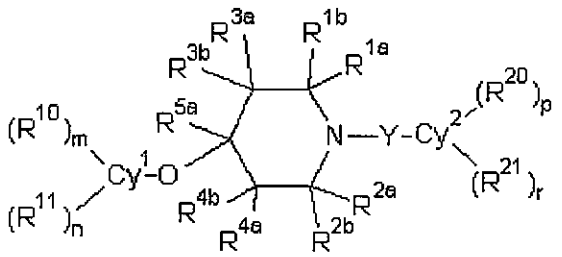
CLAIMS

1. A cyclic amine compound represented by formula (I) or salt thereof:



(I)

in formula (I),

Cy^1 and Cy^2 independently represent a C6-10 aryl group or a heterocyclyl group;

R^{1a}, R^{1b}, R^{2a}, R^{2b}, R^{3a}, R^{3b}, R^{4a}, R^{4b} and R^{5a} independently represent a hydrogen atom or an unsubstituted or substituted C1-6 alkyl group;

R^{1a} and R^{2a}, or R^{3a} and R^{4a} bond together to form an unsubstituted or substituted C3-6 alkylene group, an unsubstituted or substituted C3-6 alkenylene group, a group represented by formula: $-CH_2OCH_2-$, a group represented by formula: $-CH_2SCH_2-$, a group represented by formula: $-CH_2C(=O)CH_2-$ or a group represented by formula: $-CH_2NR^6CH_2-$, (provided that R^6 represents a hydrogen atom, an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C1-7 acyl group or an unsubstituted or substituted C1-6 alkoxycarbonyl group);

R^{10}, R^{11}, R^{20} and R^{21} independently represent an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C3-8 cycloalkyl group, an unsubstituted or substituted C2-6 alkenyl group, an unsubstituted or substituted C2-6 alkynyl group, a hydroxy group, an oxo group, an unsubstituted or substituted C1-6 alkoxy group, an unsubstituted or substituted C3-8 cycloalkoxy group, an unsubstituted or substituted C2-6 alkenyloxy group, an unsubstituted or substituted C2-6 alkynyloxy group, a carboxyl group, an unsubstituted or substituted C1-7 acyl group, an unsubstituted or

substituted C1-6 alkoxycarbonyl group, an unsubstituted or substituted C3-8 cycloalkyloxycarbonyl group, an unsubstituted or substituted C2-6 alkenyloxycarbonyl group, an unsubstituted or substituted C2-6 alkynyloxycarbonyl group, an unsubstituted or substituted C6-10 aryloxycarbonyl group, an unsubstituted or substituted heterocyclyloxycarbonyl group, an unsubstituted or substituted C1-7 acyloxy group, an unsubstituted or substituted C1-6 alkoxycarbonyloxy group, an unsubstituted or substituted C3-8 cycloalkyloxycarbonyloxy group, an unsubstituted or substituted C2-6 alkenyloxycarbonyloxy group, an unsubstituted or substituted C2-6 alkynyloxycarbonyloxy group, an unsubstituted or substituted C1-6 alkyl aminocarbonyloxy group, an unsubstituted or substituted C3-8 cycloalkyl aminocarbonyloxy group, an unsubstituted or substituted C2-6 alkenyl aminocarbonyloxy group, an unsubstituted or substituted C2-6 alkynyl aminocarbonyloxy group, an unsubstituted or substituted C6-10 aryl aminocarbonyloxy group, an unsubstituted or substituted heterocyclyl aminocarbonyloxy group, an unsubstituted or substituted aminooxy group, an unsubstituted or substituted C1-6 alkylidene aminooxy group, an unsubstituted or substituted C6-10 aryl group, an unsubstituted or substituted heterocyclyl group, an unsubstituted or substituted C6-10 aryloxy group, an unsubstituted or substituted heterocyclyloxy group, a substituted sulfonyloxy group, an amino group, an unsubstituted or substituted C1-6 alkyl amino group, an unsubstituted or substituted C3-8 cycloalkyl amino group, an unsubstituted or substituted C2-6 alkenyl amino group, an unsubstituted or substituted C2-6 alkynyl amino group, an unsubstituted or substituted C6-10 aryl amino group, an unsubstituted or substituted heterocyclyl amino group, an unsubstituted or substituted hydroxyamino group, an unsubstituted or substituted C1-7 acyl amino group, an unsubstituted or substituted C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C2-6

alkenyloxycarbonyl amino group, an unsubstituted or substituted C2-6 alkynyloxycarbonyl amino group, an unsubstituted or substituted C6-10 aryloxycarbonyl amino group, an unsubstituted or substituted heterocyclyloxycarbonyl amino group, a substituted sulfonyl amino group, an unsubstituted or substituted aminocarbonyl group, a mercapto group, an unsubstituted or substituted C1-6 alkyl thio group, an unsubstituted or substituted C3-8 cycloalkyl thio group, an unsubstituted or substituted C2-6 alkenyl thio group, an unsubstituted or substituted C2-6 alkynyl thio group, an unsubstituted or substituted C6-10 aryl thio group, an unsubstituted or substituted heterocyclyl thio group, (an unsubstituted or substituted C1-6 alkyl)thiocarbonyl group, (an unsubstituted or substituted C1-6 alkoxy)thiocarbonyl group, (an unsubstituted or substituted C1-6 alkyl thio)carbonyl group, (an unsubstituted or substituted C1-6 alkyl thio)thiocarbonyl group, a substituted sulfinyl group, a substituted sulfonyl group, a pentafluorosulfanyl group, a tri C1-6 alkyl-substituted silyl group, a tri C6-10 aryl-substituted silyl group, a cyano group, a nitro group or a halogen atom;

R^{10} and R^{11} of Cy^1 may independently form a ring, or bond together to form a ring, or bond with the atoms constituting Cy^1 to form a ring; R^{20} and R^{21} of Cy^2 may independently form a ring, or bond together to form a ring, or bond with the atoms constituting Cy^2 to form a ring;

m represents the number of R^{10} and represents an integer of 0 to 5, when m is 2 or more, R^{10}s may be the same or different;

n represents the number of R^{11} and represents an integer of 0 to 5, when n is 2 or more, R^{11}s may be the same and different;

p represents the number of R^{20} and represents an integer of 0 to 5, when p is 2 or more, R^{20}s may be the same or different;

r represents the number of R^{21} and represents an integer of 0 to 5, when r is 2 or more, R^{21}s may be the same or different;

Y represents an oxygen atom or a sulfur atom.

2. The cyclic amine compound or salt thereof according to claim 1, wherein

in formula (I), Cy^1 represents a phenyl group, a pyrazolyl group, a thiadiazolyl group, a pyridyl group, a pyrimidinyl group or a pyridazinyl group, and Cy^2 represents a phenyl group, a pyrazolyl group, a thiadiazolyl group, a pyridyl group, a pyrimidinyl group, or a pyridazinyl.

3. The cyclic amine compound or salt thereof according to claim 1 or 2, wherein

in formula (I), R^{10} represents a C1-6 alkyl group, a C1-6 alkoxy C1-6 alkyl group, a C1-6 alkoxy C1-6 alkoxy C1-6 alkyl group, a C2-6 alkenyl group, a hydroxy group, a C1-6 alkoxy group, a C1-6 haloalkoxy group, a C3-8 cycloalkoxy group, a C2-6 alkenyloxy group, a C2-6 haloalkenyloxy group, a C2-6 alkynyloxy group, a C2-6 haloalkynyloxy group, a C1-6 alkoxy C1-6 alkoxy group, a C3-8 cycloalkyl C1-6 alkoxy group, a cyano C1-6 alkoxy group, a C1-7 acyl C1-6 alkoxy group, a hydroxy C1-6 alkoxy group, a C1-7 acyloxy group, a C1-6 alkoxycarbonyl group, a C2-6 alkenyloxycarbonyl group, a C2-6 alkynyloxycarbonyl group, a C1-6 alkoxycarbonyloxy group, a C1-6 alkyl aminocarbonyloxy group, a C6-10 aryl group, a heterocyclyl group, a C1-6 haloalkyl sulfonyloxy group, a C1-6 alkylidene aminooxy group, a C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C7-11 aralkyl group, an unsubstituted or substituted C7-11 aralkyloxy group, a C1-6 alkyl thio group or a nitro group;

R^{11} represents a cyano group, a halogen atom, a pentafluorosulfanyl group, a C1-6 haloalkyl group, a C2-6 haloalkenyl group or a C2-6 haloalkynyl group;

R^{20} represents a cyano group, a halogen atom, a pentafluorosulfanyl group, a C1-6 haloalkyl group, a C2-6 haloalkenyl group or a C2-6 haloalkynyl group; and

R^{21} represents a C1-6 alkyl group, a C1-6 alkoxy C1-6 alkyl group, a C1-6 alkoxy C1-6 alkoxy C1-6 alkyl group, a hydroxy group, a C1-6 alkoxy group, a C1-6 haloalkoxy group, a C2-6 haloalkenyloxy group, a C2-6 haloalkynyloxy group, a C1-6 alkoxy C1-6 alkoxy group, a C3-8 cycloalkyl C1-6 alkoxy group, a C1-6 alkoxycarbonyl group, a C2-6 alkenyloxycarbonyl group, a C2-6 alkynyloxycarbonyl group, a C1-6 alkylidene aminooxy group, a C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C7-11 aralkyl group, an unsubstituted or substituted C7-11 aralkyloxy group or a nitro group.

4. The cyclic amine compound or salt thereof according to any one of claims 1 to 3, wherein

in formula (I), Cy^1 represents a phenyl group;

R^{1b}, R^{2b}, R^{3a}, R^{3b}, R^{4a}, R^{4b} and R^{5a} represent a hydrogen atom;

R^{1a} and R^{2a} bond together to form an unsubstituted or substituted C3-6 alkylene group, an unsubstituted or substituted C3-6 alkenylene group, a group represented by formula: $-CH_2OCH_2-$, a group represented by formula: $-CH_2SCH_2-$, a group represented by formula: $-CH_2C(=O)CH_2-$ or a group represented by formula: $-CH_2NR^6CH_2-$ (provided that R^6 represents a hydrogen atom, an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C1-7 acyl group or an unsubstituted or substituted C1-6 alkoxycarbonyl group);

Cy^2 represents a pyridine-2-yl group;

Y represents an oxygen atom;

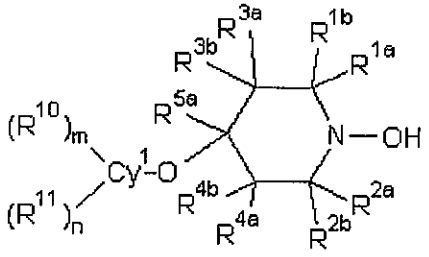
r represents 0; and

p represents an integer of 0 to 4.

5. A pest control agent comprising at least one selected from the cyclic amine compound or salt thereof according to any one of claims 1 to 4 as an active ingredient.

6. An acaricide comprising at least one selected from the cyclic amine compound or salt thereof according to any one of claims 1 to 4 as an active ingredient.

7. A hydroxylamine compound represented by formula (III) or salt thereof:



(III)

in formula (III),

Cy^1 represents a C6-10 aryl group or a heterocyclyl group;

R^{1a}, R^{1b}, R^{2a}, R^{2b}, R^{3a}, R^{3b}, R^{4a}, R^{4b} and R^{5a} independently represents a hydrogen atom or an unsubstituted or substituted C1-6 alkyl group; and R^{1a} and R^{2a}, or R^{3a} and R^{4a} bond together to form an unsubstituted or substituted C3-6 alkylene group, an unsubstituted or substituted C3-6 alkenylene group, a group represented by formula: $-CH_2OCH_2-$, a group represented by formula: $-CH_2SCH_2-$, a group represented by formula: $-CH_2C(=O)CH_2-$ or a group represented by formula: $-CH_2NR^6CH_2-$ (provided that R^6 represents a hydrogen atom, an unsubstituted or substituted C1-6 alkyl group, an

unsubstituted or substituted C1-7 acyl group or an unsubstituted or substituted C1-6 alkoxycarbonyl group);

R^{10} and R^{11} independently represents an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C3-8 cycloalkyl group, an unsubstituted or substituted C2-6 alkenyl group, an unsubstituted or substituted C2-6 alkynyl group, a hydroxy group, an oxo group, an unsubstituted or substituted C1-6 alkoxy group, an unsubstituted or substituted C3-8 cycloalkoxy group, an unsubstituted or substituted C2-6 alkenyloxy group, an unsubstituted or substituted C2-6 alkynyloxy group, carboxyl group, an unsubstituted or substituted C1-7 acyl group, an unsubstituted or substituted C1-6 alkoxycarbonyl group, an unsubstituted or substituted C3-8 cycloalkyloxycarbonyl group, an unsubstituted or substituted C2-6 alkenyloxycarbonyl group, an unsubstituted or substituted C2-6 alkynyloxycarbonyl group, an unsubstituted or substituted C6-10 aryloxycarbonyl group, an unsubstituted or substituted heterocyclyloxycarbonyl group, an unsubstituted or substituted C1-7 acyloxy group, an unsubstituted or substituted C1-6 alkoxycarbonyloxy group, an unsubstituted or substituted C3-8 cycloalkyloxycarbonyloxy group, an unsubstituted or substituted C2-6 alkenyloxycarbonyloxy group, an unsubstituted or substituted C2-6 alkynyloxycarbonyloxy group, an unsubstituted or substituted C1-6 alkyl aminocarbonyloxy group, an unsubstituted or substituted C3-8 cycloalkyl aminocarbonyloxy group, an unsubstituted or substituted C2-6 alkenyl aminocarbonyloxy group, an unsubstituted or substituted C2-6 alkynyl aminocarbonyloxy group, an unsubstituted or substituted C6-10 aryl aminocarbonyloxy group, an unsubstituted or substituted heterocyclyl aminocarbonyloxy group, an unsubstituted or substituted aminooxy group, an unsubstituted or substituted C1-6 alkylidene aminooxy group, an unsubstituted or substituted C6-10 aryl group, an

unsubstituted or substituted heterocyclyl group, an unsubstituted or substituted C6-10 aryloxy group, an unsubstituted or substituted heterocyclyloxy group, a substituted sulfonyloxy group, amino group, an unsubstituted or substituted C1-6 alkyl amino group, an unsubstituted or substituted C3-8 cycloalkyl amino group, an unsubstituted or substituted C2-6 alkenyl amino group, an unsubstituted or substituted C2-6 alkynyl amino group, an unsubstituted or substituted C6-10 aryl amino group, an unsubstituted or substituted heterocyclyl amino group, an unsubstituted or substituted hydroxyamino group, an unsubstituted or substituted C1-7 acyl amino group, an unsubstituted or substituted C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C2-6 alkenyloxycarbonyl amino group, an unsubstituted or substituted C2-6 alkynyloxycarbonyl amino group, an unsubstituted or substituted C6-10 aryloxycarbonyl amino group, an unsubstituted or substituted heterocyclyloxycarbonyl amino group, a substituted sulfonyl amino group, an unsubstituted or substituted aminocarbonyl group, a mercapto group, an unsubstituted or substituted C1-6 alkyl thio group, an unsubstituted or substituted C3-8 cycloalkyl thio group, an unsubstituted or substituted C2-6 alkenyl thio group, an unsubstituted or substituted C2-6 alkynyl thio group, an unsubstituted or substituted C6-10 aryl thio group, an unsubstituted or substituted heterocyclyl thio group, (an unsubstituted or substituted C1-6 alkyl)thiocarbonyl group, (an unsubstituted or substituted C1-6 alkoxy)thiocarbonyl group, (an unsubstituted or substituted C1-6 alkyl thio)carbonyl group, (an unsubstituted or substituted C1-6 alkyl thio)thiocarbonyl group, a substituted sulfinyl group, a substituted sulfonyl group, a pentafluorosulfanyl group, a tri C1-6 alkyl-substituted silyl group, a tri C6-10 aryl-substituted silyl group, a cyano group, nitro group or a halogen atom;

R^{10} and R^{11} of Cy^1 may independently form a ring, or bond together to form a ring, or bond with the atoms constituting Cy^1 to form a ring;

m represents the number of R^{10} and represents an integer of 0 to 5, when m is 2 or more, R^{10}s may be the same or different;

n represents the number of R^{11} and represents an integer of 0 to 5, when n is 2 or more, R^{11}s may be the same and different.

8. The hydroxylamine compound or salt thereof according to claim 7, wherein

in formula (III), Cy^1 represents a phenyl group, a pyrazolyl group, a thiadiazolyl group, a pyridyl group, a pyrimidinyl group or a pyridazinyl group.

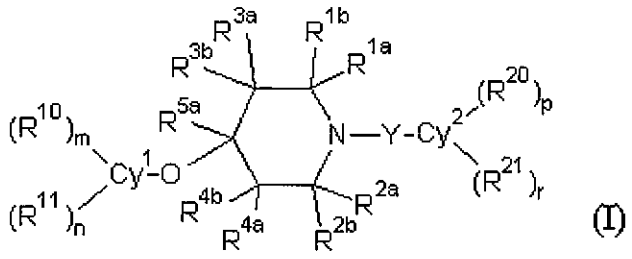
9. The hydroxylamine compound or salt thereof according to claim 7 or 8, wherein

in formula (III), R^{10} represents a C1-6 alkyl group, a C1-6 alkoxy C1-6 alkyl group, a C1-6 alkoxy C1-6 alkoxy C1-6 alkyl group, a C2-6 alkenyl group, a hydroxy group, a C1-6 alkoxy group, a C1-6 haloalkoxy group, a C3-8 cycloalkoxy group, a C2-6 alkenyloxy group, a C2-6 haloalkenyloxy group, a C2-6 alkynyloxy group, a C2-6 haloalkynyloxy group, a C1-6 alkoxy C1-6 alkoxy group, a C3-8 cycloalkyl C1-6 alkoxy group, a cyano C1-6 alkoxy group, a C1-7 acyl C1-6 alkoxy group, a hydroxy C1-6 alkoxy group, a C1-7 acyloxy group, a C1-6 alkoxycarbonyl group, a C2-6 alkenyloxycarbonyl group, a C2-6 alkynyloxycarbonyl group, a C1-6 alkoxycarbonyloxy group, a C1-6 alkyl aminocarbonyloxy group, a C6-10 aryl group, a heterocyclyl group, a C1-6 haloalkyl sulfonyloxy group, a C1-6 alkylidene aminooxy group, a C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C7-11 aralkyl group, an unsubstituted or substituted C7-11 aralkyloxy group, a C1-6 alkyl thio group or a nitro group; and

R^{11} represents a cyano group, a halogen atom, a pentafluorosulfanyl group, a C1-6 haloalkyl group, a C2-6 haloalkenyl group or a C2-6 haloalkynyl group.

CLAIMS

1. A cyclic amine compound represented by formula (I) or salt thereof:



(I)

in formula (I),

Cy^1 represents a phenyl group, a pyrazolyl group, a thiadiazolyl group, a pyridyl group, a pyrimidinyl group or a pyridazinyl group;

Cy^2 represents a phenyl group, a pyrazolyl group, a thiadiazolyl group, a pyridyl group, a pyrimidinyl group, or a pyridazinyl,

R^{1a}, R^{2a}, R^{3a} and R^{4a} independently represent a hydrogen atom or an unsubstituted or substituted C1-6 alkyl group;

R^{1b}, R^{2b}, R^{3b}, R^{4b} and R^{5a} represent a hydrogen atom; or

R^{1a} and R^{2a}, or R^{3a} and R^{4a} bond together to form an unsubstituted or substituted C3-6 alkylene group, an unsubstituted or substituted C3-6 alkenylene group, a group represented by formula: $-CH_2OCH_2-$, a group represented by formula: $-CH_2SCH_2-$, a group represented by formula: $-CH_2C(=O)CH_2-$ or a group represented by formula: $-CH_2NR^6CH_2-$, (provided that R^6 represents a hydrogen atom, an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C1-7 acyl group or an unsubstituted or substituted C1-6 alkoxycarbonyl group);

R^{10} represents a C1-6 alkyl group, a C1-6 alkoxy C1-6 alkyl group, a C1-6 alkoxy C1-6 alkoxy C1-6 alkyl group, a C2-6 alkenyl group, a hydroxy group, a C1-6 alkoxy group, a C1-6 haloalkoxy group, a C3-8 cycloalkoxy group, a C2-6 alkenyloxy group, a C2-6 haloalkenyloxy group, a C2-6 alkynyloxy group, a C2-6 haloalkynyloxy group, a C1-6 alkoxy C1-6 alkoxy group, a C3-8 cycloalkyl C1-6 alkoxy group, a cyano C1-6 alkoxy group, a C1-7 acyl C1-6 alkoxy group, a hydroxy C1-6 alkoxy group, a C1-7 acyloxy group, a C1-6 alkoxycarbonyl group, a C2-6 alkenyloxycarbonyl group, a C2-6 alkynyloxycarbonyl group, a C1-6 alkoxycarbonyloxy group, a C1-6 alkyl aminocarbonyloxy group, a C6-10 aryl group, a heterocyclyl group, a C1-6 haloalkyl sulfonyloxy group, a C1-6 alkylidene aminooxy group, a C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C7-11 aralkyl

group, an unsubstituted or substituted C7-11 aralkyloxy group, a C1-6 alkyl thio group or a nitro group;

R^{11} represents a cyano group, a halogen atom, a pentafluorosulfanyl group, a C1-6 haloalkyl group, a C2-6 haloalkenyl group or a C2-6 haloalkynyl group;

R^{20} represents a cyano group, a halogen atom, a pentafluorosulfanyl group, a C1-6 haloalkyl group, a C2-6 haloalkenyl group or a C2-6 haloalkynyl group; and

R^{21} represents a C1-6 alkyl group, a C1-6 alkoxy C1-6 alkyl group, a C1-6 alkoxy C1-6 alkoxy C1-6 alkyl group, a hydroxy group, a C1-6 alkoxy group, a C1-6 haloalkoxy group, a C2-6 haloalkenyloxy group, a C2-6 haloalkynyloxy group, a C1-6 alkoxy C1-6 alkoxy group, a C3-8 cycloalkyl C1-6 alkoxy group, a C1-6 alkoxycarbonyl group, a C2-6 alkenyloxycarbonyl group, a C2-6 alkynyloxycarbonyl group, a C1-6 alkylidene aminooxy group, a C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C7-11 aralkyl group, an unsubstituted or substituted C7-11 aralkyloxy group or a nitro group;

m represents the number of R^{10} and represents an integer of 0 to 5, when m is 2 or more, R^{10}s may be the same or different;

n represents the number of R^{11} and represents an integer of 0 to 5, when n is 2 or more, R^{11}s may be the same and different;

p represents the number of R^{20} and represents an integer of 0 to 5, when p is 2 or more, R^{20}s may be the same or different;

r represents the number of R^{21} and represents an integer of 0 to 5, when r is 2 or more, R^{21}s may be the same or different;

Y represents an oxygen atom or a sulfur atom.

2. The cyclic amine compound or salt thereof according to claim 1, wherein

in formula (I), Cy^1 represents a phenyl group;

R^{1b}, R^{2b}, R^{3a}, R^{3b}, R^{4a}, R^{4b} and R^{5a} represent a hydrogen atom;

R^{1a} and R^{2a} bond together to form an unsubstituted or substituted C3-6 alkylene group, an unsubstituted or substituted C3-6 alkenylene group, a group represented by formula: $-CH_2OCH_2-$, a group represented by formula: $-CH_2SCH_2-$, a group represented by formula: $-CH_2C(=O)CH_2-$ or a group represented by formula: $-CH_2NR^6CH_2-$ (provided that R^6 represents a hydrogen atom, an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C1-7 acyl group or an unsubstituted or substituted C1-6 alkoxycarbonyl group);

Cy^2 represents a pyridine-2-yl group;

Y represents an oxygen atom;

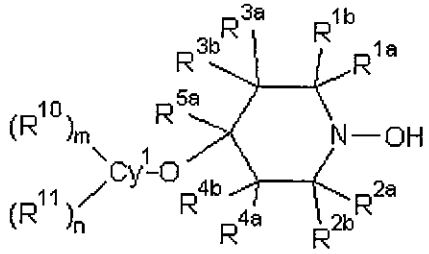
r represents 0; and

p represents an integer of 0 to 4.

3. A pest control agent comprising at least one compound selected from the cyclic amine compound or salt thereof according to claim 2 as an active ingredient.

4. An acaricide comprising at least one compound selected from the cyclic amine compound or salt thereof according to claim 2 as an active ingredient.

5. A hydroxylamine compound represented by formula (III) or salt thereof:



(III)

in formula (III),

Cy^1 represents a phenyl group, a pyrazolyl group, a thiadiazolyl group, a pyridyl group, a pyrimidinyl group or a pyridazinyl group;

R^{1a}, R^{2a}, R^{3a} and R^{4a} independently represents a hydrogen atom or an unsubstituted or substituted C1-6 alkyl group;

R^{1b}, R^{2b}, R^{3b}, R^{4b} and R^{5a} represent a hydrogen atom; or

R^{1a} and R^{2a}, or R^{3a} and R^{4a} bond together to form an unsubstituted or substituted C3-6 alkylene group, an unsubstituted or substituted C3-6 alkenylene group, a group represented by formula: $-CH_2OCH_2-$, a group represented by formula: $-CH_2SCH_2-$, a group represented by formula: $-CH_2C(=O)CH_2-$ or a group represented by formula: $-CH_2NR^6CH_2-$ (provided that R^6 represents a hydrogen atom, an unsubstituted or substituted C1-6 alkyl group, an unsubstituted or substituted C1-7 acyl group or an unsubstituted or substituted C1-6 alkoxycarbonyl group);

R^{10} represents a C1-6 alkyl group, a C1-6 alkoxy C1-6 alkyl group, a C1-6 alkoxy C1-6 alkoxy C1-6 alkyl group, a C2-6 alkenyl group, a hydroxy group, a C1-6 alkoxy group, a C1-6 haloalkoxy group, a C3-8 cycloalkoxy group, a C2-6 alkenyloxy group, a C2-6

haloalkenyloxy group, a C2-6 alkynyloxy group, a C2-6 haloalkynyloxy group, a C1-6 alkoxy C1-6 alkoxy group, a C3-8 cycloalkyl C1-6 alkoxy group, a cyano C1-6 alkoxy group, a C1-7 acyl C1-6 alkoxy group, a hydroxy C1-6 alkoxy group, a C1-7 acyloxy group, a C1-6 alkoxycarbonyl group, a C2-6 alkenyloxycarbonyl group, a C2-6 alkynyloxycarbonyl group, a C1-6 alkoxycarbonyloxy group, a C1-6 alkyl aminocarbonyloxy group, a C6-10 aryl group, a heterocyclyl group, a C1-6 haloalkyl sulfonyloxy group, a C1-6 alkylidene aminooxy group, a C1-6 alkoxycarbonyl amino group, an unsubstituted or substituted C7-11 aralkyl group, an unsubstituted or substituted C7-11 aralkyloxy group, a C1-6 alkyl thio group or a nitro group; and

R^{11} represents a cyano group, a halogen atom, a pentafluorosulfanyl group, a C1-6 haloalkyl group, a C2-6 haloalkenyl group or a C2-6 haloalkynyl group;

m represents the number of R^{10} and represents an integer of 0 to 5, when m is 2 or more, R^{10}s may be the same or different;

n represents the number of R^{11} and represents an integer of 0 to 5, when n is 2 or more, R^{11}s may be the same and different.