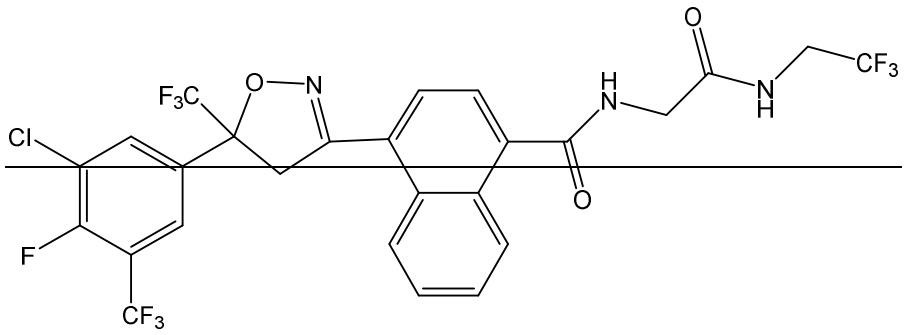
WHAT IS CLAIMED IS:

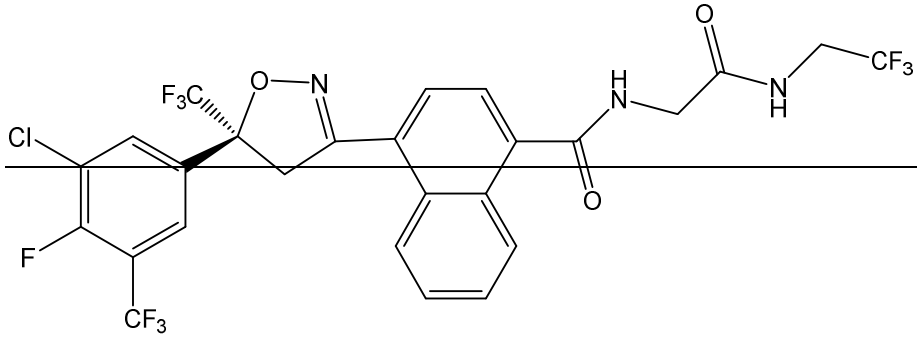
~~1. A pesticidal and parasiticidal isoxazoline compound of formula (Ie):~~



~~(Ie)~~

~~or a pharmaceutically or agriculturally acceptable salt thereof.~~

~~2. A pesticidal and parasiticidal isoxazoline compound of formula *(S)* Ie:~~



~~*(S)* Ie~~

~~or a pharmaceutically or agriculturally acceptable salt thereof.~~

~~3. A veterinary parasiticidal composition comprising an effective amount of the compound of formula (Ie) in claim 1 in combination with a pharmaceutically acceptable carrier.~~

~~4. A pesticidal composition for controlling pests that harm plants, plant propagation material, crops or material derived from wood, comprising an effective amount of the compound of formula (Ie) in claim 1 in combination with an agriculturally acceptable carrier.~~

~~5. A veterinary parasiticidal composition comprising an effective amount of the compound of formula *(S)* Ie in claim 2 in combination with a pharmaceutically acceptable carrier.~~

~~6. A pesticidal composition for controlling pests that harm plants, plant propagation material, crops or material derived from wood, comprising an effective amount of the compound~~

of formula (*S*)-Ie in claim 2 in combination with an agriculturally acceptable carrier.

7. A method for the treatment or prevention of a parasitic infestation in an animal comprising administering to the animal an effective amount of the compound of formula (Ie) in claim 1.

8. A method for the treatment or prevention of a parasitic infestation in an animal comprising administering to the animal an effective amount of the compound of formula (S)-Ie in claim 2.

9. method for controlling pests that harm plants, plant propagation material, crops or material derived from wood, comprising administering an effective amount of the compound of formula (Ie) in claim 1 to the plants, the soil in which the plants grow, plant propagation material, crops or material derived from wood.

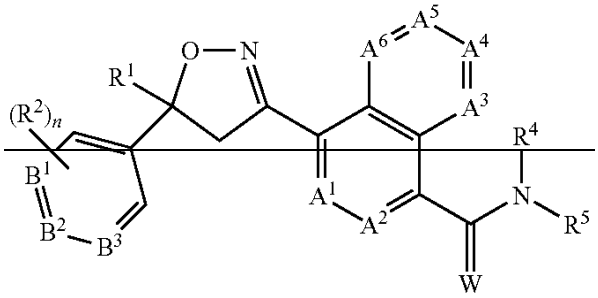
10. method for controlling pests that harm plants, plant propagation material, crops or material derived from wood, comprising administering an effective amount of the compound of formula (S)-Ie in claim 2 to the plants, the soil in which the plants grow, plant propagation material, crops or material derived from wood.

11. A long-acting injectable composition for the treatment or prevention of a parasitic infection or infestation in an animal comprising an effective amount of at least one parasiticidal isoxazoline active agent, a liquid PEG and/or a neutral oil and, optionally, a co-solvent, wherein no other pharmaceutically acceptable polymers are present.

12. The long-acting injectable composition according to claim 11 comprising:

a) an effective amount of at least one parasiticidal isoxazoline active agent, which is:

i) an isoxazoline compound of formula (I):



(I)

wherein:

A^1, A^2, A^3, A^4, A^5 and A^6 are independently selected from the group consisting of CR^3 and N, provided that at most 3 of A^1, A^2, A^3, A^4, A^5 and A^6 are N;

B^1, B^2 and B^3 are independently selected from the group consisting of CR^2 and N;

W is O or S;

R^1 is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^6;

each R^2 is independently H, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, C_2-C_4 alkoxycarbonyl, CN or NO_2;

each R^3 is independently H, halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, CN or NO_2;

R^4 is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl, C_4-C_7 cycloalkylalkyl, C_2-C_7 alkylcarbonyl or C_2-C_7 alkoxycarbonyl;

R^5 is H, OR^{10}, $NR^{11}R^{12}$ or Q^1; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^7; or

R^4 and R^5 are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of C_1-C_2 alkyl, halogen, CN, NO_2 and C_1-C_2 alkoxy;

each R^6 is independently halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, CN or NO_2;

each R^7 is independently halogen; C_1-C_6 alkyl, C_3-C_6 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 alkylamino, C_2-C_8 dialkylamino, C_3-C_6 cycloalkylamino, C_2-C_7 alkylcarbonyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkylaminocarbonyl, C_3-C_9 dialkylaminocarbonyl, C_2-C_7 haloalkylcarbonyl, C_2-C_7 haloalkoxycarbonyl, C_2-C_7

haloalkylaminocarbonyl, C_3-C_9 dihaloalkylaminocarbonyl, hydroxy, NH_2, CN or NO_2; or Q^2;

each R^8 is independently halogen, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, C_2-C_4 alkoxycarbonyl, CN or NO_2;

each R^9 is independently halogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_3-C_6 cycloalkyl, C_3-C_6 halocycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, C_1-C_6 alkylthio, C_1-C_6 haloalkylthio, C_1-C_6 alkylsulfinyl, C_1-C_6 haloalkylsulfinyl, C_1-C_6 alkylsulfonyl, C_1-C_6 haloalkylsulfonyl, C_1-C_6 alkylamino, C_2-C_6 dialkylamino, CN, NO_2, phenyl or pyridinyl;

R^{10} is H; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one of more halogen;

R^{11} is H, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl, C_4-C_7 cycloalkylalkyl, C_2-C_7 alkylcarbonyl or C_2-C_7 alkoxycarbonyl;

R^{12} is H; Q^3; or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_6 cycloalkyl, C_4-C_7 alkylcycloalkyl or C_4-C_7 cycloalkylalkyl, each optionally substituted with one or more substituents independently selected from R^7; or

R^{11} and R^{12} are taken together with the nitrogen to which they are attached to form a ring containing 2 to 6 atoms of carbon and optionally one additional atom selected from the group consisting of N, S and O, said ring optionally substituted with 1 to 4 substituents independently selected from the group consisting of C_1-C_2 alkyl, halogen, CN, NO_2 and C_1-C_2 alkoxy;

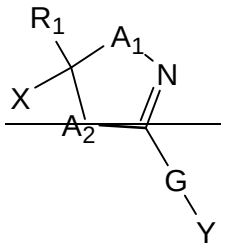
Q^1 is a phenyl ring, a 5- or 6-membered heterocyclic ring, or an 8-, 9- or 10-membered fused bicyclic ring system optionally containing one to three heteroatoms selected from up to 1 O, up to 1 S and up to 3 N, each ring or ring system optionally substituted with one or more substituents independently selected from R^8;

each Q^2 is independently a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^9;

Q^3 is a phenyl ring or a 5- or 6-membered heterocyclic ring, each ring optionally substituted with one or more substituents independently selected from R^9; and

n is 0, 1 or 2; or a pharmaceutically acceptable salt thereof; and/or

ii) an isoxazoline compound of formula (II):



~~(II)~~

~~wherein:~~

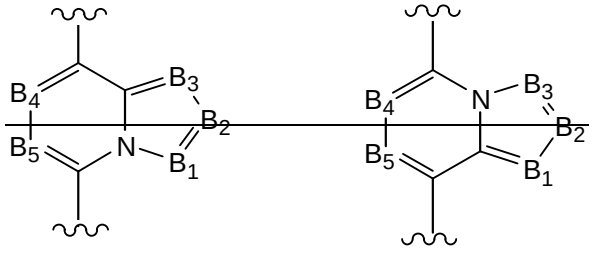
~~R_1 is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, halocycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;~~

~~X is aryl or heteroaryl, which may be unsubstituted or substituted by one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;~~

~~A_1 is oxygen; and~~

~~A_2 is oxygen, NR_2 or CR_7R_8;~~

~~G is G-1 or G-2;~~

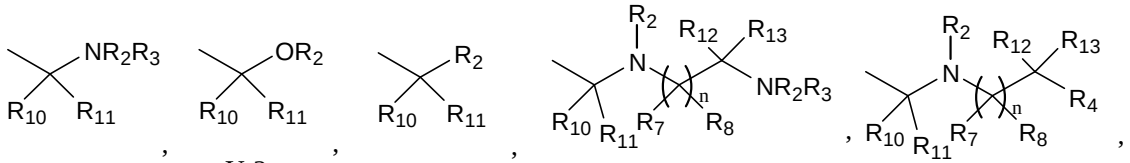


~~G-1 G-2~~

~~B_1, B_2, B_3, B_4 and B_5 are independently N or C-R_9;~~

~~Y is hydrogen, halogen, -CN; or Y is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, aryl, or heterocyclyl or heteroaryl each of which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy,~~

haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2; or Y is Y-1, Y-2, Y-3, Y-4, Y-5, Y-6, Y-7, Y-8, Y-9, Y-10, Y-11, Y-12 or Y-13;



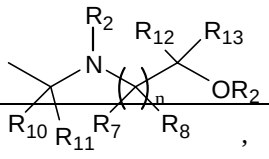
Y-1

Y-2

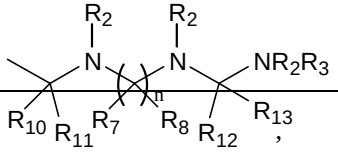
Y-3

Y-4

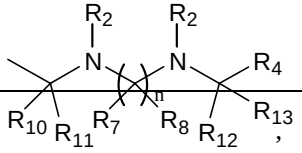
Y-5



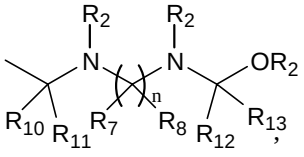
Y-6



Y-7



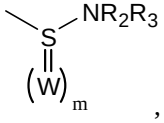
Y-8



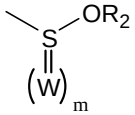
Y-9



Y-10

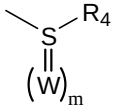


Y-11



Y-12

or



Y-13

R_2, R_3 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, $R_{10}S(O)$-, $R_{10}S(O)_2$-, $R_{10}C(O)$-, $R_{10}C(S)$-, $R_{10}R_{11}NC(O)$-, $R_{10}R_{11}NC(S)$- $R_{10}OC(O)$-;

R_4, R_5 and R_6 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, aryl or heteroaryl;

R_7 and R_8 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl or haloalkynyl;

R_9 is hydrogen, halogen, -CN, or alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, halocycloalkyl, alkylcycloalkyl or cycloalkylalkyl, each which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or -NO_2;

R_{10}, R_{11}, R_{12} and R_{13} are each independently hydrogen, alkyl, haloalkyl, thioalkyl,

alkylthioalkyl, hydroxyalkyl, alkoxyalkyl, alkenyl, haloalkenyl, alkynyl or haloalkynyl; or

R_{10} together with R_{11} form =O, =S or $=NR_2$; or

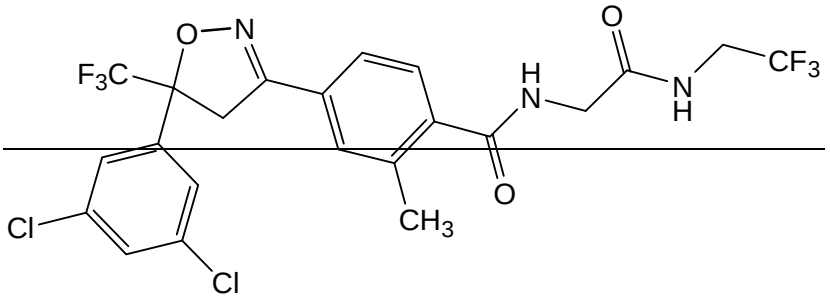
R_{12} together with R_{13} form =O, =S or $=NR_2$;

W is O, S or NR_2;

n is 1-4; and

m is 0, 1 or 2; or a pharmaceutically acceptable salt thereof; and/or

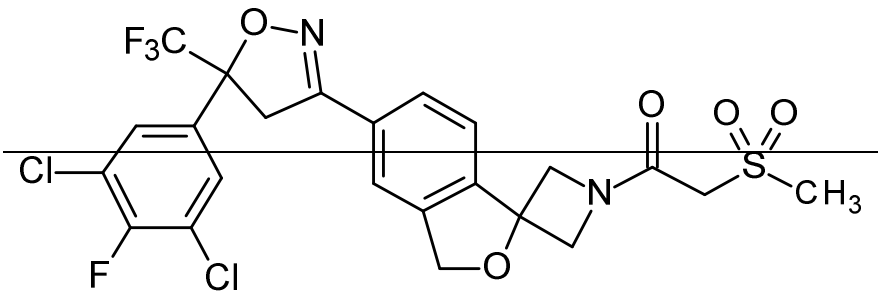
iv) an isoxazoline compound of formula (III)



(III)

or a pharmaceutically acceptable salt thereof; and/or

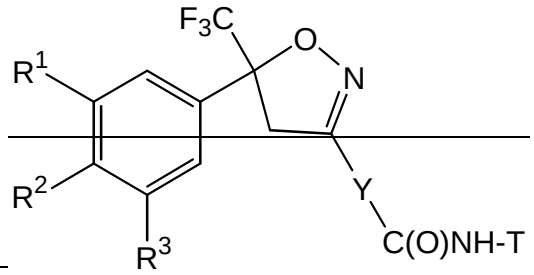
iv) an isoxazoline compound of formula (IV)



(IV)

or a pharmaceutically acceptable salt thereof; and/or

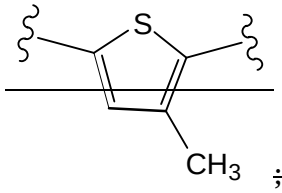
v) an isoxazoline compound of formula (V):



(V)

wherein R^1, R^2 and R^3 are independently H, Cl, F or CF_3;

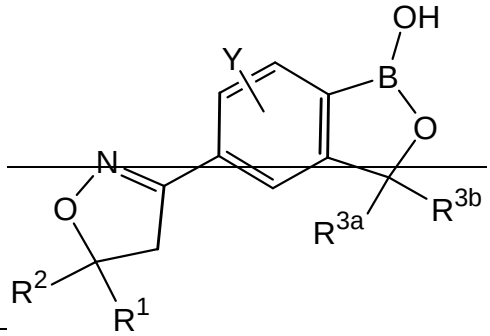
Y is the diradical group



; and

T is a C_1-C_6-alkyl group which is unsubstituted or substituted by halogen, cyano, nitro, amino, hydroxyl, C_1-C_6-alkoxy, C_1-C_6-haloalkoxy, C_1-C_6-alkylthio, C_1-C_6-alkylthio, carboxy, carbamoyl or C_2-C_6-alkanoyl group which may be unsubstituted or substituted in the alkyl portion by halogen or a pharmaceutical acceptable salt thereof; and/or

vi) an isoxazoline compound of formula (VI):



(VI)

wherein Y is hydrogen, fluoro, chloro or bromo;

R^1 is phenyl substituted with 2-4 substituents selected from halogen, methyl, difluoromethyl, trifluoromethyl, methoxy, trifluoromethoxy or trifluoroethoxy;

R^2 is methyl, fluoromethyl, trifluoromethyl or perfluoroethyl;

R^{3a} and R^{3b} are independently selected from hydrogen, methyl, ethyl or fluoromethyl; or R^{3a} and R^{3b} together combine with the carbon to which they are attached to form a cyclopentyl ring or a cyclohexyl ring; or a pharmaceutically acceptable salt thereof;

b) at least one pharmaceutically acceptable polymer which is a liquid PEG and/or a neutral oil;

c) optionally, at least one co-solvent;

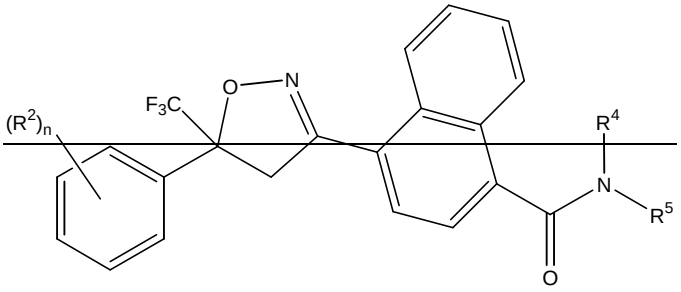
d) optionally, an antioxidant; and

e) optionally at least one pharmaceutically acceptable additive, excipient or mixtures thereof

wherein no other pharmaceutically acceptable polymers are present.

13. The long-acting injectable composition according to claim 12, wherein the at least one isoxazoline compound is a compound of formula (I), or a pharmaceutically acceptable salt thereof.

14. The long-acting injectable composition according to claim 13, wherein in the isoxazoline active agent is a compound of the formula (Ib):



(Ib)

or a pharmaceutically acceptable salt thereof,

wherein

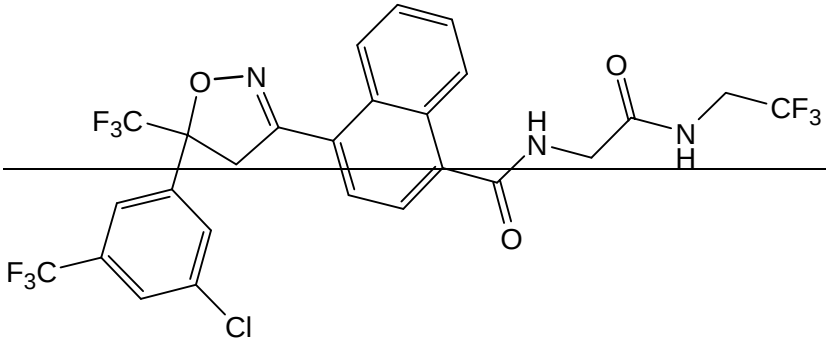
R^2 independently is halogen, C_1-C_6 alkyl or C_1-C_6 haloalkyl

R^4 is H or C_1-C_6 alkyl;

R^5 is C_1-C_4 alkyl optionally substituted with one or more R^7; and R^7 is C_2-C_7 alkylcarbonyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkylaminocarbonyl, C_3-C_9 dialkylaminocarbonyl, C_2-C_7 haloalkylcarbonyl, C_2-C_7 haloalkoxycarbonyl, C_2-C_7 haloalkylaminocarbonyl, C_3-C_9 dihaloalkylaminocarbonyl; and

n is 0, 1 or 2.

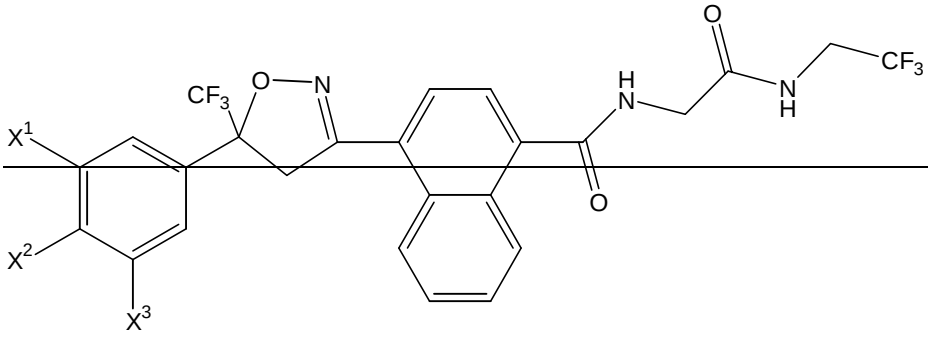
~~15. The long-acting injectable composition according to claim 14, wherein the isoxazoline active agent is a compound of formula (Ia):~~



~~(Ia)~~

~~or a pharmaceutically acceptable salt thereof.~~

~~16. The long-acting injectable composition according to claim 13, wherein the isoxazoline active agent is a compound of formula (Ic):~~



~~(Ic)~~

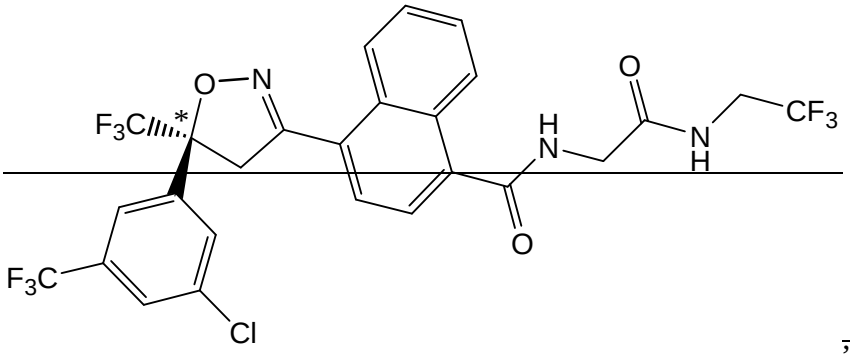
~~or a pharmaceutically acceptable salt thereof;~~

~~wherein~~

~~X^1, X^2 and X^3 are each independently H, halogen, C_1-C_3alkyl or C_1-C_3haloalkyl.~~

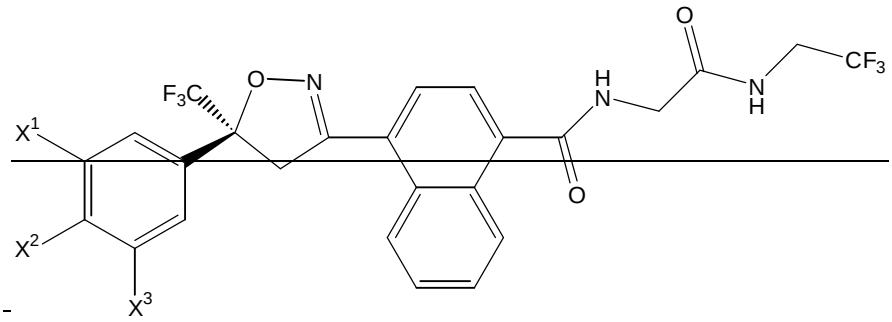
~~17. The long-acting injectable composition according to claim 11 or 12, wherein the isoxazoline active agent is enriched in an enantiomer.~~

~~18. The long-acting injectable composition according to claim 17, wherein the isoxazoline active agent is a compound of formula (*S*)-Ia or (*S*)-Ic:~~



;

~~(*S*) Ia~~



~~(*S*) Ic~~

~~wherein X^1, X^2 and X^3 are independently chloro, fluoro or CF_3;~~

~~or a pharmaceutically acceptable salt thereof.~~

~~19. The long-acting injectable composition according to any one of claims 11 to 18, wherein the liquid PEG is PEG 200, PEG 300 or PEG 400, or a mixture thereof.~~

~~20. The long-acting injectable composition according to any one of claims 11 to 19, wherein the composition comprises a co-solvent, and wherein said co-solvent is a C_1-C_6alcohol, a glycol ether, glycerol, propylene glycol, a cyclic carbonate, 2-pyrrolidone, N-methylpyrrolidone, dimethyl isosorbide, dimethylacetamide, dimethylsulfoxide or glycerol formal, or a combination thereof.~~

~~21. The long-acting injectable composition according to any one of claims 11 to 19, wherein the composition comprises a co-solvent, and wherein said co-solvent is benzyl alcohol, benzyl benzoate, ethyl acetate, triacetin, a lipid, a C_8-C_{10} triglyceride, a C_8-C_{10} triglyceride combined with linoleic acid, a C_8-C_{10} triglyceride combined with succinic acid, a propylene glycol diester of C_8-C_{10} fatty acids, castor oil, cottonseed oil, sesame oil, soybean oil or safflower oil, or a combination thereof.~~

22. The long-acting injectable composition according to any one of claims 11 to 19, wherein the composition comprises a co-solvent, and wherein the co-solvent is ethanol, isopropanol or benzyl alcohol, or a mixture thereof.

23. The long-acting injectable composition according to any one of claims 11 to 22, wherein the composition comprises a pharmaceutically acceptable excipient, and wherein the excipient is a surfactant.

24. The long-acting injectable composition according to claim 23, wherein the surfactant is selected from the group consisting of glyceryl monooleate, polyoxyethylene sorbitan fatty acid esters, sorbitan monooleate, polyvinyl alcohol, polysorbate 20, polysorbate 80, *d*-α-tocopherol polyethylene glycol 1000 succinate, sodium lauryl sulfate, co-polymers of ethylene oxide and propylene oxide, polyethylene glycol castor oil derivatives, propylene glycol monolaurate, glycerol caprylate/caprate, polyglycolized glycerides, PEG 300 caprylic/capric glycerides, PEG 400 caprylic/capric glycerides, PEG 300 oleic glycerides, PEG 300 linoleic glycerides, polyethylene glycol stearates and polyethylene glycol hydroxy stearates, or a combination thereof.

25. The long-acting injectable composition according to claim 13 comprising:

a) about 0.5 to about 30% (w/v) of the isoxazoline compounds of formula (I);

b) pharmaceutically acceptable polymer which is a liquid PEG, and/or a neutral oil;

c) optionally, about 1% to 15% (w/v) of co-solvent, wherein said co-solvent is ethanol, isopropanol or benzyl alcohol, or a combination thereof;

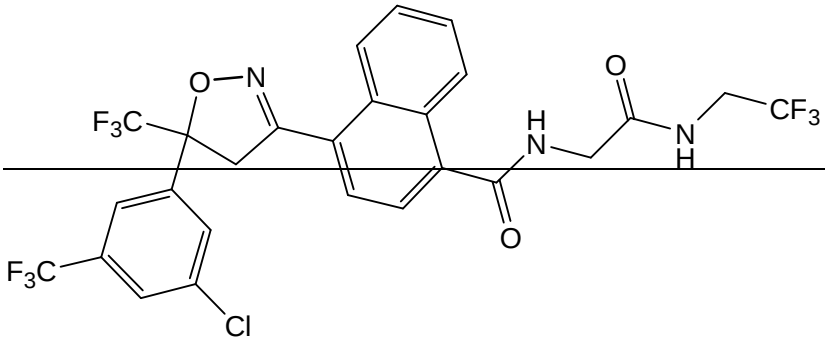
d) optionally, about 0.01% to about 2% (w/v) of an antioxidant; and

e) optionally about 0.01% to about 10% (w/v) of a pharmaceutically acceptable additive, excipient or mixtures thereof

wherein the only pharmaceutically acceptable polymer present in said long-acting injectable composition is a liquid PEG and wherein the liquid PEG and/or the neutral oil are present in the overall composition in a proportion representing the complement to 100% of the composition.

26. The long-acting injectable composition according to claim 25, wherein the composition comprises:

a) about 5 to 15% (w/v) of an isoxazoline compound of formula (Ia):



~~(Ia)~~

~~or a pharmaceutically acceptable salt thereof,~~

~~b) pharmaceutically acceptable polymer which is a liquid PEG;~~

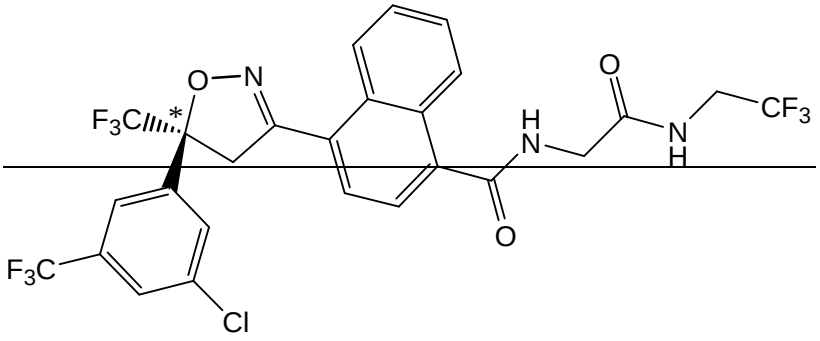
~~c) optionally, about 2% to 10% (w/v) of co-solvent, wherein said co-solvent is ethanol, isopropanol or benzyl alcohol, or a combination thereof;~~

~~d) optionally, about 0.01% to about 2% (w/v) of an antioxidant; and~~

~~e) optionally, about 0.5% to about 10% (w/v) of a pharmaceutically acceptable additive, excipient or mixtures thereof~~

~~wherein the only pharmaceutically acceptable polymer present in said long-acting injectable composition is a liquid PEG and wherein the liquid PEG is present in the overall composition in a proportion representing the complement to 100% of the composition.~~

~~27. The long-acting injectable composition according to claim 26, wherein the isoxazoline compound is:~~

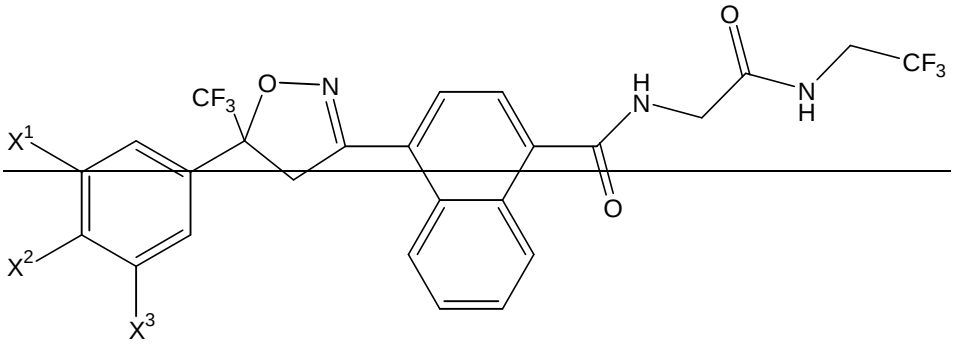


~~(*S*) 1a~~

~~or a pharmaceutically acceptable salt thereof.~~

~~28. The long-acting injectable composition according to claim 25, wherein the composition comprises:~~

a) about 5 to 15% (w/v) of an isoxazoline compound of formula (Ic):



(Ic)

or a pharmaceutically acceptable salt thereof;

wherein

X^1, X^2 and X^3 are each independently H, halogen, C_1-C_3alkyl or C_1-C_3haloalkyl;

b) pharmaceutically acceptable polymer which is a liquid PEG;

c) optionally, about 2% to 10% (w/v) of co-solvent, wherein said co-solvent is ethanol, isopropanol or benzyl alcohol, or a combination thereof;

d) optionally, about 0.01% to about 2% (w/v) of an antioxidant; and

e) optionally, about 0.5% to about 10% (w/v) of a pharmaceutically acceptable additive, excipient or mixtures thereof

wherein the only pharmaceutically acceptable polymer present in said long-acting injectable composition is a liquid PEG and wherein the liquid PEG is present in the overall composition in a proportion representing the complement to 100% of the composition.

29. The long-acting injectable composition according to claim 28, wherein;

X^1 is Cl; X^2 is F; and X^3 is CF_3.

30. The long-acting injectable composition according to any one of claims 11 to 29, wherein the parasites are treated or prevented for about 3 to 6 months.

31. The long-acting injectable composition according to any one of claims 11 to 29 wherein the parasites are treated or prevented for about 5 to 6 months.

32. The long-acting injectable composition according to any one of claims 11 to 29, wherein the parasites are treated or prevented for about 6 months.

33. The long-acting injectable composition according to any one of claim 30, 31 or 33 wherein the parasites are fleas or ticks

~~34. The long-acting composition according to any one of claims 11 to 33, which further comprises an effective amount at least one additional active agent.~~

~~35. The long-acting composition according to claim 34, wherein the additional pharmaceutically active agent is a macrocyclic lactone, a neonicotinoid active agent, a 1-N-arylpyrazole active agent, a cyclic depsipeptide, a benzimidazole, an imidazothiazole, a tetrahydropyrimidine active agent, an organophosphate active agent, levamisole, a paraherquamide active agent, a marcfortine active agent, praziquantel, closantel, pyrantel, morantel, clorsulon, a spinosyn active agent, a spinosoid active agent, an amino acetonitrile active agent, an aryloazol-2-yl cyanoethyl active agent or an insect growth regulator.~~

~~36. The long-acting composition according to claim 35, wherein the macrocyclic lactone is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, ML-1,694,554, milbemectin, milbemycin D, moxidectin or nemadectin.~~

~~37. A method for treating or preventing parasites in an animal in need thereof for a period of 3 to 6 months which comprises administering the long acting injectable composition according to claim 1 to said animal.~~

~~38. The method according to claim 37 wherein the animal is a dog, a cat, an ovine or a bovine.~~

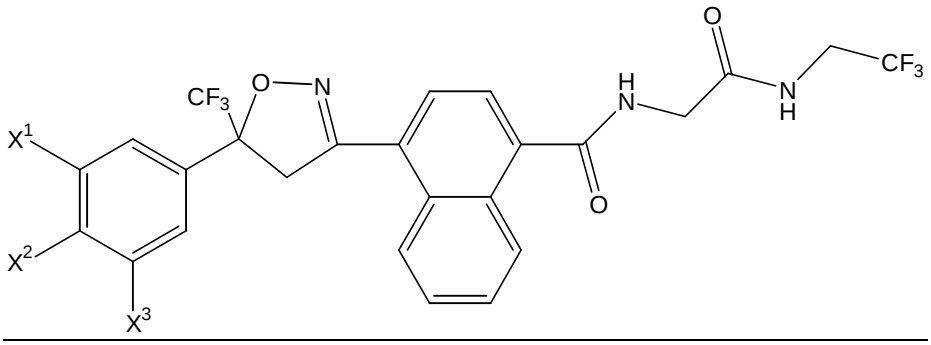
~~39. The method according to claim 37 wherein the parasites are treated or prevented for about 5 to 6 months~~

~~40. The method according to claim 37 wherein the parasites are fleas and/or ticks.~~

~~41. The use of an isoxazoline in the preparation of a long-acting injectable composition for the treatment or prevention of a parasite infestation or infection on or in an animal.~~

1. A long-acting injectable composition for the treatment or prevention of a parasitic infection or infestation in a non-human animal comprising:

a) an effective amount of at least one parasiticidal isoxazoline active agent, which is a compound of formula (Ic):



(Ic)

or a pharmaceutically acceptable salt thereof:

wherein

X^1, X^2 and X^2 are each independently H, halogen, C_1-C_3alkyl or C_1-C_3haloalkyl;

b) at least one pharmaceutically acceptable polymer which is a liquid PEG, and/or a neutral oil that is selected from triglycerides of fractionated plant fatty acids with chain lengths of C_8 to C_{10};

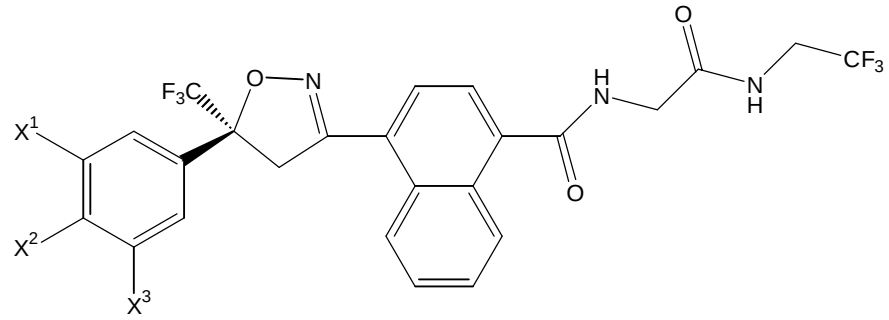
c) optionally, at least one co-solvent;

d) optionally, an antioxidant; and

e) optionally at least one pharmaceutically acceptable additive, excipient or mixtures thereof wherein no other pharmaceutically acceptable polymers are present.

2. The long-acting injectable composition according to claim 1, wherein the isoxazoline active agent is enriched in an enantiomer.

3. The long-acting injectable composition according to claim 2, wherein the isoxazoline active agent is a compound of formula (*S*)-Ic:



(*S*)-Ic

wherein X^1, X^2 and X^3 are independently chloro, fluoro or CF_3;
or a pharmaceutically acceptable salt thereof.

4. The long-acting injectable composition according to any one of claims 1 to 3, wherein; X^1 is Cl; X^2 is F; and X^3 is $–CF_3$.

5. The long-acting injectable composition according to any one of claims 1 to 4, wherein the liquid PEG is PEG 200, PEG 300 or PEG 400, or a mixture thereof.

6. The long-acting injectable composition according to any one of claims 1 to 5, wherein the composition comprises a co-solvent, and wherein the co-solvent is ethanol, isopropanol or benzyl alcohol, or a mixture thereof.

7. The long-acting composition according to any one of claims 1 to 6, which further comprises an effective amount of at least one additional active agent.

8. The long-acting composition according to claim 7, wherein the additional pharmaceutically active agent is a macrocyclic lactone, a neonicotinoid active agent, a 1-N-arylpyrazole active agent, a cyclic depsipeptide, a benzimidazole, an imidazothiazole, a tetrahydropyrimidine active agent, an organophosphate active agent, levamisole, a paraherquamide active agent, a marcfortine active agent, praziquantel, closantel, pyrantel, morantel, clorsulon, a spinosyn active agent, a spinosoid active agent, an amino acetonitrile active agent, an aryloazol-2-yl cyanoethyl active agent or an insect growth regulator.

9. The long-acting composition according to claim 8, wherein the macrocyclic lactone is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, ML-1,694,554, milbemectin, milbemycin D, moxidectin or nemadectin.

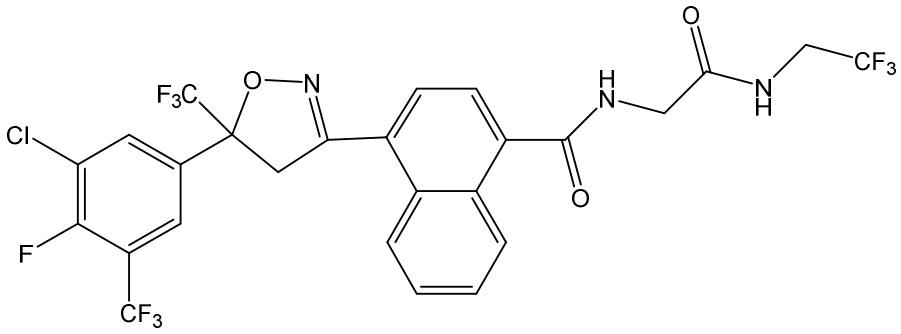
10. Use of a long-acting injectable composition according to claim 1 in the manufacture of medicament for treating or preventing parasites in an animal in need thereof, wherein the parasites are treated or prevented for about 3 to 6 months.

11. The use according to claim 10 wherein the animal is a dog, a cat, an ovine or a bovine.

12. The use according to claim 10, wherein the parasites are treated or prevented for about 5 to 6 months.

13. The use according to claim 10 wherein the parasites are fleas and/or ticks.

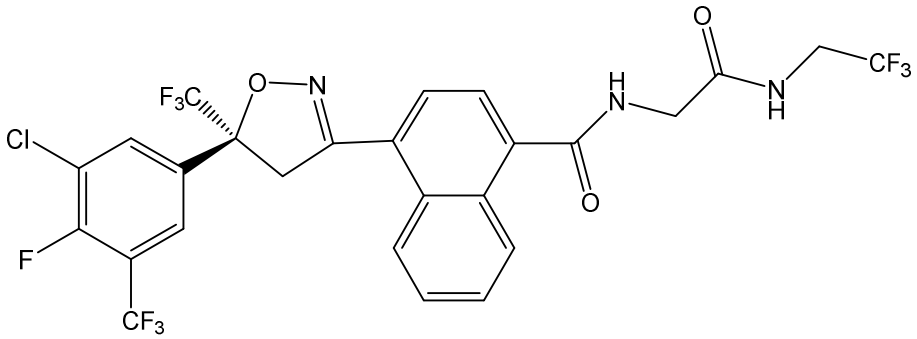
14. A pesticidal and parasiticidal isoxazoline compound of formula (Ie):



(Ie)

or a pharmaceutically or agriculturally acceptable salt thereof.

15. A pesticidal and parasiticidal isoxazoline compound of formula *(S)*-Ie:



(S)-Ie

or a pharmaceutically or agriculturally acceptable salt thereof.

16. A veterinary parasiticidal composition comprising an effective amount of the compound of formula (Ie) as defined in claim 14, or a compound of formula *(S)*-Ie as defined in claim 15, in combination with a pharmaceutically acceptable carrier.

17. The compound of formula (Ie) as defined in claim 14 or the compound of formula (S)-Ie as defined in claim 15 for use in treating or preventing a parasitic infestation in an animal.

18. Use of the compound of formula (Ie) as defined in claim 14 or the compound of formula (S)-Ie as defined in claim 15 in the manufacture of a medicament for treating or preventing a parasitic infestation in an animal.

19. The use of claim 17 or claim 18, wherein the animal is a dog, a cat, an ovine or a bovine.

20. The use of any one of claims 17 to 19, wherein the parasites are fleas and/or ticks.