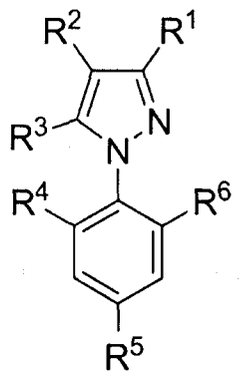
CLEAN VERSION

We Claim:-

- 8 MAY 2014

1. An insecticidal composition comprising:

a) an insecticidally effective amount of one or more compound having the general formula (I):



(I)

ORIGINAL

in which:

R^1 is alkyl, halogen, or CN; preferably R^1 is fluorine, chlorine or CN; and more preferably R^1 is CN;

R^2 is 4,5-dicyanoimidazol 2-yl, haloalkyl, or $S(O)_mR^7$; and preferably R^2 is $S(O)_mR^7$;

R^3 is hydrogen, halogen, NR^8R^9, $S(O)_nR^{10}$, C(O) R^{11}, alkyl, haloalkyl, OR^{12}, or $N=CR^{13}R^{14}$; and preferably R^3 is NR^8R^9;

R^4 and R^6, each independently represent hydrogen, halogen, haloalkyl, CN, or NO_2; preferably both R^4 and R^6 are halogen; and more preferably both R^4 and R^6 are chlorine;

R^5 is hydrogen, halogen, haloalkyl, haloalkoxy, or $S(O)_pR^{15}$; preferably R^5 is haloalkyl; and more preferably R^5 is CF_3;

R^7, R^{10}, R^{12} and R^{15} each independently represent alkyl or haloalkyl; preferably R^7 is haloalkyl; and more preferably R^7 is CF_3;

R^8 and R^9 each independently represent hydrogen, alkyl, alkenyl, haloalkyl, alkoxycarbonyl, or $S(O)_qCF_3$; and preferably both R^8 and R^9 are hydrogen;

R^{11} and R^{14} each independently represent hydrogen or alkyl;

R^{13} is phenyl optionally substituted by one or more halogen atoms or a member selected from OH, alkyl, alkoxy, and cyano; and

m, n, p, and q independently represent 0, 1, or 2; and preferably m is 1;

and

b) at least one nitrogen-based fertilizer.

2. The insecticidal composition according to any preceding claim, wherein the compound of general formula (I) is selected from:

5-amino-1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-4-[(trifluoromethyl)sulfinyl]pyrazole-3-carbonitrile (fipronil);

1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-5-(2-methylallylamino)-4-[(trifluoromethyl)sulfinyl]pyrazole-3-carbonitrile (flufiprole);

5-amino-1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-4-[(ethyl)sulfinyl]pyrazole-3-carbonitrile (ethiprole);

1-[5-amino-1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-4-(methylsulfinyl)pyrazol-3-yl]ethanone (acetoprole);

(RS)-[O-1-(4-chlorophenyl)pyrazol-4-yl O-ethyl S-propyl phosphorothioate] (pyraclofos);

1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-4-(fluoromethylthio)-5-[(pyrazinylmethyl)amino]pyrazole-3-carbonitrile (pyrafluprole);

1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-4-(difluoromethylthio)-5-[(2-pyridylmethyl)amino]pyrazole-3-carbonitrile (pyriprole);

3-methyl-1-phenylpyrazol-5-yl dimethylcarbamate (pyrolan); and

(E)-1-(2,6-dichloro-α,α,α-trifluoro-p-tolyl)-5-(4-hydroxy-3-methoxybenzylideneamino)-4-trifluoromethylthiopyrazole-3-carbonitrile (vaniliprole); and

preferably the compound of general formula (I) is fipronil.

3. The insecticidal composition according to any preceding claim, wherein the compound of general formula (I) is present in an amount of from 1 to 50% by weight.

4. The insecticidal composition according to any preceding claim, wherein the nitrogen-based fertilizer is selected from an ammonium salt, fluid nitrogen fertilizers, urea, urea-formaldehyde condensation products, urean ammonium nitrate, amino acids, metal nitrates, and mixtures thereof; and/or wherein the nitrogen-based fertilizer is present in the composition in an amount of from 0.5 to 50% by weight.

5. The insecticidal composition according to any preceding claim, further comprising one or more salts of micronutrients.

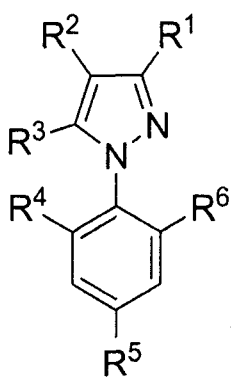
6. The insecticidal composition according to any preceding claim, wherein the compound of general formula (I) and the nitrogen-based fertilizer are present in a weight ratio of from 1:20 to 20:1.

7. The insecticidal composition according to any preceding claim, further comprising one or more auxiliaries selected from a solvent, a surfactant, a stabilizer, an anti-foaming agent, an anti-freezing agent, a preservative, an antioxidant, a colorant, a thickener, an inert filler, and mixtures thereof.

8. The insecticidal composition according to any preceding claim, wherein the composition is a granule formulation, suspension concentrate, water-

dispersible granule formulation, water-soluble granule formulation, water-dispersible powder formulation, water-soluble powder formulation, or a flowable suspension formulation.

9. A method of protecting a plant at a locus comprising applying to the locus a compound of the general formula (I):



(I)

in which:

R^1 is alkyl, halogen, or CN;

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R^3 is hydrogen, halogen, NR^8R^9, $S(O)_nR^{10}$, C(O) R^{11}, alkyl, haloalkyl, OR^{12}, or $N=CR^{13}R^{14}$;

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R^5 is hydrogen, halogen, haloalkyl, haloalkoxy, or $S(O)_pR^{15}$;

R^7, R^{10}, R^{12} and R^{15} each independently represent alkyl or haloalkyl;

R^8 and R^9 each independently represent hydrogen, alkyl, alkenyl, haloalkyl, alkoxycarbonyl, or $S(O)_qCF_3$;

R^{11} and R^{14} each independently represent hydrogen or alkyl;

R^{13} is phenyl optionally substituted by one or more halogen atoms or a member selected from OH, alkyl, alkoxy, and cyano; and

m, n, p, and q independently represent 0, 1, or 2;

and a nitrogen-based fertilizer.

10. The method according to claim 9, wherein the compound of general formula (I) and the nitrogen-based fertilizer are applied at the same time.

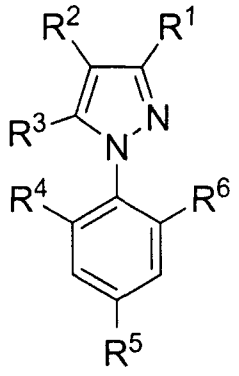
11. The method according to claim 10, comprising applying to the locus a composition according to any of claims 1 to 8.

12. The method according to any of claims 9 to 11, wherein the compound of general formula (I) and the nitrogen-based fertilizer are applied to one or more parts of the plant or to the surroundings of the plant.

13. The method according to any of claims 9 to12, wherein the plant is selected from a cereal, a fruit, a leguminous plant, an oil plant, a *cucurbitaceae*, a fibrous plant, a vegetable, a *lauraceae*, or an ornamental plant.

14. The use of a composition as defined in any of claims 1 to 8 to treat plants at a locus.

15. A method for reducing the phytoxic effects of a compound of general formula (I):



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R^5 is hydrogen, halogen, haloalkyl, haloalkoxy, or $S(O)_pR^{15}$;

R^7, R^{10}, R^{12} and R^{15} each independently represent alkyl or haloalkyl;

R^8 and R^9 each independently represent hydrogen, alkyl, alkenyl, haloalkyl, alkoxycarbonyl, or $S(O)_qCF_3$;

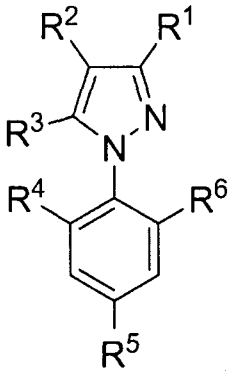
R^{11} and R^{14} each independently represent hydrogen or alkyl;

R^{13} is phenyl optionally substituted by one or more halogen atoms or a member selected from OH, alkyl, alkoxy, and cyano; and

m, n, p, and q independently represent 0, 1, or 2;

on a plant at a locus, the method comprising applying the compound of general formula (I) to the locus with a nitrogen-based fertilizer.

16. The use of a nitrogen-based fertilizer to reduce the phytotoxic effects of a compound of general formula (I):



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R^7, R^{10}, R^{12} and R^{15} each independently represent alkyl or haloalkyl;

R^8 and R^9 each independently represent hydrogen, alkyl, alkenyl, haloalkyl, alkoxycarbonyl, or $S(O)_qCF_3$;

R^{11} and R^{14} each independently represent hydrogen or alkyl;

R^{13} is phenyl optionally substituted by one or more halogen atoms or a member selected from OH, alkyl, alkoxy, and cyano; and

m, n, p, and q independently represent 0, 1, or 2.

17. An insecticidal composition substantially as hereinbefore described.

18. A method of treating plants at a locus substantially as hereinbefore described.

19. A method of reducing the phytotoxic effects of an insecticidal compound as hereinbefore described.

Dated this 05th day of May, 2014

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OF K & S PARTNERS
ATTORNEY FOR THE APPLICANT(S)