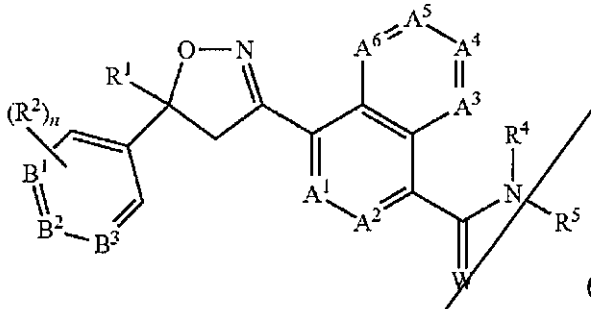
WHAT IS CLAIMED IS:

1. A topical veterinary composition for treating or preventing a parasitic infection or infestation in an animal comprising:

a) at least one isoxazoline active agent 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; and

b) a pharmaceutically acceptable carrier that is suitable for the application to the skin of an animal; and wherein the carrier does not comprise glycofurol and is not a binary mixture of propylene glycol and glycerol formal.

2. The topical veterinary composition of claim 1, wherein:

W is O;

R^4 is H or C_1-C_6 alkyl;

R^5 is -$CH_2C(O)NHCH_2CF_3$;

each of A^1, A^2, A^3, A^4, A^5 and A^6 is CH;

R^1 is C_1-C_6 alkyl each optionally substituted with one or more substituents independently selected from R^6;

R^6 is halogen or C_1-C_6 alkyl; and

B^1, B^2, and B^3 are independently CH, C-halogen, C-C_1-C_6 alkyl, C-C_1-C_6 haloalkyl, or C-C_1-C_6 alkoxy.

3. The topical veterinary composition of claim 1, wherein:

W is O;

R^1 is CF_3;

B^2 is CH;

B^1 is chloro;

B^3 is CF_3;

each of A^1, A^2, A^3, A^4, A^5 and A^6 is CH;

R^4 is H; and

R^5 is $-CH_2C(O)NHCH_2CF_3$.

4. The topical veterinary composition of claim 1, wherein the pharmaceutically acceptable carrier comprises a diester of a dicarboxylic acid, a glycol ester, a glycol ether, a fatty acid ester, a polyethylene glycol, or polyethylene glycol ester, an oil, an alcohol, a glycerol ester, a glycerol ether, propylene glycol, ethylene glycol, a glycol carbonate, dimethyl isosorbide, N-methylpyrrolidone, or a mixture thereof.

5. The topical veterinary composition of claim 4, wherein the diester of a dicarboxylic acid is a diester of a C_6-C_{16} dicarboxylic acid.

6. The topical veterinary composition of claim 5, wherein the diester of a C_6-C_{16} dicarboxylic acid is diethyl sebacate or diisopropyl adipate.

7. The topical veterinary composition of claim 4, wherein the pharmaceutically acceptable carrier comprises mixture of a diester of a dicarboxylic acid and a propylene glycol ester, a fatty acid ester, a polyethylene glycol ester, a polyethylene glycol, an oil, a C_6-C_{20} long-chain aliphatic alcohol, a C_1-C_8 alcohol, glycol ether, or a combination thereof.

8. The topical veterinary composition of claim 4, wherein the pharmaceutically acceptable carrier comprises a mixture of a diester of a dicarboxylic acid and further comprises a mixed ester of sucrose and acetic and isobutyric acid, a low melting wax, a hard fat or a block co-polymer of ethylene oxide and propylene oxide, or a combination thereof.

9. The topical veterinary composition of claim 4, wherein the pharmaceutically acceptable carrier comprises dimethyl isosorbide, glycerol formal, propylene carbonate, triacetin,

diethyleneglycol monoethyl ether, polyethylene glycol 400 or benzyl alcohol, or a mixture thereof.

10. The topical veterinary composition of any one of claims 1 to 9, further comprising at least a second active agent.

11. The topical veterinary composition of claim 10, wherein the at least second active agent is an insect growth regulator, a neonicotinoid or an avermectin or milbemycin.

12. The topical veterinary composition of claim 11, wherein the isoxazoline active agent is 4-[5-[3-chloro-5-(trifluoromethyl)phenyl]-4,5-dihydro-5-(trifluoromethyl)-3-isoxazolyl]-N-[2-oxo-2-[(2,2,2-trifluoroethyl)amino]ethyl]-1-naphthalanecarboxamide and the neonicotinoid is nitenpyram.

13. The topical veterinary composition of claim 11, wherein the at least second active agent is an insect growth regulator.

14. The topical veterinary composition of claim 13, wherein the insect growth regulator is (S)-methoprene, pyriproxyfen, hydroprene, cyromazine, fluazuron, lufenuron, or novaluron.

15. The topical veterinary composition of claim 11, wherein the avermectin or milbemycin is eprinomectin, ivermectin, selamectin, milbemectin, milbemycin D, milbemycin oxime, or moxidectin

16. The topical veterinary composition of claim 10, wherein the at least second active agent is an anthelmintic active agent selected from thiabendazole, oxibendazole, mebendazole, fenbendazole, oxfendazole, albendazole, triclabendazole, febantel, levamisole, pyrantel, morantel, praziquantel, closantel, clorsulon, an amino acetonitrile active agent, or an aryloazol-2-yl cyanoethylamino active agent.

17. The topical veterinary composition of claim 1, wherein the composition is a spot-on

composition.

18. The topical veterinary composition of claim 1, wherein the composition is a pour-on composition.

19. A method for the treatment or prevention of a parasitic infestation or infection in an animal comprising administering to the animal an effective amount of the topical veterinary composition of claim 1.

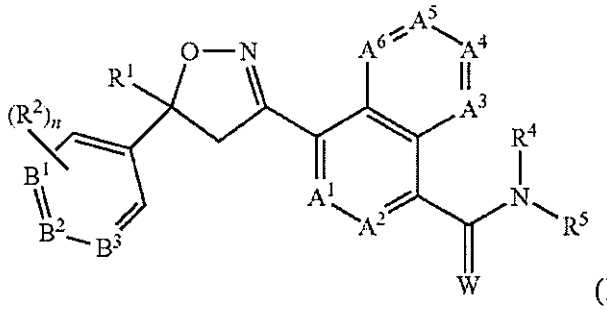
20. The method of claim 19, wherein the isoxazoline is 4-[5-[3-chloro-5-(trifluoromethyl)phenyl]-4,5-dihydro-5-(trifluoromethyl)-3-isoxazolyl]-N-[2-oxo-2-[(2,2,2-trifluoroethyl)amino]ethyl]-1-naphthalenecarboxamide.

21. Use of an isoxazoline of formula (I) in claim 1 in the preparation of a topical veterinary composition for the treatment or protection of an animal against parasites.

WHAT IS CLAIMED IS:

1. A spot-on veterinary composition for treating or preventing a parasitic infestation in an animal comprising:

(a) from about 1 to about 25% (w/v) of at least one isoxazoline active agent of Formula (I):



(I)

or a pharmaceutically acceptable salt thereof

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 or 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 the group consisting of 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; and

(b) a pharmaceutically acceptable carrier, which is suitable for an application to the skin of an animal, comprising a dialkyl ester of a C_{10}-C_{22} dicarboxylic acid

wherein said spot-on composition is a solution;

wherein about 0.1 ml to about 10 ml of said spot-on composition is applied onto the animal; and

wherein said spot-on composition controls a rate of release of the isoxazoline active agent into plasma of the animal and enhances spreading of the isoxazoline active agent on the skin of

the animal in order to maintain efficacious levels of the isoxazoline active agent in the plasma of said animal, thereby extending efficacy, wherein said spot-on composition is effective for a period of at least 1 month.

2. The spot-on veterinary composition of claim 1, wherein:

W is O;

R^4 is H or C_1-C_6 alkyl;

R^5 is $-CH_2C(O)NHCH_2CF_3$;

each of A^1, A^2, A^3, A^4, A^5 and A^6 is CH;

R^1 is C_1-C_6 alkyl each optionally substituted with one or more substituents independently selected from R^6;

R^6 is halogen or C_1-C_6 alkyl; and

B^1, B^2, and B^3 are independently CH, C-halogen, C-C_1-C_6 alkyl, C-C_1-C_6 haloalkyl, or C-C_1-C_6 alkoxy.

3. The spot-on veterinary composition of claim 1, wherein:

W is O;

R^1 is CF_3;

B^2 is CH;

B^1 is C-Cl;

B^3 is C-CF_3;

each of A^1, A^2, A^3, A^4, A^5 and A^6 is CH;

R^4 is H; and

R^5 is $-CH_2C(O)NHCH_2CF_3$.

4. The spot-on veterinary composition of claim 1, wherein the dialkyl ester of a C_{10}-C_{22}

dicarboxylic acid is diethyl sebacate, dibutyl sebacate or diisopropyl sebacate.

5. The spot-on veterinary composition of claim 3, wherein the dialkyl ester of a C_{10}-C_{22} dicarboxylic acid is diethyl sebacate, dibutyl sebacate or diisopropyl sebacate.

6. The spot-on veterinary composition of claim 1, further comprising at least one second active agent, which is an avermectin or milbemycin.

7. The spot-on veterinary composition of claim 5, further comprising at least one second active agent which is an avermectin or milbemycin.

8. The spot-on veterinary composition of claim 6, wherein the avermectin or milbemycin is eprinomectin, ivermectin, selamectin, milbemectin, milbemycin D, milbemycin oxime, or moxidectin.

9. The spot-on veterinary composition of claim 7, wherein the avermectin or milbemycin is eprinomectin, ivermectin, selamectin, milbemectin, milbemycin D, milbemycin oxime, or moxidectin.

10. The spot-on veterinary composition of claim 1, wherein the isoxazoline active agent of Formula (I) is present in a concentration of about 1 to about 5% (w/v).

11. The spot-on veterinary composition of claim 1, wherein the isoxazoline active agent of Formula (I) is present in a concentration of about 5 to about 15% (w/v).

12. The spot-on veterinary composition of claim 3, wherein the isoxazoline active agent of Formula (I) is present in a concentration of about 1 to about 5% (w/v).

13. The spot-on veterinary composition of claim 3, wherein the isoxazoline active agent of Formula (I) is present in a concentration of about 5 to about 15% (w/v).

14. The spot-on veterinary composition of claim 5, wherein the isoxazoline active agent of Formula (I) is present in a concentration of about 1 to about 5% (w/v).

15. The spot-on veterinary composition of claim 5, wherein the isoxazoline active agent of Formula (I) is present in a concentration of about 5 to about 15% (w/v).