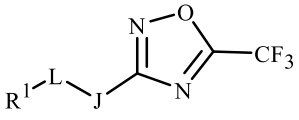
CLAIMS

What is claimed is:

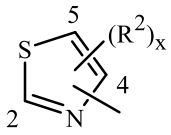
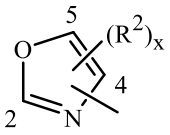
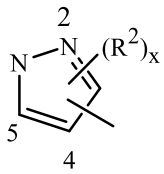
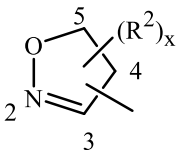
1. A compound selected from Formula **1**, tautomers, *N*-oxides, and salts thereof,



1

wherein

R^1 is

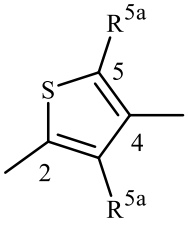
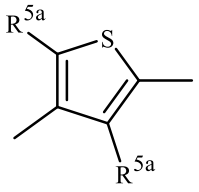
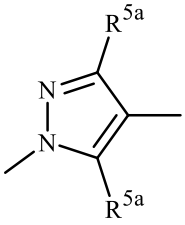
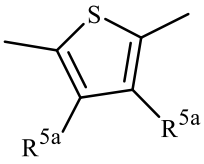

,

,

or

,

U-1 U-2 U-12 U-29

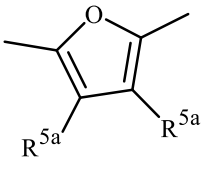
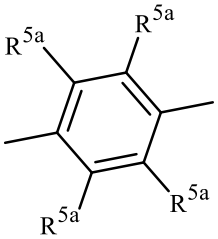
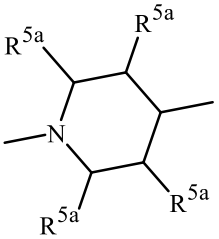
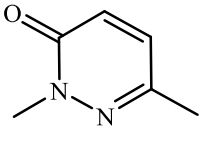
wherein the floating bond is connected to L in Formula **1** through any available carbon or nitrogen atom of the depicted ring;

x is 0, 1 or 2;L is $(CR^{4a}R^{4b})_n$, CH_2O, OCH_2CH_2, CH_2CH_2O or CH_2OCH_2, wherein the atom to the left is connected to R^1, and the atom to the right is connected to J;

J is


,

,

,

,

J-4 J-18 J-27 J-40


,

,

or


J-41 J-63 J-73 J-93

wherein the bond projecting to the left is bonded to L, and the bond projecting to the right is bonded to the oxadiazole ring in Formula **1**;

each R^{5a} is independently H or R^5; provided that at most only two R^{5a} substituents are other than H;

each R^2 is independently halogen, cyano, -CH(=O), -C(=O)OH, -C(=O)$NR^{3a}R^{3b}$, -C(R^6)=NR^7 or -U-V-Q; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_7 cycloalkyl, C_1-C_6 alkoxy, C_2-C_6 alkenyloxy, C_2-C_6 alkynyloxy, C_3-C_7 cycloalkoxy, C_1-C_6 alkylthio, C_2-C_6 alkoxycarbonyl, C_3-C_6 alkenyloxycarbonyl, C_3-C_6 alkynyloxycarbonyl, C_4-C_7 cycloalkoxycarbonyl, C_2-C_6 alkylcarbonyloxy or C_2-C_6 alkylcarbonylamino, each optionally substituted with up to 2 substituents independently selected from R^{10};

each R^{3a} is independently H, cyano, hydroxy, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 alkoxy, C_2-C_4 alkoxyalkyl, C_2-C_4 alkylcarbonyl, C_2-C_4 haloalkylcarbonyl or C_3-C_5 alkoxycarbonylalkyl;

each R^{3b} is independently H, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 haloalkenyl, C_2-C_6 alkynyl, C_2-C_6 haloalkynyl, C_3-C_8 halocycloalkyl, C_4-C_{10} cycloalkylalkyl, C_4-C_{10} halocycloalkylalkyl, C_2-C_6 alkoxyalkyl or C_2-C_6 haloalkoxyalkyl, each optionally substituted with up to 1 substituent selected from cyano, C_2-C_4 alkylcarbonyl, C_2-C_4 alkoxycarbonyl and C_3-C_{15} trialkylsilyl;

each R^{4a} and R^{4b} is independently H, halogen, hydroxy, methyl or methoxy;

each R^5 is independently methyl or methoxy;

each R^6 is independently H or methyl;

each R^7 is independently C_1-C_4 alkoxy, C_2-C_4 alkenyloxy or C_2-C_4 alkynyloxy, each optionally substituted with up to 1 substituent selected from cyano, hydroxy and -C(=O)OH;

each R^{10} is independently halogen, cyano, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_2-C_4 alkoxyalkoxy, C_1-C_4 alkylsulfonyl, C_1-C_4 haloalkylsulfonyl, C_2-C_4 alkylcarbonyl, C_2-C_4 haloalkylcarbonyl, C_2-C_5 alkoxycarbonyl or -C(R^{13})=NOR^{14};

each U is independently a direct bond, C(=O)O or C(=O)NR^{17}, wherein the atom to the left is connected to R^1, and the atom to the right is connected to V;

each V is independently a direct bond, C_1-C_3 alkylene, C_2-C_4 alkenylene or C_3-C_4 alkynylene;

each Q is independently phenyl, each optionally substituted with up to 2 substituents independently selected from R^{12}; or pyridinyl, pyrazolyl, imidazolyl, triazolyl, thiazolyl, oxazolyl, isoxazolyl, thienyl, isoxazolinyl, piperidinyl, morpholinyl or piperazinyl, each ring optionally substituted with up to 2 substituents independently selected from R^{12};

each R^{12} is independently halogen, cyano, C_1-C_2 alkyl, C_1-C_2 haloalkyl or C_1-C_2 alkoxy;

each R^{13} is independently H, halogen, methyl or methoxy;

each R^{14} is independently H, C_1-C_2 alkyl, C_1-C_2 haloalkyl, C_2-C_4 alkenyl, C_2-C_4 alkylcarbonyl or C_2-C_4 alkoxycarbonyl;

each R^{17} is independently H, cyano, methyl or halomethyl; and

n is 1, 2 or 3;

provided that:

(a) when R^1 is U-12 connected to L via the nitrogen atom, then L is CH_2O, OCH_2CH_2, CH_2CH_2O or CH_2OCH_2; and

(b) the compound of Formula **1** is not 3-[4-[(4,5-dihydro-5,5-dimethyl-2-oxazolyl)methyl]phenyl]-5-(trifluoromethyl)-1,2,4-oxadiazole.

2. A compound of Claim 1 wherein:

L is $(CR^{4a}R^{4b})_n$;

J is J-27, J-40 or J-63;

each R^2 is independently -C(=O)$NR^{3a}R^{3b}$, -$C(R^6)$=NR^7 or -U-V-Q; or C_2-C_6 alkoxycarbonyl, C_3-C_6 alkenyloxycarbonyl or C_3-C_6 alkynyloxycarbonyl, each optionally substituted with up to 1 substituent selected from R^{10};

each R^{3a} is independently H, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_1-C_4 alkoxy, C_2-C_4 alkoxyalkyl, C_2-C_4 alkylcarbonyl, C_2-C_4 haloalkylcarbonyl or C_3-C_5 alkoxycarbonylalkyl;

each R^{3b} is independently H, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 haloalkenyl, C_2-C_6 alkynyl, C_2-C_6 haloalkynyl, C_4-C_{10} cycloalkylalkyl, C_4-C_{10} halocycloalkylalkyl, C_2-C_6 alkoxyalkyl or C_2-C_6 haloalkoxyalkyl, each optionally substituted with up to 1 substituent selected from C_2-C_4 alkylcarbonyl and C_2-C_4 alkoxycarbonyl;

each R^{4a} and R^{4b} is independently H or methyl;

each R^6 is H;

each R^7 is independently C_1-C_4 alkoxy, C_2-C_4 alkenyloxy or C_2-C_4 alkynyloxy;

each R^{10} is independently halogen, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, C_2-C_4 alkylcarbonyl, C_2-C_4 haloalkylcarbonyl, C_2-C_5 alkoxycarbonyl or -$C(R^{13})$=NOR^{14};

each V is independently a direct bond, C_1-C_3 alkylene or C_2-C_4 alkenylene;

each Q is independently phenyl, each optionally substituted with up to 2 substituents independently selected from R^{12}; or pyridinyl, pyrazolyl, imidazolyl, triazolyl, thiazolyl or oxazolyl, each ring optionally substituted with up to 2 substituents independently selected from R^{12};

each R^{12} is independently halogen, methyl or methoxy; and

each R^{14} is independently H, methyl, halomethyl, C_2-C_4 alkylcarbonyl or C_2-C_4 alkoxycarbonyl.

3. A compound of Claim 2 wherein:

R^1 is U-2 or U-12;

J is J-40 or J-63;

R^{5a} is H;

each R^2 is independently -C(=O)$NR^{3a}R^{3b}$; or C_2-C_6 alkoxycarbonyl, optionally substituted with up to 1 substituent selected from R^{10};

each R^{3a} is independently H, C_1-C_4 alkyl, C_1-C_4 haloalkyl, C_2-C_4 alkenyl, C_2-C_4 alkynyl, C_2-C_4 alkoxyalkyl or C_3-C_5 alkoxycarbonylalkyl;

each R^{3b} is independently H, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl or C_2-C_6 haloalkenyl, each optionally substituted with up to 1 substituent selected from C_2-C_4 alkylcarbonyl and C_2-C_4 alkoxycarbonyl; and

each R^{10} is independently halogen, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_2-C_4 alkylcarbonyl, C_2-C_4 haloalkylcarbonyl or C_2-C_5 alkoxycarbonyl.

4. A compound of Claim 3 wherein:

R^1 is U-2 connected at its 2-position to L; or

each R^2 is independently -C(=O)$NR^{3a}R^{3b}$ or C_2-C_6 alkoxycarbonyl; and

n is 1.

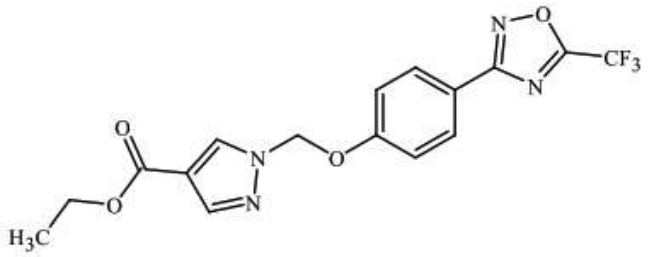
5. A compound of Claim 1 wherein:

R^1 is U-2 connected at its 2-position to L; or

R^1 is U-12 connected at its 1-position to L; and

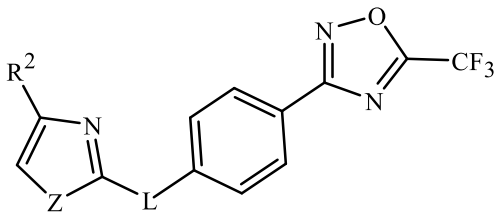
each R^2 is independently -C(=O)$NR^{3a}R^{3b}$ or C_2-C_6 alkoxycarbonyl.

6. A compound of Claim 5 which is:



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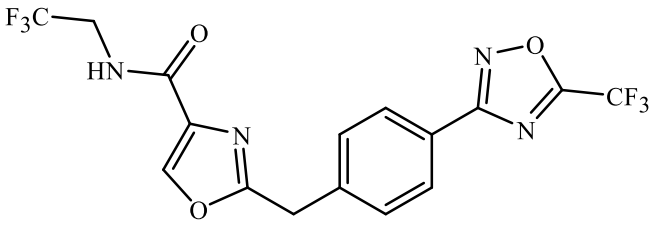
7. A compound of Claim 1 which is selected from:



wherein

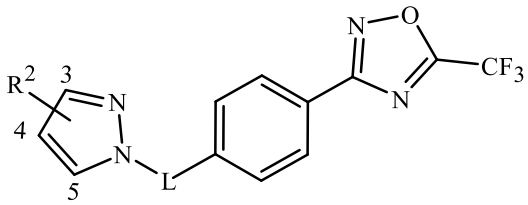
R^2 is $ClCH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $F_2CHCH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $N{\equiv}CCH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $MeOCH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is 1*H*-pyrazol-1-yl-$CH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $F_3CCH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $CF_3CH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $MeOCH_2CH_2NHC(=O)$; Z is S and L is CH_2; or
R^2 is $FCH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is $CF_3OCH_2CH_2NHC(=O)$; Z is O and L is CH_2; or
R^2 is 3,3-di-F-pyrolidin-1-yl-C(=O); Z is O and L is CH_2; or
R^2 is $CF_3CH_2NHC(=O)$; Z is S and L is CH_2.

8. A compound of Claim 7 which is



.

9. A compound of Claim 1 which is selected from:



wherein
R^2 is 4-($CF_3CH_2NHC(=O)$) and L is CH_2O; or
R^2 is 4-($MeOCH_2CH_2NHC(=O)$) and L is CH_2O; or
R^2 is 4-($N{\equiv}CCH_2NHC(=O)$) and L is CH_2O; or
R^2 is 4-(1*H*-pyrazol-1-yl-$CH_2CH_2NHC(=O)$) and L is CH_2O; or
R^2 is 4-(*c*-$PrCH_2OC(=O)$) and L is CH_2O; or
R^2 is 4-(*n*-$PrOC(=O)$) and L is CH_2O; or
R^2 is 4-($EtOC(=O)$) and L is CH_2CH_2O; or
R2 is 4-(EtOC(=O)) and L is CH2OCH2; or
R^2 is 4-($EtOC(=O)$) and L is CH_2O;
and the atom to the right in L is connect to the phenyl ring and the atom to left is connected to the pyrazolyl ring.

10. A fungicidal composition comprising (a) a compound of Claim 1; and (b) at least one other fungicide.

11. A fungicidal composition comprising (a) a compound of Claim 1; and (b) at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents.

12. A method for controlling plant diseases caused by fungal plant pathogens comprising applying to the plant or portion thereof, or to the plant seed, a fungicidally effective amount of a compound of Claim 1.

13. A method for controlling plant diseases caused by Basidiomycetes fungal plant pathogens comprising applying to the plant or portion thereof, or to the plant seed, a fungicidally effective amount of a compound of Claim 1.