz), 1.85-1.90 (1H, m), 2.00-2.06 (1H, m), 3.44-3.50 (1H, m), 3.63-3.71 (1H, m), 3.86-3.91 (1H, m), 3.99-4.14 (3H, m), 5.15 (1H, d, J=8.8 Hz), 6.18 (1H, d, J=8.3 Hz), 7.79-7.83 (1H, m), 8.10-8.14 (2H, m), 8.47 (1H, d, J=2.0 Hz). white crystal m.p. 165.2°C
973	^{1}H-NMR δ ($CDCl_3$, ppm): 0.73-0.83 (6H, m), 0.93-1.04 (6H, m), 1.18-1.23 (6H, m), 1.84-2.05 (2H, m), 3.46-3.69 (2H, m), 3.84-3.93 (1H, m), 4.00-4.08 (1H, m), 4.81-4.91 (1H, m), 5.11 (1H, d, *J*=8.3 Hz), 6.15 (1H x 1/3, d, *J*=7.8 Hz), 6.54 (1H x 2/3, br), 7.79-7.84 (1H,

	m), 7.98 (1H, d, *J*=8.8 Hz), 8.10–8.14 (1H, m), 8.47–8.51 (1H, m). white crystal m.p. 167.7°C APCI-MS: M^+: 427
981	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.83–1.91 (1H, m), 2.00–2.05 (1H, m), 3.46–3.50 (1H, m), 3.64–3.72 (1H, m), 3.86–3.90 (1H, m), 3.98–4.04 (1H, m), 4.11 (2H, q, J=6.8 Hz), 5.14 (1H, d, J=6.8 Hz), 6.20 (1H, d, J=9.3 Hz), 7.41–7.43 (1H, m), 8.15–8.16 (1H, m), 8.22–8.23 (1H, m), 8.42–8.43 (1H, m). white crystal m.p. 171.3°C
982	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.22 (6H, d, J=5.8 Hz), 1.83–1.96 (1H, m), 2.01–2.09 (1H, m), 3.47–3.52 (1H, m), 3.62–3.70 (1H, m), 3.85–3.88 (1H, m), 3.98–4.04 (1H, m), 4.83–4.91 (1H, m), 5.07 (1H, d, J=9.8 Hz), 6.19 (1H, d, J=7.8 Hz), 7.41–7.43 (1H, m), 8.16–8.18 (1H, m), 8.23 (1H, m), 8.42–8.46 (1H, m). white crystal m.p. 204.3°C

Properties of Compound (71) in Table 2

Compound No.	Properties
983	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.91 (6H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.84-1.91 (2H, m), 2.03 (1H, m), 3.47-3.51 (1H, m), 3.65-3.67 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.86-3.90 (1H, m), 4.01-4.03 (1H, m), 5.18 (1H, m), 6.21 (1H, m), 7.27-7.44 (1H, m), 8.15-8.16 (1H, m), 8.22-8.23 (1H, m), 8.42-8.46 (1H, m). white crystal m.p. 179.6°C
984	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.86-1.87 (1H, m), 2.01-2.02 (1H, m), 3.48-3.54 (1H, m), 3.59-3.67 (1H, m), 3.77-3.81 (1H, m), 3.98-4.04 (1H, m), 4.97 (1H, m), 6.17 (1H, d, J=9.3 Hz), 7.41-7.46 (1H, m), 8.16-8.17 (1H, m), 8.22-8.23 (1H, m), 8.41-8.43 (1H, m). white crystal m.p. 171.7°C
985	^{1}H-NMR δ ($CDCl_3$, ppm): 0.70 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.87-1.92 (1H, m), 1.96-2.05 (1H, m), 2.58 (3H, s), 3.42-3.45 (1H, m), 3.71-3.78 (1H, m), 3.91-3.94 (1H, m), 3.98-4.05 (1H, m), 4.10 (2H, q, J=7.3 Hz), 5.20 (1H, d, J=9.3 Hz), 6.37 (1H, m), 7.29-7.31 (1H, m), 7.76-7.78 (1H, m), 7.98-8.00 (1H, m), 8.44 (1H, m). white crystal m.p. 194.4°C
986	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.3 Hz), 1.22 (3H, d, J=6.3 Hz), 1.88-1.99 (1H, m), 2.01-2.08 (1H, m), 2.59 (3H, s), 3.43-3.47 (1H, m), 3.69-3.77 (1H, m), 3.88-3.92 (1H, m), 3.98-4.06 (1H, m), 4.80-4.92 (1H, m), 5.13 (1H, d, J=8.8 Hz), 6.34 (1H, m), 7.30-7.31 (1H, m), 7.71 (1H, m), 7.99-8.01 (1H, m), 8.46 (1H, m). white crystal m.p. 203.7°C
987	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.3 Hz), 0.98 (3H,

	d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.85-1.92 (2H, m), 1.96-2.02 (1H, m), 2.58 (3H, s), 3.43-3.46 (1H, m), 3.73-3.78 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.90-3.93 (1H, m), 4.01-4.03 (1H, m), 5.23 (1H, d, J=8.3 Hz), 6.36 (1H, d, J=7.3 Hz), 7.29-7.31 (1H, m), 7.74-7.78 (1H, m), 7.99-8.00 (1H, m), 8.40 (1H, m). white crystal m.p. 190.4°C
988	^{1}H-NMR δ ($CDCl_3$, ppm): 0.72 (3H, d, J=6.8 Hz), 0.79 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.87-1.88 (1H, m), 1.90 (1H, m), 2.55 (3H, s), 3.49 (1H, m), 3.64-3.66 (1H, m), 3.82-3.83 (1H, m), 4.01-4.04 (1H, m), 5.00 (1H, m), 6.30 (1H, m), 7.27-7.28 (1H, m), 7.70-7.74 (1H, m), 7.95-7.97 (1H, m), 8.40 (1H, m). white crystal m.p. 155.5°C

Properties of Compound (72) in Table 2

Compound No.	Properties
989	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=7.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.84-1.87 (1H, m), 2.02-2.03 (1H, m), 3.47-3.51 (1H, m), 3.62-3.70 (1H, m), 3.88-3.92 (1H, m), 4.01-4.06 (1H, m), 4.11 (2H, q, J=7.3 Hz), 5.21 (1H, d, J=7.3 Hz), 6.31 (1H, d, J=8.8 Hz), 7.07-7.09 (1H, m), 7.92 (1H, m), 7.94-7.98 (1H, m), 8.04-8.07 (1H, m). white crystal m.p. 162.4°C
990	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.21 (6H, d, J=6.3 Hz), 1.86 (1H, m), 2.01-2.03 (1H, m), 3.48-3.52 (1H, m), 3.60-3.68 (1H, m), 3.85-3.89 (1H, m), 4.01-4.03 (1H, m), 4.87-4.90 (1H, m), 5.12 (1H, d, J=9.3 Hz), 6.24 (1H, d, J=8.8 Hz), 7.07-7.09 (1H, m), 7.92 (1H, m), 7.94-7.98 (1H, m), 8.04-8.07 (1H, m). white crystal m.p. 180.9°C
991	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.97 (3H, d, J=7.3 Hz), 0.98 (3H, d, J=7.3 Hz), 1.86-1.91 (2H, m), 2.02-2.09 (1H, m), 3.47-3.52 (1H, m), 3.63-3.65 (1H, m), 3.84 (2H, d, J=6.8 Hz), 3.87-3.91 (1H, m), 4.01-4.03 (1H, m), 5.20 (1H, d, J=9.8 Hz), 6.20 (1H, d, J=8.3 Hz), 7.07-7.09 (1H, m), 7.92 (1H, m), 7.94-7.98 (1H, m), 8.05-8.07 (1H, m). white crystal m.p. 173.7°C
993	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.3 Hz), 0.83 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.86-1.88 (1H, m), 2.02-2.05 (1H, m), 3.47-3.52 (1H, m), 3.64-3.67 (1H, m), 3.89-3.93 (1H, m), 4.02-4.06 (1H, m), 4.11 (2H, q, J=7.3 Hz), 5.22 (1H, d, J=8.3 Hz), 6.28 (1H, d, J=8.8 Hz), 7.59-7.61 (1H, m), 7.69-7.72 (1H, m), 8.05-8.07 (1H, m), 8.10-8.12 (1H, m). white crystal m.p. 182.8°C
994	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.85

	(3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.97-1.99 (2H, m), 3.45-3.50 (1H, m), 3.50-3.60 (1H, m), 3.80-4.00 (2H, m), 5.20 (1H, m), 7.45 (1H, m), 7.63 (1H, s), 8.18-8.20 (1H, m), 8.41-8.43 (1H, m), 8.51 (1H, m), 9.10-9.11 (1H, m). white crystal m.p. 207.7°C
995	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (6H, d, J=6.3 Hz), 1.86-1.93 (2H, m), 2.03-2.04 (1H, m), 3.74 (2H, d, J=6.3 Hz), 3.83-3.90 (4H, m), 5.20 (1H, m), 6.20 (1H, m), 7.56-7.63 (1H, m), 7.66-7.73 (1H, m), 8.03-8.12 (1H, m), 8.23 (1H, m). white crystal m.p. 209.6°C
997	^{1}H-NMR δ ($CDCl_3$, ppm): 0.73 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.87-1.92 (1H, m), 1.95-2.04 (1H, m), 3.47-3.53 (1H, m), 3.63-3.74 (1H, m), 3.79-3.91 (1H, m), 3.98 (3H, s), 4.01-4.08 (1H, m), 4.10 (2H, q, J=7.3 Hz), 5.18 (1H, d, J=6.8 Hz), 6.26 (1H, d, J=8.8 Hz), 8.23-8.25 (1H, m), 8.32 (1H, m), 8.43-8.45 (1H, m), 9.11 (1H, m). white crystal m.p. 189.9°C

Properties of Compound (73) in Table 2

Compound No.	Properties
998	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.80 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20 (6H, d, J=6.3 Hz), 1.87-1.89 (1H, m), 1.95-2.02 (1H, m), 3.49-3.54 (1H, m), 3.64-3.66 (1H, m), 3.85-3.89 (1H, m), 3.98 (3H, s), 4.03-4.05 (1H, m), 4.86-4.89 (1H, m), 5.11 (1H, d, J=8.8 Hz), 6.23 (1H, d, J=8.3 Hz), 8.23-8.25 (1H, m), 8.33 (1H, m), 8.43-8.45 (1H, m), 9.11-9.12 (1H, m). white crystal m.p. 191.8°C
999	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.81 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.97 (3H, d, J=7.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.86-1.91 (2H, m), 2.01-2.02 (1H, m), 3.49-3.54 (1H, m), 3.66-3.67 (1H, m), 3.83 (1H, d, J=6.3 Hz), 3.87-3.91 (1H, m), 3.98 (3H, s), 4.03-4.05 (1H, m), 5.20 (1H, d, J=8.8 Hz), 6.24 (1H, d, J=8.8 Hz), 8.24-8.26 (1H, m), 8.34 (1H, m), 8.44-8.46 (1H, m), 9.12 (1H, m). white crystal m.p. 180.6°C
1000	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.79 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.90 (1H, m), 1.95 (1H, m), 3.55 (1H, m), 3.63-3.66 (1H, m), 3.78-3.82 (1H, m), 3.98 (3H, s), 3.99 (1H, m), 5.00 (1H, m), 6.20 (1H, m), 8.24-8.25 (1H, m), 8.30 (1H, m), 8.43-8.46 (1H, m), 9.11-9.12 (1H, m). white crystal m.p. 150.3°C
1001	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.23 (3H, t, J=6.8 Hz), 1.85-1.86 (1H, m), 1.98-2.02 (1H, m), 3.54-3.59 (2H, m), 3.96-4.00 (2H, m), 4.07 (2H, q, J=6.8 Hz), 5.97 (1H, d, J=8.8 Hz), 7.46 (1H, d, J=8.8 Hz), 7.58 (1H, s), 8.18-8.20 (1H, m), 8.41-8.44 (1H, m), 8.50 (1H, m), 9.10-9.11 (1H, m). white crystal m.p. 237.1°C
1002	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H,

	d, J=5.8 Hz), 1.20 (3H, d, J=6.3 Hz), 1.22 (3H, d, J=6.3 Hz), 1.85–1.87 (1H, m), 1.98–2.02 (1H, m), 3.56–3.60 (2H, m), 3.96–4.00 (2H, m), 4.82–4.86 (1H, m), 5.69 (1H, d, J=9.3 Hz), 7.33 (1H, d, J=9.3 Hz), 7.50 (1H, s), 8.19–8.21 (1H, m), 8.41–8.44 (1H, m), 8.48 (1H, m), 9.11–9.12 (1H, m). white crystal m.p. 253.1°C
1003	^{1}H–NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.3 Hz), 1.85–1.89 (2H, m), 1.99–2.02 (1H, m), 3.56–3.60 (2H, m), 3.79–3.82 (2H, m), 3.98 (2H, d, J=6.3 Hz), 5.82 (1H, d, J=9.3 Hz), 7.41 (1H, d, J=8.8 Hz), 7.51 (1H, s), 8.20–8.22 (1H, m), 8.42–8.44 (1H, m), 8.49 (1H, m), 9.11–9.12 (1H, m). white crystal m.p. 244.6°C
1004	^{1}H–NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.97–1.99 (2H, m), 3.45–3.50 (1H, m), 3.50–3.60 (1H, m), 3.80–4.00 (2H, m), 5.20 (1H, m), 7.45 (1H, m), 7.63 (1H, s), 8.18–8.20 (1H, m), 8.41–8.43 (1H, m), 8.51 (1H, m), 9.10–9.11 (1H, m). white solid

Properties of Compound (74) in Table 2

Compound No.	Properties
1005	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=7.3 Hz), 1.96-1.97 (1H, m), 2.03-2.06 (1H, m), 3.49-3.52 (1H, m), 3.63-3.67 (1H, m), 3.89-3.90 (1H, m), 4.06 (1H, m), 4.09 (2H, q, J=7.3 Hz), 5.14 (1H, m), 6.24 (1H, d, J=6.3 Hz), 8.10 (1H, m), 8.52-8.55 (1H, m), 8.74-8.77 (1H, m), 9.36-9.38 (1H, m). white crystal m.p. 172.1°C
1006	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.76 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.3 Hz), 1.13 (3H, d, J=6.3 Hz), 1.19 (3H, d, J=6.3 Hz), 2.04-2.06 (2H, m), 3.50-3.54 (1H, m), 3.61-3.67 (1H, m), 3.86-3.89 (1H, m), 4.03-4.05 (1H, m), 4.84-4.89 (1H, m), 5.09 (1H, m), 6.24 (1H, d, J=8.3 Hz), 8.11 (1H, m), 8.52-8.55 (1H, m), 8.73-8.76 (1H, m), 9.36-9.38 (1H, m). white crystal m.p. 177.1°C
1007	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.91 (6H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.8 Hz), 1.89-1.99 (2H, m), 2.04-2.05 (1H, m), 3.51-3.54 (1H, m), 3.66 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.88 (1H, dd, J=6.3,8.7 Hz), 4.03-4.05 (1H, m), 5.18 (1H, m), 6.24 (1H, d, J=7.8 Hz), 8.11 (1H, m), 8.52-8.55 (1H, m), 8.74-8.77 (1H, m), 9.36-9.38 (1H, m). white crystal m.p. 166.8°C
1008	^{1}H-NMR δ ($CDCl_3$, ppm): 0.74 (3H, d, J=6.3 Hz), 0.78 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.03 (3H, d, J=6.3 Hz), 1.43 (9H, s), 1.82 (1H, m), 2.03 (1H, m), 3.57 (1H, m), 3.61-3.66 (1H, m), 3.80-3.85 (1H, m), 4.08 (1H, m), 4.99 (1H, m), 6.19 (1H, m), 8.11 (1H, m), 8.52-8.55 (1H, m), 8.73-8.76 (1H, m), 9.37-9.38 (1H, m). white crystal m.p. 140.7°C
1009	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.3 Hz), 0.83 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H,

	d, J=6.3 Hz), 1.24 (3H, t, J=6.8 Hz), 1.85-1.93 (1H, m), 2.03-2.08 (1H, m), 2.65 (3H, s), 3.46-3.50 (1H, m), 3.65-3.72 (1H, m), 3.87-3.91 (1H, m), 3.99-4.06 (1H, m), 4.11 (2H, q, J=6.8 Hz), 5.14 (1H, d, J=8.3 Hz), 6.25 (1H, d, J=8.8 Hz), 8.02 (1H, m), 8.37-8.39 (1H, m), 9.22-9.23 (1H, m). white crystal m.p. 193.5°C
1010	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.22 (6H, d, J=6.3 Hz), 1.86-1.91 (1H, m), 2.02-2.06 (1H, m), 2.65 (3H, s), 3.46-3.52 (1H, m), 3.63-3.70 (1H, m), 3.86-3.99 (1H, m), 4.00-4.06 (1H, m), 4.83-4.91 (1H, m), 5.07 (1H, d, J=8.8 Hz), 6.22 (1H, d, J=8.8 Hz), 8.03 (1H, m), 8.37-8.39 (1H, m), 9.22-9.23 (1H, m). white crystal m.p. 188.8°C
1011	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.82 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.02 (3H, d, J=6.3 Hz), 1.86-1.91 (2H, m), 2.03-2.05 (1H, m), 2.65 (3H, s), 3.48-3.52 (1H, m), 3.64-3.68 (1H, m), 3.84 (1H, d, J=6.3 Hz), 3.88-3.92 (1H, m), 4.02-4.04 (1H, m), 5.20 (1H, d, J=7.3 Hz), 6.28 (1H, d, J=8.3 Hz), 8.04 (1H, m), 8.37-8.39 (1H, m), 9.22-9.23 (1H, m). white crystal m.p. 159.7°C

Properties of Compound (75) in Table 2

Compound No.	Properties
1013	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 0.93-1.03 (6H, m), 1.88 (1H, q, J=6.8 Hz), 2.04 (1H, q, J=6.8 Hz), 3.43-3.47 (1H, m), 3.60-3.72 (2H, m), 3.67 (3H, s), 3.90-4.00 (1H, m), 4.01 (3H, s), 4.04 (3H, s), 5.17 (1H, br), 6.23 (1H, d, J=8.8 Hz), 7.12-7.15 (1H, m), 8.14 (1H, br). white solid
1014	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.22-1.27 (3H, m), 1.86-1.91 (1H,m), 2.01-2.06 (1H, m), 3.46-3.50 (2H, m), 3.53-3.60 (1H, m), 3.88-4.00 (1H, m), 4.01 (3H, s), 4.05 (3H, s), 4.09-4.12 (2H, m), 5.06 (1H, br), 6.22 (1H, br), 7.13-7.15 (1H, m), 7.97 (1/2H, br), 8.07 (1/2H, br). white crystal m.p. 178.6°C
1015	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.19-1.27 (6H, m), 1.86-1.92 (1H,m), 1.99-2.06 (1H, m), 3.46-3.50 (1H, m), 3.52-3.60 (1H, m), 3.84-3.90 (1H, m), 4.01 (3H, s), 4.05 (3H, s), 4.06-4.08 (1H, m), 4.86-4.91 (1H, m), 5.06 (1H, br), 6.08 (1H, br), 7.13-7.15 (1H, m), 8.11 (1H, br). white crystal m.p. 186.0°C
1017	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.42 (9/2H, s), 1.45 (9/2H, s), 1.86-1.91 (1H, m), 2.05-2.11 (1H, m), 3.46-3.50 (2H, m), 3.54-3.61 (1H, m), 3.89-4.00 (1H, m), 4.01 (3H, s), 4.05 (3H, s), 4.95 (1H, br), 6.23 (1H, br), 7.13-7.15 (1H, m), 7.97 (1H, br). white solid
1019	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.84-1.91 (1H, m), 2.10-2.15 (1H, m), 3.45 (1H, m), 3.59 (1H, m), 3.89 (1H, dd, J=6.3,7.8 Hz), 3.92-3.97 (1H, m), 4.88 (1H, q, J=6.3 Hz), 5.03 (1H,

	m), 6.17 (1H, d, J=6.8 Hz), 7.03 (1H, m), 7.04 (1H, dd, J=3.9,4.9 Hz), 7.44-7.46 (1H, m), 7.51 (1H, d, J=2.9 Hz). white crystal m.p. 212.6°C
1020	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (6H, d, J=6.8 Hz), 0.91 (6H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.84-1.93 (2H, m), 2.11-2.13 (1H, m), 3.48-3.52 (1H, m), 3.56 (1H, m), 3.84 (2H, d, J=6.8 Hz), 3.90 (1H, dd, J=6.8,7.8 Hz), 3.92-3.95 (1H, m), 5.11 (1H, m), 6.18 (1H, m), 6.98 (1H, m), 7.05 (1H, dd, J=3.9,5.4 Hz), 7.44-7.46 (1H, m), 7.51 (1H, d, J=3.9 Hz). white crystal m.p. 204.9°C
1021	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=7.3 Hz), 1.42 (9H, s), 1.85-1.90 (1H, m), 2.10-2.17 (1H, m), 3.35 (1H, m), 3.66-3.69 (1H, m), 3.83 (1H, dd, J=6.3,7.3 Hz), 3.91-3.98 (1H, m), 4.96 (1H, m), 6.19 (1H, d, J=7.8 Hz), 7.04 (1H, dd, J=3.9,5.4 Hz), 7.12 (1H, m), 7.43-7.45 (1H, m), 7.54 (1H, d, J=3.4 Hz). white crystal m.p. 172.7°C

Properties of Compound (76) in Table 2

Compound No.	Properties
1022	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.3 Hz), 0.89 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.22 (3H, t, J=6.8 Hz), 1.86-1.91 (1H, m), 2.06-2.11 (1H, m), 2.51 (3H, s), 3.46-3.50 (1H, m), 3.53-3.57 (1H, m), 3.92 (1H, dd, J=6.3,8.3 Hz), 3.95-3.98 (1H, m), 4.08 (2H, q, J=6.8 Hz), 5.15 (1H, d, J=7.3 Hz), 6.27 (1H, d, J=8.3 Hz), 6.48 (1H, m), 6.86 (1H, d, J=4.9 Hz), 7.25 (1H, d, J=6.8 Hz). white crystal m.p. 180.6°C
1023	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.3 Hz), 1.22 (3H, d, J=6.3 Hz), 1.84-1.91 (1H, m), 2.09-2.12 (1H, m), 2.51 (3H, s), 3.51-3.54 (2H, m), 3.88-3.91 (1H, m), 3.93-3.98 (1H, m), 4.85-4.88 (1H, m), 5.04 (1H, m), 6.17 (1H, d, J=7.8 Hz), 6.49 (1H, m), 6.86 (1H, d, J=5.4 Hz), 7.25 (1H, d, J=5.4 Hz). white crystal m.p. 206.9°C
1024	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (6H, d, J=6.8 Hz), 0.89 (3H, d, J=6.3 Hz), 0.90 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.84-1.91 (2H, m), 2.08-2.10 (1H, m), 2.51 (3H, s), 3.47-3.56 (2H, m), 3.82 (2H, d, J=6.3 Hz), 3.91 (1H, dd, J=6.3,8.8 Hz), 3.94-3.98 (1H, m), 5.15 (1H, d, J=6.3 Hz), 6.20 (1H, d, J=6.3 Hz), 6.48 (1H, m), 6.86 (1H, d, J=5.4 Hz), 7.25 (1H, d, J=5.9 Hz). white crystal m.p. 187.9°C
1025	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.85-1.90 (1H, m), 2.07-2.12 (1H, m), 2.51 (3H, s), 3.43-3.50 (1H, m), 3.53-3.58 (1H, m), 3.83 (1H, dd, J=6.8,8.3 Hz), 3.92-3.99 (1H, m), 4.96 (1H, m), 6.19 (1H, d, J=7.8 Hz), 6.55 (1H, m), 6.85 (1H, d, J=4.9 Hz), 7.24 (1H, d, J=4.9 Hz). white crystal m.p. 168.5°C
1026	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.91

	(3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=6.8 Hz), 1.83-1.92 (1H, m), 2.07-2.17 (1H, m), 2.49 (3H, s), 3.48-3.51 (2H, m), 3.90 (1H, dd, J=6.3,7.7 Hz), 3.93-3.95 (1H, m), 4.12 (2H, q, J=6.8 Hz), 5.11 (1H, m), 6.19 (1H, d, J=7.8 Hz), 6.70 (1H, d, J=3.4 Hz), 6.79 (1H, m), 7.31 (1H, d, J=3.4 Hz). white crystal m.p. 183.1°C
1027	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20 (6H, d, J=6.3 Hz), 1.85-1.90 (1H, m), 2.08-2.13 (1H, m), 2.49 (3H, s), 3.46-3.48 (1H, m), 3.54 (1H, m), 3.88-3.91 (2H, m), 4.85-4.91 (1H, m), 5.07 (1H, m), 6.23 (1H, d, J=5.9 Hz), 6.69 (1H, d, J=2.9 Hz), 6.86 (1H, m), 7.31 (1H, d, J=3.4 Hz). white crystal m.p. 188.6°C

Properties of Compound (77) in Table 2

Compound No.	Properties
1028	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (6H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.85-1.90 (2H, m), 2.08-2.13 (1H, m), 2.49 (3H, s), 3.50-3.51 (2H, m), 3.83 (2H, d, J=6.3 Hz), 3.90 (1H, dd, J=6.3,8.3 Hz), 3.93-3.95 (1H, m), 5.15 (1H, d, J=7.3 Hz), 6.22 (1H, d, J=7.3 Hz), 6.69 (1H, d, J=2.9 Hz), 6.81 (1H, m), 7.31 (1H, d, J=3.4 Hz). white crystal m.p. 176.3°C
1029	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.82-1.90 (1H, m), 2.11-2.14 (1H, m), 2.48 (3H, s), 3.37 (1H, m), 3.61-3.67 (1H, m), 3.82-3.85 (1H, m), 3.91-3.93 (1H, m), 4.99 (1H, m), 6.23 (1H, m), 6.69 (1H, d, J=2.9 Hz), 6.95 (1H, m), 7.33 (1H, d, J=3.4 Hz). white crystal m.p. 149.1°C
1030	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.84-1.91 (1H, m), 2.10-2.17 (1H, m), 3.41-3.44 (1H, m), 3.58-3.61 (1H, m), 3.90 (1H, dd, J=6.3,7.8 Hz), 3.93-3.95 (1H, m), 4.10 (1H, q, J=6.8 Hz), 5.15 (1H, d, J=7.8 Hz), 6.27 (1H, d, J=7.8 Hz), 6.86 (1H, d, J=3.9 Hz), 7.15 (1H, m), 7.30 (1H, d, J=3.9 Hz). white crystal m.p. 193.7°C
1031	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=7.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.3 Hz), 1.84-1.91 (1H, m), 2.11-2.17 (1H, m), 3.36-3.39 (1H, m), 3.61-3.66 (1H, m), 3.87-3.95 (2H, m), 4.83-4.92 (1H, m), 5.07 (1H, d, J=7.8 Hz), 6.24 (1H, d, J=7.8 Hz), 6.85 (1H, d, J=4.4 Hz), 7.19 (1H, m), 7.31 (1H, d, J=3.9 Hz). white crystal m.p. 205.2°C
1032	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.3 Hz), 0.97 (6H, d, J=6.8 Hz), 0.99 (6H,

	d, J=7.3 Hz), 1.84-1.91 (2H, m), 2.10-2.15 (1H, m), 3.36-3.43 (1H, m), 3.58-3.61 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.88-3.95 (2H, m), 5.15 (1H, d, J=7.8 Hz), 6.24 (1H, d, J=7.3 Hz), 6.85 (1H, d, J=3.9 Hz), 7.14 (1H, m), 7.29 (1H, d, J=3.9 Hz). white crystal m.p. 187.7°C
1033	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.81-1.88 (1H, m), 2.11-2.18 (1H, m), 3.22 (1H, m), 3.72 (1H, m), 3.80-3.89 (1H, m), 3.91-3.95 (1H, m), 4.94 (1H, m), 6.14 (1H, m), 6.85 (1H, d, J=3.9 Hz), 7.22 (1H, m), 7.33 (1H, d, J=3.9 Hz). white crystal m.p. 175.0°C
1034	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=6.8 Hz), 1.85-1.90 (1H, m), 2.04-2.08 (1H, m), 3.46-3.50 (1H, m), 3.68-3.70 (1H, m), 3.91-4.01 (2H, m), 4.09-4.13 (2H, m), 5.16 (1H, d, J=6.8 Hz), 6.27 (1H, d, J=8.8 Hz), 6.95-6.96 (1H, m), 7.22 (1H, m), 7.45-7.46 (1H, m). white crystal m.p. 173.9°C

Properties of Compound (78) in Table 2

Compound No.	Properties
1035	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.22 (6H, d, J=6.3 Hz), 1.85-1.91 (1H, m), 2.04-2.10 (1H, m), 3.46-3.52 (1H, m), 3.63-3.72 (1H, m), 3.89-3.92 (1H, m), 3.99-4.01 (1H, m), 4.86-4.91 (1H, m), 5.06 (1H, m), 6.21 (1H, d, J=8.3 Hz), 6.95-6.99 (1H, m), 7.23 (1H, m), 7.44-7.46 (1H, m). white crystal m.p. 194.2°C
1036	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 1.85-1.93 (2H, m), 2.08 (1H, m), 3.45-3.51 (1H, m), 3.61-3.73 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.91 (1H, dd, J=6.3,8.7 Hz), 3.69-4.00 (1H, m), 5.15-5.16 (1H, m), 6.20 (1H, d, J=7.8 Hz), 6.95-6.96 (1H, m), 7.22 (1H, m), 7.45-7.46 (1H, m). white crystal m.p. 178.7°C
1037	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.83-1.91 (1H, m), 2.04-2.09 (1H, m), 3.49-3.55 (1H, m), 3.60-3.67 (1H, m), 3.83 (1H, dd, J=6.3,8.7 Hz), 3.69-3.99 (1H, m), 4.97 (1H, m), 6.18 (1H, d, J=8.3 Hz), 6.95-6.96 (1H, m), 7.23 (1H, m), 7.44-7.45 (1H, m). white crystal m.p. 175.5°C
1039	ESI-MS M^+: 501 white solid
1042	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=6.8 Hz), 1.86-1.89 (1H, m), 2.09-2.13 (1H, m), 3.46-3.50 (1H, m), 3.57 (1H, m), 3.90 (1H, dd, J=6.3,7.8 Hz), 3.93-3.94 (1H, m), 4.10 (2H, q, J=6.8 Hz), 5.10 (1H, m), 6.21 (1H, d, J=7.8 Hz), 6.99 (1H, m), 7.28-7.30 (1H, m), 7.40-7.42 (1H, m), 7.90-7.91 (1H, m). white crystal m.p. 212.3°C
1043	^{1}H-NMR ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90

	(3H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=7.3 Hz), 1.20 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=5.9 Hz), 1.87–1.92 (1H, m), 2.11–2.16 (1H, m), 3.42 (1H, m), 3.61–3.64 (1H, m), 3.89 (1H, dd, J=6.3,7.8 Hz), 3.91–3.95 (1H, m), 4.84–4.92 (1H, m), 5.03 (1H, m), 6.18 (1H, d, J=8.3 Hz), 7.00 (1H, m), 7.28–7.30 (1H, m), 7.41–7.43 (1H, m), 7.91–7.92 (1H, m). white crystal m.p. 225.0°C
1044	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=6.8 Hz), 1.86–1.92 (2H, m), 2.10–2.14 (1H, m), 3.46–3.50 (1H, m), 3.57–3.60 (1H, m), 3.83 (1H, d, J=6.3 Hz), 3.88–3.97 (2H, m), 5.12 (1H, m), 6.21 (1H, m), 7.00 (1H, m), 7.28–7.31 (1H, m), 7.41–7.42 (1H, m), 7.90–7.91 (1H, m). white crystal m.p. 213.4°C

Properties of Compound (79) in Table 2

Compound No.	Properties
1045	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.86-1.88 (1H, m), 2.12-2.14 (1H, m), 3.30 (1H, m), 3.70 (1H, m), 3.81-3.85 (1H, m), 3.93 (1H, m), 4.90 (1H, m), 6.20 (1H, m), 7.10 (1H, m), 7.27-7.29 (1H, m), 7.43-7.44 (1H, m), 7.92-7.93 (1H, m). white crystal m.p. 184.6°C
1046	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.93 (6H, d, J=6.8 Hz), 1.25 (3H, t, J=6.8 Hz), 1.82-1.93 (3H, m), 2.01-2.03 (1H, m), 2.15-2.29 (2H, m), 3.33-3.37 (2H, m), 3.84-3.96 (4H, m), 4.10-4.13 (2H, m), 4.31-4.37 (1H, m), 5.20 (1H, m), 6.80 (1H, m). white crystal m.p. 146.5°C
1047	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.3 Hz), 1.22-1.25 (6H, m), 1.84-1.93 (3H, m), 2.01-2.02 (1H, m), 2.26-2.29 (2H, m), 3.35-3.36 (2H, m), 3.84-3.97 (4H, m), 4.33-4.37 (1H, m), 4.88-4.91 (1H, m), 5.10 (1H, m), 6.82 (1H, m). white crystal m.p. 167.2°C
1050	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.84-1.89 (1H, m), 2.03-2.08 (1H, m), 3.42-3.46 (1H, m), 3.60-3.62 (1H, m), 3.90 (1H, dd, J=6.3,8.3 Hz), 3.93-3.98 (1H, m), 4.11 (2H, q, J=7.3 Hz), 5.14 (1H, d, J=7.3 Hz), 6.18 (1H, d, J=8.8 Hz), 6.47 (1H, dd, J=1.9,3.4 Hz), 6.82 (1H, m), 7.08 (1H, d, J=3.4 Hz), 7.42 (1H, d, J=0.9 Hz). white crystal m.p. 213.3°C
1051	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.21 (6H, d, J=6.3 Hz), 1.84-1.89 (1H, m), 2.02-2.07 (1H, m), 3.43-3.49 (1H, m), 3.55-3.63 (1H, m), 3.89 (1H, dd, J=6.8,8.3 Hz), 3.93-3.99 (1H,

	m), 4.85-4.91 (1H, m), 5.08 (1H, d, J=6.8 Hz), 6.18 (1H, d, J=8.8 Hz), 6.47 (1H, dd, J=1.5,3.4 Hz), 6.85 (1H, m), 7.07 (1H, d, J=3.4 Hz), 7.42 (1H, m). white crystal m.p. 207.0°C
1052	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.84-1.92 (2H, m), 2.04-2.06 (1H, m), 3.43-3.47 (1H, m), 3.57-3.63 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.90 (1H, dd, J=8.7,2.4 Hz), 3.96-3.98 (1H, m), 5.17 (1H, d, J=7.8 Hz), 3-6017 (1H, d, J=7.3 Hz), 6.47-6.48 (1H, m), 6.83 (1H, m), 7.07 (1H, dd, J=0.9,3.4 Hz), 7.42 (1H, d, J=0.9 Hz). white crystal m.p. 200.1°C
1053	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.84-1.89 (1H, m), 2.05-2.07 (1H, m), 3.50-3.54 (2H, m), 3.81 (1H, dd, J=6.8,8.7 Hz), 3.94-3.98 (1H, m), 4.98 (1H, m), 6.16 (1H, d, J=8.8 Hz), 6.46 (1H, dd, J=1.9,3.4 Hz), 6.89 (1H, m), 7.08 (1H, d, J=3.4 Hz), 7.42 (1H, d, J=0.9 Hz). white crystal m.p. 155.9°C

Properties of Compound (80) in Table 2

Compound No.	Properties
1054	^{1}H-NMR ($CDCl_3$, ppm): 0.74 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 1.23 (3H, t, J=6.8 Hz), 1.84-1.89 (1H, m), 2.00-2.09 (1H, m), 2.37 (3H, s), 3.34-3.37 (1H, m), 3.62-3.67 (1H, m), 3.91-3.94 (2H, m), 4.10 (2H, q, J=6.8 Hz), 5.18 (1H, m), 6.20 (1H, m), 6.31-6.32 (1H, m), 6.66 (1H, m), 7.27-7.28 (1H, m). white crystal m.p. 154.0°C
1055	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=5.8 Hz), 1.22 (3H, d, J=6.3 Hz), 1.84-1.87 (1H, m), 2.02-2.05 (1H, m), 2.37 (3H, s), 3.35-3.40 (1H, m), 3.62-3.64 (1H, m), 3.88-3.99 (2H, m), 4.84-4.91 (1H, m), 5.11 (1H, m), 6.16 (1H, d, J=8.3 Hz), 6.31 (1H, m), 6.68 (1H, m). white crystal m.p. 173.9°C
1056	^{1}H-NMR δ ($CDCl_3$, ppm): 0.75 (3H, d, J=6.3 Hz), 0.85 (3H, d, J=6.3 Hz), 0.90 (6H, d, J=6.3 Hz), 0.96 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 1.84-1.92 (2H, m), 2.02-2.03 (1H, m), 2.37 (3H, s), 3.34-3.39 (1H, m), 3.63-3.67 (1H, m), 3.83 (1H, d, J=6.3 Hz), 3.90-3.99 (2H, m), 5.20 (1H, m), 6.20 (1H, m), 6.31-6.32 (1H, m), 6.67 (1H, m), 7.27-7.28 (1H, m). white crystal m.p. 154.8°C
1057	^{1}H-NMR δ ($CDCl_3$, ppm): 0.76 (3H, d, J=6.8 Hz), 0.84 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.83-1.90 (1H, m), 2.00-2.08 (1H, m), 2.37 (3H, s), 3.38-3.44 (1H, m), 3.55-3.66 (1H, m), 3.81-3.85 (1H, m), 3.94-3.97 (1H, m), 6.20 (1H, m), 6.30-6.31 (1H, m), 6.71 (1H, m), 7.26 (1H, m). white crystal m.p. 137.8°C
1058	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.83-1.91 (1H, m), 2.09-2.18 (1H, m), 3.40 (1H, m), 3.58 (1H, m), 3.87-3.94 (2H, m), 4.11 (2H, q, J=6.8 Hz), 5.08 (1H,

	m), 6.15 (1H, d, J=7.8 Hz), 6.66 (1H, m), 6.82 (1H, m), 7.39-7.40 (1H, m), 7.95 (1H, m). white crystal m.p. 227.2°C
1059	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.3 Hz), 1.24 (3H, d, J=6.3 Hz), 1.82-1.91 (1H, m), 2.10-2.18 (1H, m), 3.35 (1H, m), 3.61 (1H, m), 3.86-3.94 (2H, m), 4.85-4.91 (1H, m), 5.03 (1H, m), 6.14 (1H, d, J=7.8 Hz), 6.67 (1H, m), 6.88 (1H, m), 7.39-7.40 (1H, m), 7.95 (1H, m). white crystal m.p. 215.0°C
1060	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (6H, d, J=6.8 Hz), 0.92 (6H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.86-1.89 (2H, m), 2.09-2.16 (1H, m), 3.40-3.42 (1H, m), 3.58 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.87-3.90 (2H, m), 5.10 (1H, m), 6.16 (1H, m), 6.66 (1H, m), 6.84 (1H, m), 7.39-7.40 (1H, m), 7.95 (1H, m). white crystal m.p. 212.8°C

Properties of Compound (81) in Table 2

Compound No.	Properties
1061	^{1}H-NMR δ ($CDCl_3$, ppm): 0.93 (6H, d, J=6.8 Hz), 0.97 (6H, d, J=6.8 Hz), 1.43 (9H, s), 1.81-1.89 (1H, m), 2.11-2.19 (1H, m), 3.22 (1H, m), 3.82 (1H, m), 3.88-3.96 (2H, m), 4.95 (1H, m), 6.13 (1H, m), 6.70 (1H, m), 6.95 (1H, m), 7.37-7.39 (1H, m), 7.97 (1H, m). white crystal m.p. 178.9°C
1062	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.3 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.23 (3H, t, J=7.3 Hz), 1.84-1.92 (1H, m), 2.07-2.41 (1H, m), 2.58 (3H, s), 3.45-3.51 (2H, m), 3.89-3.92 (2H, m), 4.11 (2H, q, J=7.3 Hz), 5.16 (1H, m), 6.29 (1H, m), 6.50 (1H, m), 6.69 (1H, m), 7.21 (1H, m). white crystal m.p. 136.3°C
1063	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20 (6H, d, J=6.3 Hz), 1.87-1.88 (1H, m), 2.09-2.14 (1H, m), 2.58 (3H, s), 3.41 (1H, m), 3.54 (1H, m), 3.88-3.91 (2H, m), 4.85-4.91 (1H, m), 5.09 (1H, m), 6.25 (1H, m), 6.51 (1H, m), 6.73 (1H, m), 7.21 (1H, m). white crystal m.p. 176.0°C
1064	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (6H, d, J=6.8 Hz), 0.91 (6H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.87-1.89 (2H, m), 2.11-2.12 (1H, m), 2.58 (3H, s), 3.44 (1H, m), 3.51 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.88-3.92 (2H, m), 5.16 (1H, m), 6.24 (1H, m), 6.50 (1H, m), 6.68 (1H, m), 7.21-7.22 (1H, m). white crystal m.p. 125.3°C
1065	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.3 Hz), 1.42 (9H, s), 1.84-1.89 (1H, m), 2.08-2.41 (1H, m), 2.57 (3H, s), 3.30 (1H, m), 3.61-3.65 (1H, m), 3.82-3.85 (1H, m), 3.91 (1H, m), 5.00 (1H, m), 6.27 (1H, m), 6.54 (1H, m), 6.80 (1H, m), 7.20 (1H, m). white crystal m.p. 106.2°C

1066	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=5.8 Hz), 0.88 (3H, d, J=5.8 Hz), 0.97 (6H, m), 1.24 (3H, t, J=6.3 Hz), 1.95 (1H, m), 1.98 (3H, s), 2.07 (1H, m), 2.22 (3H, s), 3.41 (1H, m), 3.92 (2H, m), 4.10-4.12 (2H, m), 5.02 (1H, m), 6.35 (1H, m), 6.61 (1H, m), 6.87-6.90 (1H, m). white crystal m.p. 130.5°C
1067	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=5.8 Hz), 0.97 (3H, d, J=6.3 Hz), 1.21 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=5.8 Hz), 1.85-1.91 (1H, m), 1.95 (3H, s), 2.05-2.12 (1H, m), 2.21 (3H, s), 3.40-3.44 (1H, m), 3.60-3.67 (1H, m), 3.89-3.94 (2H, m), 4.85-4.91 (1H, m), 5.17 (1H, d, J=8.3 Hz), 6.40 (1H, m), 6.67 (1H, m), 6.88 (1H, s). white crystal m.p. 134.7°C
1068	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.91 (6H, d, J=6.8 Hz), 0.95 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 1.85-1.91 (2H, m), 1.95 (3H, s), 2.03-2.07 (1H, m), 2.22 (3H, s), 3.39-3.42 (1H, m), 3.61-3.66 (1H, m), 3.83 (2H, d, J=6.3 Hz), 3.90-3.93 (2H, m), 5.25 (1H, d, J=6.3 Hz), 6.39 (1H, m), 6.64 (1H, m), 6.87 (1H, m). white crystal m.p. 144.7°C

Properties of Compound (82) in Table 2

Compound No.	Properties
1069	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 1.43 (9H, s), 1.83-1.91 (1H, m), 1.94 (3H, s), 2.03-2.10 (1H, m), 2.21 (3H, s), 3.45-3.53 (1H, m), 3.61-3.67 (1H, m), 3.82-3.85 (1H, m), 3.94-3.97 (1H, m), 5.10 (1H, d, J=7.3 Hz), 6.42 (1H, m), 6.71-6.74 (1H, m), 6.88 (1H, m). white crystal m.p. 114.1°C
1070	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.83-1.88 (1H, m), 2.03-2.10 (1H, m), 3.44-3.47 (1H, m), 3.55-3.63 (1H, m), 3.91-4.01 (2H, m), 4.11 (2H, q, J=6.8 Hz), 5.22 (1H, m), 6.34 (1H, m), 6.41-6.44 (1H, m), 6.78 (1H, m), 7.03-7.04 (1H, m). white crystal m.p. 174.0°C
1071	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.89 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=5.8 Hz), 1.23 (3H, d, J=5.8 Hz), 1.81-1.90 (1H, m), 2.03-2.12 (1H, m), 3.45-3.52 (1H, m), 3.54-3.56 (1H, m), 3.86-3.89 (1H, m), 3.93-4.00 (1H, m), 4.86-4.92 (1H, m), 5.08 (1H, d, J=5.3 Hz), 6.18 (1H, d, J=8.8 Hz), 6.41-6.44 (1H, m), 6.75 (1H, m), 7.03-7.04 (1H, m). white crystal m.p. 178.0°C
1072	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.91 (6H, d, J=6.8 Hz), 0.95 (3H, d, J=7.3 Hz), 0.97 (3H, d, J=7.3 Hz), 1.81-1.94 (2H, m), 2.02-2.08 (1H, m), 3.48 (1H, m), 3.57-3.64 (1H, m), 3.84 (2H, d, J=6.3 Hz), 3.91-3.99 (2H, m), 5.30 (1H, d, J=8.8 Hz), 6.41-6.44 (2H, m), 6.81-6.84 (1H, m), 7.03-7.04 (1H, m). white crystal m.p. 154.9°C
1073	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.83-1.92 (1H, m), 2.03-2.10 (1H, m), 3.51 (2H, m), 3.60-3.69 (1H, m), 3.79-

	3.82 (1H, m), 3.93–3.98 (1H, m), 4.99 (1H, m), 6.19 (1H, m), 6.40–6.44 (1H, m), 6.80 (1H, m), 7.00–7.05 (1H, m). white crystal m.p. 117.5°C
1074	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.88 (1H, q, J=6.8 Hz), 2.03–2.11 (1H, m), 3.47–3.50 (1H, m), 3.61–3.66 (1H, m), 3.67 (3H, s), 3.93–4.00 (1H, m), 4.01–4.06 (1H, m), 5.20 (1H, br), 6.23 (1H, d, J=8.7 Hz), 6.72 (1H, d, J=5.4 Hz), 7.05 (1H, br), 7.14 (1H, d, J=5.4 Hz), 7.32–7.36 (1H, m), 7.41–7.44 (2H, m), 7.73–7.77 (2H, m). white crystal: m.p. 182.2°C
1075	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21–1.27 (3H, m), 1.88–1.92 (1H, m), 2.05–2.11 (1H, m), 3.48–3.52 (1H, m), 3.60–3.63 (1H, m), 3.90–3.94 (1H, m), 4.00–4.03 (1H, m), 4.08–4.14 (2H, m), 5.14 (1H, br), 6.22 (1H, q, J=8.8 Hz), 6.72 (1H, q, J=3.4 Hz), 7.09 (1H, br), 7.16 (1H, q, J=3.4 Hz), 7.32–7.36 (1H, m), 7.41–7.44 (2H, m), 7.73–7.77 (2H, m). white crystal: m.p. 175.6°C

Properties of Compound (83) in Table 2

Compound No.	Properties
1076	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.20-1.25 (6H, m), 1.89 (1H, q, J=6.8 Hz), 2.08 (1H, q, J=6.8 Hz), 3.48-3.60 (2H, m), 3.89-3.93 (1H, m), 3.99-4.06 (1H, m), 4.89 (1H, q, J=6.8 Hz), 5.08 (1H, br), 6.20-6.22 (1H, m), 6.71 (1H, d, J=3.4 Hz), 7.09 (1H, br), 7.16 (1H, d, J=3.4 Hz), 7.32-7.36 (1H, m), 7.41-7.44 (2H, m), 7.73-7.77 (2H, m). white crystal: m.p. 220.8°C
1078	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.44 (9H, s), 1.86-1.92 (1H, m), 2.06-2.12 (1H, m), 3.45-3.61 (2H, m), 3.84 (1H, q, J=6.8 Hz), 4.00-4.05 (1H, m), 4.98 (1H, br), 6.15-6.17 (1H, m), 6.72 (1H, d, J=8.8 Hz), 7.15 (1H, d, J=3.4 Hz), 7.32-7.36 (1H, m), 7.41-7.44 (2H, m), 7.73-7.78 (2H, m). white crystal: m.p. 198.3°C
1079	^{1}H-NMR δ ($CDCl_3$, ppm): 0.77 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=7.8 Hz), 0.97 (3H, d, J=7.3 Hz), 1.23 (3H, t, J=6.8 Hz), 1.86-1.89 (1H, m), 2.04-2.06 (1H, m), 3.36-3.42 (1H, m), 3.55-3.63 (1H, m), 3.89-4.00 (2H, m), 4.03 (3H, s), 4.10 (2H, q, J=6.8 Hz), 5.21 (1H, m), 6.20 (1H, m), 6.94 (1H, m), 6.98 (1H, m), 7.62 (1H, m). white crystal m.p. 147.4°C
1080	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=7.3 Hz), 0.97 (3H, d, J=6.8 Hz), 1.21 (6H, d, J=5.8 Hz), 1.85-1.87 (1H, m), 2.04 (1H, m), 3.37-3.43 (1H, m), 3.54-3.62 (1H, m), 3.88 (1H, dd, J=6.3,8.7 Hz), 3.95-3.97 (1H, m), 4.03 (3H, s), 4.84-4.91 (1H, m), 5.11 (1H, m), 6.19 (1H, m), 6.94 (1H, m), 6.98 (1H, m), 7.62 (1H, m). white crystal m.p. 156.0°C

1081	^{1}H-NMR δ ($CDCl_3$, ppm): 0.78 (3H, d, J=6.8 Hz), 0.86 (3H, d, J=6.8 Hz), 0.90 (6H, d, J=6.8 Hz), 0.95 (3H, d, J=7.3 Hz), 0.97 (3H, d, J=7.3 Hz), 1.85-1.92 (2H, m), 2.03-2.05 (1H, m), 3.37-3.43 (1H, m), 3.55-3.63 (1H, m), 3.83 (1H, d, J=6.8 Hz), 3.88-3.92 (1H, dd, J=6.3,8.7 Hz), 3.96-3.99 (1H, m), 4.03 (3H, s), 5.26 (1H, d, J=7.8 Hz), 6.18 (1H, d, J=7.8 Hz), 6.94 (1H, m), 6.98 (1H, m), 7.62-7.65 (1H, m). white crystal m.p. 152.3°C
1082	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.85-1.89 (1H, m), 2.02-2.04 (1H, m), 3.39-3.45 (1H, m), 3.51-3.59 (1H, m), 3.79-3.83 (1H, m), 3.93-4.00 (1H, m), 4.03 (3H, s), 5.04 (1H, m), 6.17 (1H, d, J=9.3 Hz), 6.93 (1H, m), 6.97-6.98 (1H, m), 7.62 (1H, m). white crystal m.p. 146.7°C
1083	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=7.3 Hz), 1.82-1.91 (1H, m), 2.09-2.17 (1H, m), 2.46 (3H, s), 3.35-3.48 (1H, m), 3.51-3.65 (1H, m), 3.82 (3H, s), 3.90 (2H, q, J=5.8 Hz), 4.08 (2H, q, J=7.3 Hz), 5.08 (1H, br), 6.15-6.17 (1H, m), 6.46 (1H, br), 7.70 (1H, s). white crystal m.p. 184.8°C

Properties of Compound (84) in Table 2

Compound No.	Properties
1084	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.23 (3H, d, J=6.8 Hz), 1.82-1.91 (1H, m), 2.10-2.18 (1H, m), 2.47 (3H, s), 3.29-3.35 (1H, m), 3.60-3.64 (1H, m), 3.82 (3H, s), 3.83-3.90 (2H, m), 4.83-4.89 (1H, m), 5.01 (1H, br), 6.13 (1H, br), 6.50 (1H, br), 7.71 (1H, s). white crystal m.p. 194.2°C
1085	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.95 (6H, d, J=6.8 Hz), 0.989 (6H, d, J=6.8 Hz), 1.82-1.93 (2H, m), 2.09-2.15 (1H, m), 2.46 (3H, s), 3.35-3.42 (1H, m), 3.55-3.64 (1H, m), 3.82 (3H, s), 3.83-3.84 (2H, m), 3.88-3.91 (2H, m), 5.10-5.11 (1H, m), 6.16-6.18 (1H, m), 6.47 (1H, br), 7.70 (1H, s). white crystal m.p. 231.5°C
1086	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.82-1.87 (1H, m), 2.12-2.17 (1H, m), 2.47 (3H, s), 3.29-3.35 (1H, m), 3.70-3.80 (1H, m), 3.82 (3H, s), 3.83-3.85 (2H, m), 4.96 (1H, br), 6.12 (1H, br), 6.59 (1H, br), 7.75 (1H, s). white crystal m.p. 125.3°C
1087	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.80-1.89 (1H, m), 2.04-2.18 (1H, m), 3.44 (1H, m), 3.56-3.59 (1H, m), 3.89-3.93 (2H, m), 3.95 (3H, s), 4.09 (2H, q, J=6.8 Hz), 5.12 (1H, d, J=7.8 Hz), 6.30 (1H, d, J=8.3 Hz), 6.63 (1H, m), 7.93 (1H, s). white crystal m.p. 177.6°C
1088	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=5.8 Hz), 1.23 (3H, d, J=6.3 Hz), 1.80-1.88 (1H, m), 2.12-2.20 (1H, m), 3.32 (1H, m), 3.64-6.68 (1H, m), 3.89 (2H, dd, J=5.8,7.3 Hz), 3.95 (3H, s), 4.82-4.88 (1H, m), 4.99 (1H, d,

	J=6.3 Hz), 6.18 (1H, m), 6.66 (1H, m), 7.93 (1H, s). white crystal m.p. 205.1°C
1089	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.97 (6H, d, J=6.8 Hz), 1.81-1.93 (2H, m), 2.13-2.18 (1H, m), 3.38 (1H, m), 3.60-3.63 (1H, m), 3.82 (2H, d, J=5.8 Hz), 3.88-3.93 (2H, m), 3.95 (3H, s), 5.09 (1H, d, J=6.3 Hz), 6.21 (1H, m), 6.62 (1H, m), 7.92 (1H, s). white crystal m.p. 182.2°C
1090	^{1}H-NMR δ ($CDCl_3$, ppm): 0.91 (3H, d, J=6.3 Hz), 0.95 (3H, d, J=3.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.42 (9H, s), 1.81-1.90 (1H, m), 2.04-2.21 (1H, m), 3.21 (1H, m), 3.74-3.77 (1H, m), 3.83-3.88 (1H, m), 3.91 (1H, m), 3.94 (3H, s), 4.96 (1H, m), 6.23 (1H, m), 6.79 (1H, m), 7.97 (1H, s). white crystal m.p. 159.6°C

Properties of Compound (85) in Table 2

Compound No.	Properties
1091	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=7.3 Hz), 1.00 (3H, d, J=7.3 Hz), 1.08 (3H, d, J=6.3 Hz), 1.23-1.26 (3H, m), 1.47-1.50 (1H, m), 1.53-1.65 (2H, m), 1.84-1.92 (1H, m), 2.11-2.18 (1H, m), 2.58 (2H, q, J=6.8 Hz), 3.40-3.48 (1H, m), 3.55-3.58 (1H, m), 3.86-3.95 (2H, m), 4.09-4.14 (2H, m), 4.10 (3H, s), 5.07 (1H, br), 6.10-6.12 (1H, m), 6.37 (1H, s), 6.95-6.99 (1H, m). white crystal: m.p. 158.4°C
1092	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.98 (6H, d, J=7.8 Hz), 1.00 (6H, d, J=7.3 Hz), 1.21 (3H, d, J=6.3 Hz), 1.24 (3H, d, J=6.3 Hz), 1.59 (1H, q, J=6.8 Hz), 2.14-2.18 (1H, 2.58 (2H, q, J=6.8 Hz), 3.30-3.39 (1H, m), 3.51-3.58 (1H, m), 3.85-3.92 (2H, m), 4.10 (3H, s), 5.01 (1H, br), 6.10 (1H, br), 6.39 (1H, s), 7.00 (1H, br). white crystal: m.p. 178.4°C
1093	^{1}H-NMR δ ($CDCl_3$, ppm): 0.89 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.3 Hz), 0.92 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.51 (2H, q, J=6.3 Hz), 1.58-1.60 (1H, m), 1.87-1.90 (2H, m), 2.14-2.18 (1H, m), 3.30-3.39 (1H, m), 3.51-3.58 (1H, m), 3.84-3.91 (4H, m), 4.10 (3H, s), 5.17 (1H, br), 6.18 (1H, br), 6.37 (1H, s), 7.01 (1H, br). white solid
1094	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.3 Hz), 0.92 (3H, d, J=7.3 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.3 Hz), 1.44 (9H, s), 1.46-1.53 (2H, m), 1.56-1.63 (1H, m), 1.85 (1H, q, J=6.8 Hz), 2.16 (1H, q, J=6.8 Hz), 2.58 (2H, q, J=6.8 Hz), 3.20 (1H, br), 3.68 (1H, br), 3.81 (1H, t, J=6.8 Hz), 3.89-3.96 (1H, m), 4.10 (3H, s), 4.92 (1H, br), 6.08 (1H, br), 6.43 (1H, s), 7.06 (1H, br). white crystal: m.p. 131.5°C

1095	^{1}H-NMR δ ($CDCl_3$, ppm): 0.90 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.25 (3H, t, J=6.8 Hz), 1.85-1.97 (1H, m), 2.12-2.21 (1H, m), 2.51 (3H. s), 3.27-3.40 (1H, m), 3.61-3.69 (1H, m), 3.84-3.96 (2H, m), 4.10-4.15 (2H, m), 5.08 (1H, br), 6.17 (1H, d, J=8.3 Hz), 7.27-7.32 (1H, m). white crystal m.p. 168.9°C
1096	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.93 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.22 (3H, d, J=6.8 Hz), 1.85-1.97 (1H, m), 2.10-2.21 (1H, m), 2.51 (3H. s), 3.27-3.40 (1H, m), 3.61-3.69 (1H, m), 3.85-4.01 (2H, m), 4.85-4.90 (1H, m), 6.17 (1H, br), 7.28 (1H, s). white crystal m.p. 172.1°C
1097	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=6.8 Hz), 1.86-1.95 (2H, m), 2.13-2.18 (1H, m), 2.51 (3H, s), 3.31-3.45 (1H, m), 3.63-3.70 (1H, m), 3.84-3.94 (3H, m), 5.11 (1H, d, J=7.8 Hz), 6.21 (1H, d, J=8.8 Hz), 7.32 (1H, s). white crystal m.p. 168.5°C

Properties of Compound (86) in Table 2

Compound No.	Properties
1098	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.43 (9H, s), 1.85-1.95 (1H, m), 2.15-2.20 (1H, m), 2.50 (3H, s), 3.15-3.20 (1H, m), 3.80-3.84 (2H, m), 3.92-3.97 (1H, m), 4.92 (1H, br), 6.12-6.14 (1H, m), 7.37 (1H, s). white crystal m.p. 128.5°C
1099	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.23 (3H, t, J=6.8 Hz), 1.83-1.91 (1H, m), 2.10-2.15 (1H, m), 2.66 (3H, s), 2.69 (3H, s), 3.41-3.47 (1H, m), 3.53-3.66 (1H, m), 3.89-3.96 (2H, m), 4.10 (2H, q, J=6.8 Hz), 5.13 (1H, d, J=7.8 Hz), 6.27 (1H, d, J=8.3 Hz), 6.73 (1H, m). white crystal m.p. 186.1°C
1100	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.3 Hz), 1.23 (3H, d, J=6.8 Hz), 1.83-1.91 (1H, m), 2.03-2.18 (1H, m), 2.68 (3H, s), 2.71 (3H, s), 3.37-3.40 (1H, m), 3.57-3.61 (1H, m), 3.86-3.96 (2H, m), 4.75-4.97 (1H, m), 5.02 (1H, d, J=7.8 Hz), 6.20 (1H, d, J=8.3 Hz), 6.81 (1H, d, J=8.3 Hz). white crystal m.p. 187.6°C
1101	^{1}H-NMR δ ($CDCl_3$, ppm): 0.86 (6H, d, J=6.8 Hz), 0.89 (3H, d, J=6.3 Hz), 0.90 (3H, d, J=6.3 Hz), 0.97 (3H, d, J=6.3 Hz), 0.99 (3H, d, J=6.3 Hz), 1.87-1.90 (2H, m), 2.12-2.14 (1H, m), 2.67 (3H, s), 2.69 (3H, s), 3.38-3.45 (1H, m), 3.54-3.57 (1H, m), 3.83 (2H, d, J=6.8 Hz), 3.88-3.96 (2H, m), 5.13 (1H, d, J=7.3 Hz), 6.23 (1H, d, J=7.3 Hz), 6.75 (1H, m). white crystal m.p. 179.8°C
1103	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.3 Hz), 1.25 (3H, t, J=7.3 Hz), 1.86-1.96 (1H, m), 2.10-2.12 (1H, m), 3.41-3.43 (1H, m), 3.55-3.58 (1H, m), 3.86-3.99 (1H, m), 4.07 (1H, m), 4.12 (2H, q,

	J=6.8 Hz), 5.15 (1H, m), 6.20 (1H, m), 6.87-6.90 (1H, m), 7.30 (1H, m), 8.31-8.33 (1H, m). white crystal m.p. 172.5°C
1104	^{1}H-NMR δ ($CDCl_3$, ppm): 0.79 (3H, d, J=6.8 Hz), 0.85 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.3 Hz), 1.21 (6H, d, J=6.3 Hz), 1.86-1.95 (1H, m), 2.10 (1H, m), 3.38-3.46 (1H, m), 3.52-3.61 (1H, m), 3.87 (1H, dd, J=6.3,8.7 Hz), 4.04-4.06 (1H, m), 4.85-4.92 (1H, m), 5.07 (1H, m), 6.15-6.18 (1H, m), 6.85-6.90 (1H, m), 7.27 (1H, m), 8.31-8.33 (1H, m). white solid
1105	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.3 Hz), 0.86 (3H, d, J=6.8 Hz), 0.91 (6H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.8 Hz), 1.85-2.03 (2H, m), 2.10 (1H, m), 3.38-3.46 (1H, m), 3.56-3.58 (1H, m), 3.81-3.99 (3H, m), 4.04 (1H, m), 5.08 (1H, m), 6.22-6.26 (1H, m), 6.89-6.99 (1H, m), 7.29 (1H, m), 8.31-8.33 (1H, m). white crystal m.p. 193.2°C

Properties of Compound (87) in Table 2

Compound No.	Properties
1106	^{1}H-NMR δ ($CDCl_3$, ppm): 0.80 (3H, d, J=6.8 Hz), 0.87 (3H, d, J=7.3 Hz), 1.00 (6H, d, J=7.3 Hz), 1.42 (9H, s), 1.86-1.95 (1H, m), 2.04 (1H, m), 3.38-3.46 (1H, m), 3.60 (1H, m), 3.80-3.86 (1H, m), 4.10 (1H, m), 5.00 (1H, m), 6.25 (1H, m), 6.89-6.90 (1H, m), 7.40 (1H, m), 8.30-8.33 (1H, m). white solid
1107	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.83 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=7.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.83-1.93 (1H, m), 2.03-2.08 (1H, m), 2.46 (3H, s), 3.44-3.49 (1H, m), 3.57-3.64 (1H, m), 3.87-3.92 (1H, m), 3.95-3.97 (1H, m), 4.09-4.15 (2H, m), 5.15 (1H, m), 6.17 (1H, d, J=7.8 Hz), 6.39-6.41 (1H, m), 7.22 (1H, m). white crystal m.p. 182.4°C
1108	^{1}H-NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=7.3 Hz), 0.88 (3H, d, J=6.8 Hz), 1.00 (3H, d, J=6.3 Hz), 1.01 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=5.8 Hz), 1.23 (3H, d, J=6.3 Hz), 1.83-1.93 (1H, m), 2.04-2.09 (1H, m), 2.48 (3H, s), 3.46-3.49 (1H, m), 3.55-3.63 (1H, m), 3.86-3.92 (1H, m), 3.96-4.06 (1H, m), 4.84-4.93 (1H, m), 5.13 (1H, d, J=8.3 Hz), 6.23 (1H, d, J=7.8 Hz), 6.39-6.41 (1H, m), 7.23 (1H, m). white crystal m.p. 207.5°C
1109	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.95 (3H, d, J=7.3 Hz), 0.99 (3H, d, J=7.3 Hz), 1.01 (6H, d, J=6.8 Hz), 1.83-1.93 (2H, m), 2.07 (1H, m), 2.46 (3H, s), 3.45-3.50 (1H, m), 3.56-3.67 (1H, m), 3.80-3.86 (2H, m), 3.88-3.95 (1H, m), 3.97-4.04 (1H, m), 5.25 (1H, d, J=7.8 Hz), 6.24-6.26 (1H, m), 6.40-6.41 (1H, m), 7.26 (1H, m). white crystal m.p. 211.4°C
1111	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.24 (3H, t, J=6.8 Hz), 1.30 (3H, t, J=6.8 Hz), 1.86-1.90 (1H, m), 2.05-2.17 (1H, m), 2.70 (3H, s), 3.03-3.09 (2H, m), 3.35-3.50 (1H, m), 3.53-

	3.56 (1H, m), 3.89–3.92 (2H, m), 4.08–4.13 (2H, m), 5.11–5.12 (1H, m), 6.20–6.22 (1H, m), 6.68 (1H, br). white crystal: m.p. 183.8°C
1112	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.21 (3H, d, J=6.8 Hz), 1.23 (3H, d, J=6.8 Hz), 1.31 (3H, t, J=6.8 Hz), 1.85–1.90 (1H, m), 2.12–2.17 (1H, m), 2.72 (3H, s), 3.07–3.10 (2H, m), 3.35–3.50 (1H, m), 3.53–3.56 (1H, m), 3.86–3.94 (2H, m), 4.85–4.90 (1H, m), 5.00 (1H, br), 6.13–6.15 (1H, m), 6.73 (1H, br). white crystal: m.p. 163.3°C
1113	^{1}H-NMR δ ($CDCl_3$, ppm): 0.87 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 0.99 (6H, d, J=6.8 Hz), 1.30 (3H, t, J=6.8 Hz), 1.84–1.93 (2H, m), 2.12–2.17 (1H, m), 2.70 (3H, s), 3.01–3.09 (2H, m), 3.39–3.46 (1H, m), 3.53–3.56 (1H, m), 3.83–3.96 (4H, m), 5.10 (1H, br), 6.14–6.16 (1H, m), 6.66 (1H, br). white crystal: m.p. 183.6°C

Properties of Compound (88) in Table 2

Compound No.	Properties
1114	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.96 (3H, d, J=6.8 Hz), 0.99 (3H, d, J=6.8 Hz), 1.30 (3H, t, J=6.8 Hz), 1.43 (9H, s), 1.84-1.90 (1H, m), 2.12-2.17 (1H, m), 2.70 (3H, s), 3.07 (2H, q, J=6.8 Hz), 3.28-3.33 (1H, m), 3.62-3.66 (1H, m), 3.80-3.83 (1H, m), 3.89-3.97 (1H, m), 4.92 (1H, br), 6.12-6.14 (1H, m), 6.76 (1H, br). white crystal: m.p. 197.8°C
1115	^{1}H-NMR δ ($CDCl_3$, ppm): 0.82 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.22-1.29 (3H, m), 1.38 (9H, s), 1.85-1.91 (1H, m), 2.05-2.13 (1H, m), 3.49-3.52 (2H, m), 3.89-3.94 (2H, m), 4.09-4.14 (2H, m), 5.12 (1H, br), 6.23 (1H, br), 6.74 (1H, br), 6.77-6.78 (1H, m), 7.32-7.33 (1H, m). pale peach crystal: m.p. 131.3°C
1116	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.19-1.34 (6H, m), 1.38 (9H, s), 1.79-1.92 (1H, m), 2.05-2.15 (1H, m), 3.45-3.58 (2H, m), 3.89-3.96 (2H, m), 4.87 (1H, q, J=6.8 Hz), 5.08-5.10 (1H, m), 6.27 (1H, br), 6.77-6.78 (1H, m), 6.83 (1H, br), 7.32-7.34 (1H, m). pale yellow crystal: m.p. 148.0°C
1120	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.13 (3H, d, J=6.8 Hz), 1.20 (3H, d, J=6.8 Hz), 1.41 (9H,s), 1.84-1.92 (1H, m), 2.08-2.13 (1H, m), 3.48-3.67 (2H, m), 3.86-3.96 (2H, m), 4.84-4.89 (1H, m), 5.02 (1H, m), 6.15-6.17 (1H, m), 6.72 (1H, m), 7.59 (1/2H, s), 8.22 (1/2H, s). white crystal
1123	^{1}H-NMR δ ($CDCl_3$, ppm): 0.83 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.23 (3H, t, J=6.8 Hz), 1.85-1.90 (2H,

	m), 2.09-2.17 (1H, m), 3.47-3.48 (2H, m), 3.89-3.91 (2H, m), 3.92 (3H, s), 4.10 (2H, q, J=6.8 Hz), 5.17 (1H, m), 6.04-6.06 (1H, m), 6.28 (1H, m), 6.58-6.59 (1H, m), 6.59 (1H, m), 6.69 (1H, m). white crystal m.p. 164.9°C
1124	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 1.20 (6H, d, J=6.3 Hz), 1.84-1.90 (1H, m), 2.09-2.14 (1H, m), 3.41-3.49 (2H, m), 3.86-3.91 (2H, m), 3.92 (3H, s), 4.85-4.93 (1H, m), 5.06 (1H, m), 6.04-6.06 (1H, m), 6.22 (1H, m), 6.59-6.60 (1H, m), 6.68 (1H, m). white crystal m.p. 188.3°C
1125	^{1}H-NMR δ ($CDCl_3$, ppm): 0.84 (6H, d, J=6.8 Hz), 0.90 (6H, d, J=6.3 Hz), 0.96 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.3 Hz), 1.85-1.90 (2H, m), 2.09-2.12 (1H, m), 3.48 (2H, m), 3.84 (2H, d, J=6.8 Hz), 3.89-3.90 (2H, m), 3.92 (3H, s), 5.17 (1H, m), 6.03-6.06 (1H, m), 6.25 (1H, m), 6.58-6.59 (1H, m), 6.59 (1H, m), 6.69-6.70 (1H, m). white crystal m.p. 179.7°C

Properties of Compound (89) in Table 2

Compound No.	Properties
1126	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.90 (3H, d, J=6.8 Hz), 0.97 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.3 Hz), 1.43 (9H, s), 1.84-1.89 (1H, m), 2.10-2.17 (1H, m), 3.35-3.38 (1H, m), 3.55-3.58 (1H, m), 3.81-3.90 (2H, m), 3.92 (3H, s), 4.98 (1H, m), 6.04-6.06 (1H, m), 6.21 (1H, m), 6.61-6.62 (1H, m), 6.68-6.69 (1H, m), 6.69 (1H, m). white crystal m.p. 168.9°C
1128	ESI-MS M^+: 527 white solid
1132	^{1}H-NMR δ ($CDCl_3$, ppm): 0.85 (3H, d, J=6.8 Hz), 0.91 (3H, d, J=6.8 Hz), 0.94 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=7.3 Hz), 1.20 (3H, d, J=5.8 Hz), 1.22 (3H, d, J=5.8 Hz), 1.96 (1H, q, J=6.8 Hz), 2.03-2.05 (1H, m), 2.93 (1H, s), 2.17-2.35 (1H, m), 3.63-3.68 (1H, m), 3.80-3.86 (1H, m), 3.98-4.02 (1H, m), 4.81 (1H, br), 4.97-4.99 (1H, m), 6.46 (1/2H, m), 6.95 (1/2H, m). white crystal
1136	^{1}H-NMR δ ($CDCl_3$, ppm): 0.88 (3H, d, J=6.8 Hz), 0.92 (3H, d, J=6.8 Hz), 0.98 (3H, d, J=6.8 Hz), 1.01 (3H, d, J=7.3 Hz), 1.93-1.96 (1H, m), 2.05-2.18 (1H, m), 3.38-3.43 (1H, m), 3.54-3.56 (1H, m), 3.90-3.96 (1H, m), 4.02-4.08 (1H, m), 4.87 (1H, br), 5.00-5.10 (1H, m), 6.45-6.48 (1/2H, m), 6.57 (1/2H, br), 7.42-7.45 (2H, m), 7.47-7.52 (3H, m), 7.96-7.97 (1H, m). white crystal
1148	^{1}H NMR δ ($CDCl_3$, ppm): 0.81 (3H, d, J=6.3 Hz), 0.84 (3H, d, J=6.3 Hz), 0.92 (3H, d, J=6.3 Hz), 0.98 (3H, d, J=6.8 Hz), 1.20-1.27 (6H, m), 1.81-1.98 (1H, m), 2.01-2.08 (1H, m), 3.75-3.98 (3H, m), 4.73-4.93 (2H, m), 6.18 (1H, br), 6.95 (1H, br), 7.06-7.08 (1H, m), 7.24-7.39 (2H, m), 7.41-7.45 (1H, m), 8.20 (1H, br). white solid
1152	^{1}H NMR δ ($CDCl_3$, ppm): 0.80-0.96 (6H, m), 1.18-1.37 (9H, m), 2.05-2.12 (1H, m), 3.47-3.54 (2H, m), 3.93-3.97 (1H, m), 4.28-4.37 (1H, m), 4.86-4.90 (1H, m), 5.11 (1H, br), 6.60 (1H, br), 7.48-7.58 (3H, m), 7.97

	(1H, d, J=7.8 Hz), 8.07 (1H, d, J=7.8 Hz). white crystal m.p. 198.4°C
1156	^{1}H NMR δ ($CDCl_3$, ppm): 0.80–0.90 (6H, m), 1.19–1.36 (9H, m), 2.09–2.16 (1H, m), 3.49–3.54 (2H, m), 3.92–3.96 (1H, m), 4.28–4.34 (1H, m), 4.86–4.90 (1H, m), 5.09 (1H, d), 6.60 (1H, d), 7.27–7.32 (1H, m), 7.56 (1H, d, J=7.8 Hz), 7.64 (1H, dd, J=2.4, 7.8 Hz), 8.02 (1H, dd, J=4.9, 7.8 Hz). white crystal m.p. 178.4°C

Preparation Examples and Test Examples

Hereinafter, Preparation Examples and Fungicidal acitivity Test Examples of fungicides according to the invention are illustrated. In the following examples, "parts" refer to "parts by weight" or "% by weight".

Preparation Example 1 (Powder)

2 parts of Compound No. 38 and 98 parts of clay were uniformly mixed and ground to obtain powder containing 2% of the active ingredients.

Preparation Example 2 (Wettable powder)

10 parts of Compound No. 54, 70 parts of kaolin, 18 parts of white carbon and 2 parts of calcium alkylbenzene sulfonate were uniformly mixed and ground to obtain wettable powder in the form of uniform, fine powder containing 10% of the active ingredients.

Preparation Example 3 (Wettable powder)

20 parts of Compound No. 152, 3 parts of calcium alkylbenzene sulfonate, 5 parts of polyoxyethylenenonylphenyl ether and 72 parts of white clay were uniformly mixed and ground to obtain wettable powder in the form of uniform, fine powder containing 20% of the

active ingredients.

Preparation Example 4 (Wettable powder)

50 parts of Compound No. 159, 1 parts of sodium lignin sulfonate, 5 parts of white carbon and 44 parts of diatomaceous earth were mixed and ground to obtain wettable powder containing 50% of the active ingredients.

Preparation Example 5 (Flowable agent)

5 parts of Compound No. 163, 7 parts of propylene glycol, 4 parts of sodium lignin sulfonate, 2 parts of dioctylsulfosuccinate sodium salt, and 82 parts of water were wet ground with sand grinder to obtain flowable agent containing 5% of the active ingredients.

Preparation Example 6 (Flowable agent)

10 parts of Compound No. 167, 7 parts of propylene glycol, 2 parts of sodium lignin sulfonate, 2 parts of dioctylsulfosuccinate sodium salt, and 79 parts of water were wet ground with sand grinder to obtain flowable agent containing 10% of the active ingredients.

Preparation Example 7 (Flowable agent)

25 parts of Compound No. 307, 5 parts of propylene glycol, 5 parts of polyoxyethylene oleic acid ester, 5 parts

of polyoxyethylene diallyl ether sulfate, 0.2 parts of antifoaming agent based silicone, and 59.8 parts of water were wet ground with sand grinder to obtain flowable agent containing 25% of the active ingredients.

Preparation Example 8 (Powder)

2 parts of Compound No. 684 and 98 parts of clay were uniformly mixed and ground to obtain powder containing 2% of the active ingredients.

Preparation Example 9 (Wettable powder)

10 parts of Compound No. 733, 70 parts of kaolin, 18 parts of white carbon and 2 parts of calcium alkylbenzene sulfonate were uniformly mixed and ground to obtain wettable powder in the form of uniform, fine powder containing 10% of the active ingredients.

Preparation Example 10 (Wettable powder)

20 parts of Compound No. 696, 3 parts of calcium alkylbenzene sulfonate, 5 parts of polyoxyethylenenonylphenyl ether and 72 parts of white clay were uniformly mixed and ground to obtain wettable powder in the form of uniform, fine powder containing 20% of the active ingredients.

Preparation Example 11 (Wettable powder)

50 parts of Compound No. 718, 1 parts of sodium lignin sulfonate, 5 parts of white carbon and 44 parts of diatomaceous earth were mixed and ground to obtain wettable powder containing 50% of the active ingredients.

Preparation Example 12 (Flowable agent)

5 parts of Compound No. 689, 7 parts of propylene glycol, 4 parts of sodium lignin sulfonate, 2 parts of dioctylsulfosuccinate sodium salt, and 82 parts of water were wet ground with sand grinder to obtain flowable agent containing 5% of the active ingredients.

Preparation Example 13 (Flowable agent)

10 parts of Compound No. 874, 7 parts of propylene glycol, 2 parts of sodium lignin sulfonate, 2 parts of dioctylsulfosuccinate sodium salt, and 79 parts of water were wet ground with sand grinder to obtain flowable agent containing 10% of the active ingredients.

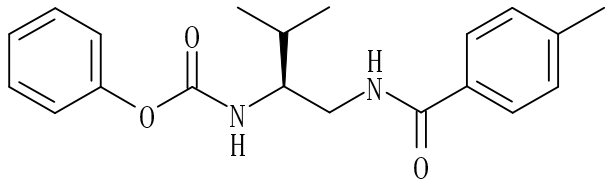
Preparation Example 14 (Flowable agent)

25 parts of Compound No. 848, 5 parts of propylene glycol, 5 parts of polyoxyethylene oleic acid ester, 5 parts of polyoxyethylene diallyl ether sulfate, 0.2 parts of antifoaming agent based silicone, and 59.8 parts of water

were wet ground with sand grinder to obtain flowable agent containing 25% of the active ingredients.

The effect obtained from the fungicides of the invention is specifically illustrated with reference to Test Examples as follows. The agent used for comparision is the compound recited as agricultural and horticultural fungicides in the publication of WO03008372, and it was subjected to experiment as prepared in the same manner as the experimental compounds.

Comparative Compound



Test Example 1: Controlling effect against tomato late blight

A solution of the compound in acetone was diluted with water to 250 ppm, and the solution was sprayed to the tomato seedling (breed: Sekaiichi, one per plastic pot having a diameter of 7.5 cm) at 4-leaf stage in an amount of 10 mL of the compound/pot. After air-drying, the pot was transferred to a moist chamber at 18°C (12-hour light-dark light cycle), and inoculated by spray with a zoosporic suspension of Phytophthora infestans. On the 4^{th} day after inoculation the infected area rate for 4 leaves of leaflet was examined. Evaluation was carried out by the following criteria.

The infected area rate for the untreated groups in the examination was not less than 60%.

A: Infected area rate of less than 5%
B: Infected area rate of 5% to less than 50%
C: Infected area rate of not less than 50%

Table 3

Controlling effect against tomato late blight (1)

Compound No.	Effect
Comparative Compound	C

1	B
4	B
6	B
18	B
26	A
38	A
39	B
40	A
42	A
47	B
50	A
51	A
52	A
54	A
55	A
56	A
58	B
59	B
60	B
69	A
75	A
76	A
99	B
100	A

101	B
123	A
124	A
125	A
126	A
127	A
128	A
129	B
135	A
138	A
139	A
140	A
141	A
143	A
147	A
148	B

Controlling effect against tomato late blight (2)

Compound No.	Effect
151	A
152	A
153	A
154	A
157	A
159	A
160	A
161	A
162	A
163	A
164	A
166	A
167	A
168	A
169	A
171	A
172	A
173	A
174	A
175	A
176	A

177	A
178	B
180	B
182	A
183	A
184	A
185	A
186	B
187	A
188	A
191	A
192	A
193	A
194	A
196	A
198	A
200	A
201	A
202	A
203	A

Controlling effect against tomato late blight (3)

Compound No.	Effect
204	A
205	A
206	A
208	A
209	B
210	B
213	A
214	A
218	B
220	B
221	B
222	A
224	A
225	A
226	A
227	B
228	B
229	A
230	B
231	B
232	B

237	B
238	B
239	B
241	A
242	B
243	A
247	B
248	B
257	A
261	B
274	A
276	B
278	A
279	A
281	B
283	A
287	A
291	A
292	A
293	A

Controlling effect against tomato late blight (4)

Compound No.	Effect
294	A
295	A
296	A
297	A
298	B
299	A
300	B
301	B
302	A
303	A
304	A
305	A
306	A
307	A
308	A
309	A
310	A
311	A
312	B
313	A
314	A

315	A
316	B
317	A
328	B
329	B
330	B
332	A
335	A
336	A
337	A
338	A
339	A
340	A
341	A
342	A
343	A
344	A
345	A
346	A
347	A

Controlling effect against tomato late blight (5)

Compound No.	Effect
348	A
349	A
350	A
352	A
388	B
389	B
390	B
392	B
393	B
395	B
396	B
397	B
398	A
400	A
404	B
408	A
411	A
412	A
413	A
414	A
416	A

420	A
424	B
427	B

Controlling effect against tomato late blight (6)

Compound No.	Effect
431	A
432	A
433	A
435	A
436	A
437	B
444	A
447	A
448	A
449	A
450	A
451	A
452	A
453	A
454	A
455	B
456	A
458	B
462	A
466	B
470	B

478	B
482	B
486	B
490	A
494	A
498	A
506	B
514	A
526	B
538	B
554	A
565	A
566	B
575	B
579	B
583	B
587	A

Controlling effect against tomato late blight (7)

Compound No.	Effect
599	A
601	B
603	B
638	B
639	A
640	A
641	A
642	B
643	A
644	A
645	A
646	A
647	A
649	A
650	A
651	A
652	A
665	A
666	A
667	A
669	A

675	A
678	B
684	A
685	A
686	A
688	A
689	A
690	A
691	A
693	A
694	A
695	A
696	A
697	A
698	A
699	A
700	A
701	A
702	A

Controlling effect against tomato late blight (8)

Compound No.	Effect
703	A
704	A
705	A
708	A
709	A
710	A
711	A
712	A
713	A
714	A
715	A
717	A
718	A
719	A
733	A
735	A
737	A
765	A
766	A
767	A
771	A

772	A
773	A
774	A
775	A
776	A
777	A
778	A
779	B
780	A
781	A
782	A
783	A
784	A
785	B
786	A
787	B
788	A

Controlling effect against tomato late blight (9)

Compound No.	Effect
789	A
790	A
793	A
794	A
798	A
799	A
800	A
801	A
802	A
803	A
810	A
811	A
812	B
814	A
815	A
816	B
818	A
819	A
820	A
823	A
826	A

827	A
828	A
830	A
831	A
832	A
834	A
835	A
836	A
838	A
839	A
842	B
843	A
844	A
846	A
847	A
848	A
849	A
850	A
857	A
861	B

Controlling effect against tomato late blight (10)

Compound No.	Effect
862	B
868	A
869	A
870	A
872	A
873	A
874	A
875	A
876	A
878	A
882	A
886	A
889	A
890	A
891	A
895	B
899	A
902	A
903	A
906	B
907	A

908	A
910	A
911	A
912	A
914	A
915	A
916	A
917	B
921	B
924	A
929	A
933	A
937	B
938	B
939	B
940	B
941	A
942	A
943	A
945	B

Controlling effect against tomato late blight (11)

Compound No.	Effect
948	B
949	A
951	A
952	A
953	A
954	A
955	A
960	A
963	A
968	A
969	A
970	A
971	A
972	A
973	A
981	A
982	A
983	A
984	A
985	A
986	A

987	A
988	A
989	A
990	A
991	A
993	A
994	A
995	B
997	A
998	A
999	A
1000	A
1005	B
1008	B
1009	A
1010	A
1011	A
1013	B
1014	B
1015	B

Controlling effect against tomato late blight (12)

Compound No.	Effect
1017	B
1019	A
1020	B
1021	B
1022	B
1023	B
1024	B
1025	B
1026	A
1027	A
1028	A
1029	A
1030	A
1031	A
1032	A
1033	A
1035	B
1042	B
1043	A
1044	A
1045	A

1050	B
1051	A
1052	B
1053	A
1055	A
1057	B
1066	A
1067	A
1068	A
1069	A
1070	A
1071	A
1072	A
1073	A
1074	A
1075	A
1076	A
1078	A
1080	A
1082	B

Controlling effect against tomato late blight (13)

Compound No.	Effect
1093	B
1094	B
1097	B
1100	B
1104	B
1105	B
1106	B
1108	B
1109	B
1110	B
1111	A
1112	A
1113	A
1114	A
1115	A
1116	A
1120	A
1124	B
1125	A
1126	B
1148	A

1152	A
1156	A

Test Example 2: Controlling effect against cucumber downy mildew

A solution of the compound in acetone was diluted with water to 250ppm, and the solution was sprayed to the cucumber seedling (breed: Sagamihangbak, two per plastic pot having a diameter of 7.5 cm) at 1-leaf stage in an amount of 10mL of the compound/pot. After air-drying, the pot was transferred to a moist chamber provided in the greenhouse, and inoculated by spray with a zoosporic suspension of Pseudoperonospora cubensis. On the 7^{th} day after inoculation the infected area rate for the leaves was examined. Evaluation was carried out by the following criteria.

The infected area rate for untreated groups in the examination was 60 to 80%.

A: the infected area rate of less than 5%
B: the infected area rate of 5% to less than 50%
C: the infected area rate of not less than 50%

Table 4

Controlling effect against cucumber downy mildew (1)

Compound No.	Effect
Comparative Compound	C

1	B
2	B
3	B
4	B
6	B
10	A
22	B
38	A
39	B
40	A
42	A
47	B
50	A
51	A
52	A
54	A
55	A
56	A
69	A
75	B
121	B
123	A
124	A
125	A

126	A
129	B
131	A
135	B
138	A
139	A
140	A
141	B
143	B
145	B
147	B
148	B
151	B
152	A
153	A
154	A

Controlling effect against cucumber downy mildew (2)

Compound No.	Effect
157	A
159	A
160	A
161	A
162	A
163	A
164	A
166	A
167	A
168	A
169	A
171	A
172	A
173	A
174	A
175	B
176	A
177	A
182	A
183	A
184	B

185	A
186	A
187	A
188	A
191	B
192	A
193	A
194	A
196	B
197	B
198	B
200	A
201	A
202	A
203	A
204	A
205	A
206	A
208	A
209	B

Controlling effect against cucumber downy mildew (3)

Compound No.	Effect
210	B
213	A
214	A
218	B
221	B
222	B
224	A
225	A
226	A
227	B
228	B
229	B
230	B
231	B
232	B
237	B
238	B
239	B
241	A
242	B
243	A

247	B
248	B
261	B
274	B
278	A
279	A
281	B
283	A
287	B
291	A
292	A
293	A
294	B
295	A
296	B
297	A
298	B
299	A
300	B
301	B

Controlling effect against cucumber downy mildew (4)

Compound No.	Effect
302	A
303	A
304	A
305	A
306	A
307	A
308	A
309	A
310	A
311	A
312	B
313	A
314	A
315	A
316	A
317	B
328	B
329	B
330	B
332	A
335	A

336	A
337	A
338	A
339	A
340	A
341	A
342	A
343	A
344	B
345	B
346	B
347	B
348	B
349	B
350	B
352	A

Controlling effect against cucumber downy mildew (5)

Compound No.	Effect
388	B
389	B
390	B
392	B
394	B
396	B
397	B
400	A
408	A
412	A
416	A
431	A
432	A
433	A
435	A
436	A
437	A
444	A
447	A
448	A
449	A

450	A
451	A
452	A
453	A
454	A
455	A
456	A
554	A
565	A
567	B
575	B

Controlling effect against cucumber downy mildew (6)

Compound No.	Effect
595	B
599	A
601	A
639	B
640	B
641	B
643	A
644	A
645	A
646	B
647	B
648	B
649	A
650	A
651	A
652	A
665	A
666	A
667	A
669	A
674	A

675	B
678	A
684	A
685	A
686	A
688	A
689	A
690	B
691	A
693	A
694	A
695	A
696	B
697	B
698	A
699	A
700	A
701	A
702	A

Controlling effect against cucumber downy mildew (7)

Compound No.	Effect
703	A
704	A
705	A
708	A
709	A
710	A
711	A
712	A
713	A
714	A
715	A
717	A
718	A
719	A
733	A
735	A
737	A
765	A
766	A
767	A
771	A

772	A
773	A
774	A
775	A
776	A
777	A
778	A
780	A
781	A
782	A
783	A
784	A
785	B
786	A
787	A
788	A
789	A

Controlling effect against cucumber downy mildew (8)

Compound No.	Effect
793	A
794	A
798	B
799	A
800	B
801	B
802	B
803	B
810	A
811	A
812	A
814	A
815	A
816	A
818	A
819	A
820	A
823	A
826	A
827	B
828	B

830	A
831	A
832	A
833	A
834	A
836	A
838	A
839	A
842	B
843	A
844	A
846	A
847	A
848	A
849	B
850	B
853	B
857	B
868	A
869	A

Controlling effect against cucumber downy mildew (9)

Compound No.	Effect
870	A
872	A
873	A
874	A
875	A
876	A
878	B
882	B
886	A
889	A
890	A
891	A
899	A
902	A
903	A
906	B
907	B
908	A
911	B
912	B
914	A

915	A
916	A
917	A
924	A
929	A
933	B
934	B
937	A
938	B
939	B
940	B
941	A
942	A
943	B
948	B
949	A
951	A
952	A
953	A
954	A

Controlling effect against cucumber downy mildew (10)

Compound No.	Effect
955	A
960	A
968	B
969	B
970	B
971	A
972	A
973	A
981	A
982	A
983	A
984	A
985	A
986	A
987	A
988	A
989	B
990	A
991	B
993	A
994	A

995	A
998	A
999	A
1000	B
1001	B
1002	B
1004	B
1007	B
1010	B
1011	B
1015	B
1017	B
1019	A
1020	B
1021	B
1023	B
1026	A
1027	A
1028	A
1029	A

Controlling effect against cucumber downy mildew (11)

Compound No.	Effect
1030	A
1031	A
1032	A
1033	A
1035	A
1036	A
1042	A
1043	A
1044	A
1045	A
1050	B
1051	A
1052	A
1053	A
1054	B
1055	A
1056	B
1057	B
1058	B
1061	B
1065	B

1066	A
1067	A
1068	A
1069	A
1070	A
1071	A
1072	A
1073	A
1074	A
1075	A
1076	A
1078	B
1080	A
1082	B
1094	B
1097	B
1109	B
1110	B
1112	B

Controlling effect against cucumber downy mildew (12)

Compound No.	Effect
1113	B
1114	B
1115	A
1116	A
1124	B
1125	A
1126	B
1148	A
1152	A
1156	A

Test Example 3: Controlling effect against grape downy mildew

The developed leaf of grape seedling (breed: Cabernet Sauvignon) grown in 1/2000a pot was cut and prepared a leaf disk having a diameter of 32 mm. A solution of the compound in acetone was diluted with water to 250 ppm, and the leaf disk was immersed for 3 hours. The disk was taken from the agent solution, subjected to air-drying, and then inoculated by spray with a zoosporangia suspension of Plasmopara viticola. The test disk was incubated at 18°C for 12 hours in a light-dark light cycle. On the 10^{th} day after inoculation the infected area rate for the leaf disk was examined. Evaluation was carried out by the following criteria. The infected area rate for the untreated groups in the examination was 60 to 70%.

A: the infected area rate of less than 5%
B: the infected area rate of 5% to less than 50%
C: the infected area rate of not less than 50%

Table 5

Controlling effect against grape downy mildew (1)

Compound No.	Effect

Comparative Compound	C
10	B
38	B
40	A
42	B
50	A
51	B
52	B
54	A
55	A
56	A
69	B
123	B
124	B
125	B
126	B
131	B
138	B
139	B
152	A
153	A
154	A
157	A
159	A

160	A
161	A
162	A
163	A
164	A
166	B
167	A
168	A
169	A
171	A
172	A
173	A
174	B
176	A
177	A
182	A
183	A

Controlling effect against grape downy mildew (2)

Compound No.	Effect
185	A
186	B
187	B
188	B
192	A
193	B
194	B
200	B
201	A
202	A
203	A
204	A
205	B
206	A
208	A
213	B
214	B
224	A
225	B
226	B
241	B

243	A
278	B
279	B
283	A
291	A
292	A
293	A
295	A
297	A
299	B
302	A
303	A
304	A
305	A
306	A
307	A
308	A
309	A
310	A
311	A

Controlling effect against grape downy mildew (3)

Compound No.	Effect
313	A
314	A
315	A
316	B
335	A
336	A
337	A
338	A
339	A
340	A
341	A
342	A
343	B
352	A
400	A
408	A
412	B
431	A
432	A
435	A
436	A

437	B
444	A
447	A
448	A
449	A
450	B
451	A
452	A
453	A
454	A
456	A
554	A
565	A

Controlling effect against grape downy mildew (4)

Compound No.	Effect
599	A
601	B
643	A
644	A
645	A
649	B
650	B
651	B
652	B
665	A
666	A
667	A
669	A
674	B
678	B
684	A
685	A
686	A
688	A
689	A
691	A

693	A
694	A
695	A
698	B
699	A
700	A
701	A
702	A
703	A
704	A
705	A
708	A
709	B
710	A
711	A
712	A
713	A
714	A
715	A

Controlling effect against grape downy mildew (5)

Compound No.	Effect
717	A
718	A
719	A
733	A
735	A
737	A
765	A
766	B
767	A
771	A
772	A
773	A
774	A
775	A
776	A
777	A
778	A
780	A
781	B
782	A
783	A

784	A
785	B
787	B
788	A
789	B
793	A
794	B
799	A
810	B
811	B
812	B
814	A
815	A
816	B
818	A
819	A
820	B

Controlling effect against grape downy mildew (6)

Compound No.	Effect
823	B
826	A
830	A
831	A
832	A
834	A
835	A
836	A
838	A
839	A
843	B
844	B
846	A
847	A
848	A
868	B
869	A
870	A
872	B
873	A
874	A

875	A
876	A
886	A
889	A
890	A
891	A
899	B
902	A
903	A
908	B
914	A
915	A
916	A
917	B
924	B
929	B
937	B
941	A
942	B
949	B

Controlling effect against grape downy mildew (7)

Compound No.	Effect
951	B
952	A
953	A
954	A
955	A
960	B
971	A
972	A
973	A
981	B
982	A
983	A
984	B
985	B
986	A
987	A
988	B
990	A
993	A
994	B
995	B

998	B
999	B
1019	B
1026	B
1027	A
1028	B
1029	B
1030	B
1031	A
1032	B
1033	A
1035	B
1036	B
1042	B
1043	B
1044	B
1045	B
1051	B
1052	B
1053	B

Controlling effect against grape downy mildew (8)

Compound No.	Effect
1055	B
1066	B
1067	B
1068	B
1069	B
1070	A
1071	A
1072	A
1073	A
1074	B
1075	B
1076	A
1080	B
1115	B
1116	B

Test Example 4: Controlling effect against rice blast disease

A solution of the compound in acetone was diluted with water to 250 ppm, and the test compound was sprayed to the rice plant (breed: Tsukimimochi, 50 planted per plastic pot

having a diameter of 6 cm) at 4-leaf stage in an amount of 10 mL of the compound/pot. After air-drying, the pot was transferred to a moist chamber at 25°C (12-hour light-dark light cycle), and inoculated by spray with conidium suspension of Pyricularia oryzae. On the 7^{th} to 10^{th} days after inoculation, the number of blotch in all the pots was examined. Evaluation was carried out by the following criteria.

The number of blotch per pot for the untreated groups in the examination was not less than 60.

A: The number of lesions of less than 5

B: The number of lesions of not less than 6 to less than 50

C: The number of lesions of not less than 50

Table 6

Controlling effect against rice blast disease

Compound No.	Effect
Comparative Compound	A
47	A
100	A
113	A
114	A

115	A
147	A
148	A
397	A
405	A
752	A
766	A
835	A
881	A

Test Example 5: Inhibiting effect of extension of hyphae against Pythium aphanidermatum

Potato Dextrose Agar (hereinafter referred to as PDA) was heated to 40°C, and then a solution of the compound in acetone was added to 100 ppm. 15 mL of the compound was injected to a Petri dish having a diameter of 9 cm, and cooled to solidify. A mycelial fragment of Pythium aphanidermatum preliminarily grown in the PDA, was perforated with cork borer having 6mm of diameter and transplanted to the agent-containing PDA, while allowing the hyphae ascus plane to be directed downward. After incubation of the dark room at 25°C for 24 hours, the diameter of the extended hyphae was measured and the evaluation was carried out by the following criteria.

A: The inhibiting rate compared with the group untreated with the agent of not less than 95%

B: The inhibiting rate compared with the group untreated with the agent of not less than 50 to less than 95%

C: The inhibiting rate compared the group untreated with the agent of less than 50%

Table 7

Inhibiting effect of extension of hyphae against Pythium aphanidermatum (1)

Compound No.	Effect
Comparative Compound	C
6	B
55	B
129	B
159	B
160	A
163	A
164	B
167	A
169	B
171	B

172	B
176	A
182	A
183	A
186	B
188	B
214	B
279	B
292	A
306	A
307	B
309	B
310	B
311	A
312	A
313	A
314	A
315	A
316	B
317	B
348	B
350	A
408	A
416	A

444	A
452	A
565	B

Inhibiting effect of extension of hyphae against Pythium aphanidermatum (2)

Compound No.	Effect
649	B
650	A
651	A
652	A
674	A
675	A
678	A
684	A
685	A
686	A
688	A
689	A
690	A
691	A
693	A
694	A
698	A
699	A
700	B
701	B

702	B
703	A
704	A
705	B
708	B
709	B
710	B
711	B
712	B
713	A
714	A
715	A
717	A
718	A
719	A
733	A
735	A

Inhibiting effect of extension of hyphae against Pythium aphanidermatum (3)

Compound No.	Effect
765	A
766	B
767	A
771	A
772	A
775	A
777	A
778	A
781	A
782	A
783	A
784	A
785	A
786	A
787	A
788	A
789	A
790	A
793	A
794	A

799	B
800	B
814	B
818	B
819	B
826	A
827	A
828	B
830	A
831	A
832	A
834	A
835	A
836	B
846	A
847	A
848	B
849	B
872	B
873	B

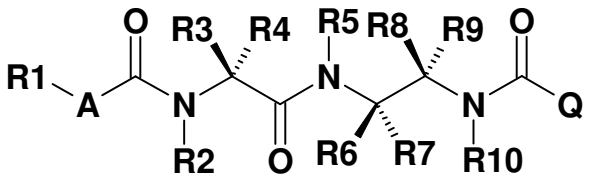
Inhibiting effect of extension of hyphae against Pythium aphanidermatum (4)

Compound No.	Effect
874	B
876	A
886	B
889	B
890	B
891	B
902	B
903	B
911	B
912	B
955	B
994	A
995	B
1011	B
1027	B
1029	B
1067	A
1068	A
1069	A
1071	A

1072	A
1073	A
1074	A
1075	A
1076	B
1077	B

CLAIMS

1. A diamine derivative represented by the formula (1):



(1)

[wherein

R1 is an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an aryl group, a heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties;

R2 and R5 are each independently a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an acyl group, an aryl group, a heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties;

R3 and R4 are each independently a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group

having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an aryl group, a heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or R3 and R4 may be bonded to each other to form a hydrocarbon ring having 3 to 6 carbon atoms;

R6, R7, R8 and R9 are each independently a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, or an alkynyl group having 2 to 6 carbon atoms, provided that at least one substituent represents an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, or an alkynyl group having 2 to 6 carbon atoms;

R10 is a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, or an acyl group;

A is oxygen atom or sulfur atom; and

Q is an aryl group or a heterocycle].

2. The diamine derivative according to claim 1, wherein at least one of R3 and R4 is an alkyl group having 1 to 6 carbon atoms, a cycloalkyl group having 3 to 6 carbon atoms, an alkenyl group having 2 to 6 carbon atoms, a cycloalkenyl group having 3 to 6 carbon atoms, an alkynyl group having 2 to 6 carbon atoms, an aryl group, heterocycle, an arylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or a heteroarylalkyl group having 1 to 6 carbon atoms on alkyl moieties, or R3 and R4 may be bonded to each other to form a hydrocarbon ring having 3 to 6 carbon atoms.

3. The diamine derivative according to claim 2, wherein R10 is a hydrogen atom.

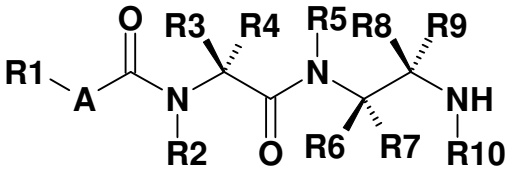
4. The diamine derivative according to claim 3, wherein R2 and R5 are hydrogen atoms.

5. A fungicide comprising the diamine derivative according to any one of claims 1 to 4 as an active ingredient.

6. An agricultural and horticultural fungicides comprising the diamine derivative according to any one of

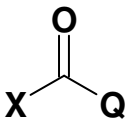
claims 1 to 4 as an active ingredient.

7. A process for preparing the diamine derivative according to in any one of claims 1 to 4, comprising reacting a compound represented by the formula (2)



(2)

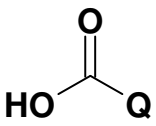
[wherein R1, R2, R3, R4, R5, R6, R7, R8, R9, R10 and A have the same meanings as in claim 1] with a compound represented by the formula (3)



(3)

[wherein Q has the same meaning as in claim 1, and X is a leaving group].

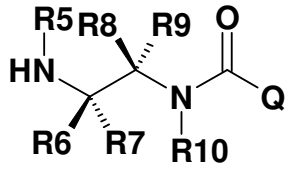
8. A process for preparing the diamine derivative as described in any one of claims 1 to 4, comprising reacting the compound represented by the formula (2) with a compound represented by the formula (4)



(4)

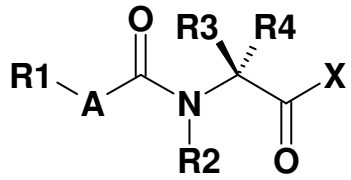
[wherein Q has the same meaning as in claim 1].

9. A process for preparing the diamine derivative as described in any one of claims 1 to 4, comprising reacting a compound represented by the formula (5)



(5)

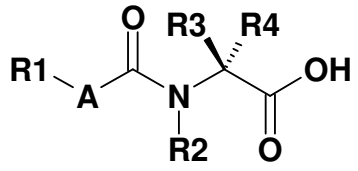
[wherein R5, R6, R7, R8, R9, R10 and Q have the same meanings as in claim 1] with a compound represented by the formula (6)



(6)

[wherein R1, R2, R3, R4 and A have the same meanings as in claim 1, and X is a leaving group].

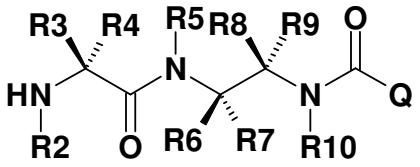
10. A process for preparing the diamine derivative as described in any one of claims 1 to 4, comprising reacting the compound represented by the formula (5) with a compound represented by the formula (7)



(7)

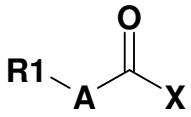
wherein R1, R2, R3, R4 and A have the same meanings as in claim 1.

11. A process for preparing the diamine derivative as described in any one of claims 1 to 4, comprising reacting a compound of formula (8)



(8)

[wherein R2, R3, R4, R5, R6, R7, R8, R9, R10 and Q have the same meanings as in claim 1] with a compound represented by the formula (9)



(9)

[wherein R1 and A have the same meanings as in claim 1 and X is a leaving group].