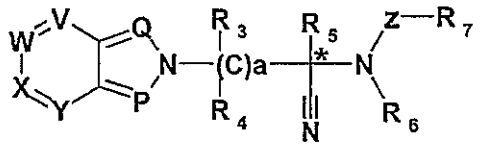
WHAT IS CLAIMED IS:

1. An aryloazol-2-yl-cyanoethylamine compound of formula (I) that is enriched in the (R)-enantiomer in a weight:weight ratio of 1.05 or higher, or a salt thereof:



(I)

wherein:

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is N;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is N;

X is C-R_{10};

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is N;

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is N;

R_8, R_9, R_{10} and R_{11} are independently of one another hydrogen, amino, amido, cyano, nitro, halogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, alkylthio, haloalkylthio, arylthio, alkoxy, phenoxy, alkoxyalkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl, haloalkylsulfinyl, SF_5, alkylsulfonyl, haloalkylsulfonyl, alkylamino, di(alkyl)amino, alkylcarbonylamino, alkylaminoalkoxy, dialkylaminoalkoxy, alkylaminoalkyl, dialkylaminoalkyl, aminoalkyl, formyl, -C(O)OH, unsubstituted or substituted phenyl, wherein the substituents, independent of one another, may be one or more of halogen, alkyl, haloalkyl, alkoxy or haloalkoxy;

R_2 is hydrogen, halogen, alkyl, haloalkyl, alkoxy, haloalkoxy, alkoxyalkoxy, alkylaminoalkoxy, dialkylaminoalkoxy, alkylaminoalkyl, dialkylaminoalkyl or aminoalkyl;

R_3 and R_4 are independently of one another hydrogen, alkyl or haloalkyl;

R_5 is alkyl, haloalkyl, hydroxyalkyl, alkylthioalkyl, alkyloxyalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl or alkylsulfonyloxyalkyl;

R_6 is hydrogen or alkyl;

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independent of one another cyano, nitro, halogen, alkyl, haloalkyl, unsubstituted or substituted phenyl, unsubstituted or substituted phenoxy, alkylthio, haloalkylthio, alkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, amino, alkylamino, di(alkyl)amino or SF_5;

Z is a C(O); and

a is 1.

2. The compound of claim 1, wherein:

R_5 is hydrogen, alkyl, or haloalkyl.

3. The compound of claim 1, wherein:

R_3 and R_4 are hydrogen;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, amino, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

4. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, R_{10} and R_{11} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino,C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3 and, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-

alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

5. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is N;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_9, R_{10} and R_{11} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino, C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, amino, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

6. The compound of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is N;

Y is C-R_{11};

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, and R_{11} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1- C_6-alkyl)amino,C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, amino, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

7. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is N;

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, and R_{10} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino,C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

8. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is N;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, Cl, Br, methoxy;

R_3, R_4 and R_6 are hydrogen;

R_5 is methyl;

R_7 is phenyl substituted by one or more of cyano, halogen, SF_5, OCF_3 or SCF_3;

R_9, R_{10} and R_{11} are, independently of one another, hydrogen, Cl, Br, I or methyl;

Z is C(O); and

a is 1.

9. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P and Q are N;

V is N or C-R_8;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, Cl, Br, methoxy;

R_3, R_4 and R_6 are hydrogen;

R_5 is methyl;

R_7 is phenyl substituted by one or more of cyano, halogen, SF_5, OCF_3 or SCF_3;

R_8, R_9, R_{10} and R_{11} are, independently of one another, hydrogen, Cl, Br, I or methyl;

Z is C(O); and

a is 1.

10. The aryloazol-2-yl-cyanoethylamine of claim 8, wherein:

Q is C-R_2;

R_2 is hydrogen or methoxy;

R_3, R_4 and R_6 are hydrogen;

R_5 is methyl;

R_7 is phenyl substituted by one or more of cyano, OCF_3 or SCF_3;

R_9, R_{10} and R_{11} are, independently of one another, hydrogen, Cl, Br, I or methyl;

Z is C(O); and

a is 1.

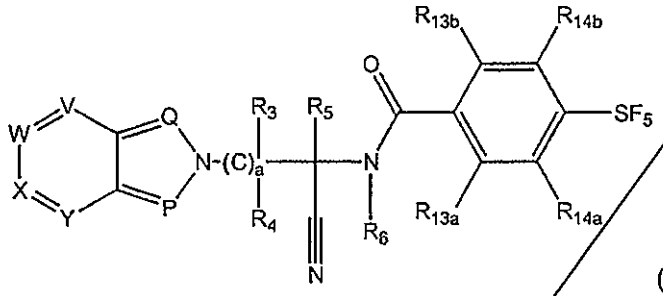
11. The arylozaol-2-yl-cyanoethylamine of claim 1, wherein the arylozaol-2-yl-cyanoethylamine is:

(+)-*N*-[1-Cyano-1-methyl-2-(4,5,7-trichloro-2*H*-benzotriazol-2-yl)-ethyl]-4-trifluoromethoxybenzamide, or (-)-*N*-[1-cyano-1-methyl-2-(4,5,7-trichloro-2*H*-benzotriazol-2-yl)-ethyl]-4-trifluoromethoxybenzamide .

12. The arylozaol-2-yl-cyanoethylamine of claim 1, wherein the arylozaol-2-yl-cyanoethylamine is:

(+)-*N*-[2-(6-Bromo-2*H*-pyrazolo[4,3-*b*]pyridin-2-yl)-1-cyano-1-methylethyl]-4-trifluoromethoxybenzamide, or (-)-*N*-[2-(6-bromo-2*H*-pyrazolo[4,3-*b*]pyridin-2-yl)-1-cyano-1-methylethyl]-4-trifluoromethoxybenzamide.

13. An aryloazol-2-yl-cyanoethylamino pentafluorothiobenzamide derivatives of formula (IH):



(IH)

Wherein:

P is N;

Q is C-R_2 or N;

V is C-R_8 or N;

W is C-R_9 or N;

X is C-R_{10} or N;

Y is C-R_{11} or N;

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, R_{10} and R_{11} are independently of one another hydrogen, amino, amido, cyano, nitro, halogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, alkylthio, haloalkylthio, arylthio, alkoxy, phenoxy, alkoxyalkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl, haloalkylsulfinyl, SF_5, alkylsulfonyl, haloalkylsulfonyl, alkylamino, di(alkyl)amino, alkylcarbonylamino, alkylaminoalkoxy, dialkylaminoalkoxy, alkylaminoalkyl, dialkylaminoalkyl, aminoalkyl, formyl, -C(O)OH, unsubstituted or substituted phenyl, wherein the substituents, independent of one another, may be one or more of halogen, alkyl, haloalkyl, alkoxy or haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl;

R_3 and R_4 are independently of one another hydrogen, alkyl or haloalkyl;

R_6 is hydrogen or alkyl;

R_{13a}, R_{13b}, R_{14a} and R_{14b} are each independently of one another cyano, nitro, halogen, alkyl, haloalkyl, alkylthio, haloalkylthio, alkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, SF_5, alkylamino, amino or di(alkyl)amino; and

a is 1, 2 or 3.

14. The compound of claim 13, wherein P is N and Q is N or C-R_2.

15. The compound of claim 13, wherein P is N, Q is N or C-R_2, and V is N.

16. The compound of claim 13, wherein P is N, Q is N or C-R_2, and X is N.

17. The compound of claim 13, wherein P is N, Q is N or C-R_2, and Y is N.

18. The compound of claim 13, wherein:

P is N;

Q is N or C-R_2;

R_3 and R_4 are hydrogen;

R_5 is hydrogen, C_1-C_3-alkyl, or halo- C_1-C_3-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

a is 1.

19. The compound of claim 13, wherein:

P is N;

Q is N or C-R_2;

R_3, R_4, R_6 are hydrogen;

R_5 is methyl; and

a is 1.

20. The compound of claim 13, wherein the compound is enriched in an enantiomer.

21. A paraciticidal composition comprising a compound of claim 1 or claim 13 and a pharmaceutically acceptable carrier.

22. The composition of claim 21 which further comprises one or more additional active agents.

23. The composition of claim 21, wherein the additional active agent is an avermectin or milbemycin.

24. The composition of claim 23, wherein the avermectin or milbemycin is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, milbemectin, milbemycin D, moxidectin, nemadectin, a 5-oxo avermectin or milbemycin derivative, a 5-oxime avermectins or milbemycin derivative, or a combination thereof.

25. A compound of formula (I) in claim 1 or formula (IH) in claim 13 for use in treating or preventing parasitic infection or infestation in an animal.

26. The compound of claim 25, wherein the parasite is *Anaplocephala, Ancylostoma, Anecator, Ascaris, Brugia, Bunostomum, Capillaria, Chabertia, Cooperia, Cyathostomum, Cylicocyclus, Cylicodontophorus, Cylicostephanus, Craterostomum, Dictyocaulus, Dipetalonema, Dipylidium, Dirofilaria, Dracunculus, Echinococcus, Enterobius, Fasciola, Filaroides, Habronema, Haemonchus, Metastrongylus, Moniezia, Necator, Nematodirus, Nippostrongylus, Oesophagostumum, Onchocerca, Ostertagia, Oxyuris, Paracaris, Schistosoma, Strongylus, Taenia, Toxocara, Strongyloides, Toxascaris, Trichinella, Trichuris, Trichostrongylus, Triodontophorous, Uncinaria, Wuchereria,* or combinations thereof.

27. The compound of claim 25, wherein the parasite is *Haemonchus contortus, Ostertagia circumcincta, Trichostrongylus axei, Trichostrongylus colubriformis, Cooperia curticei, Nematodirus battus* or combinations thereof.

28. The compound of claim 25, wherein the parasites are fleas, ticks, mites, mosquitoes, flies, fly larvae, lice, or combinations thereof.

29. The compound of claim 25, wherein the parasites are fleas or ticks.

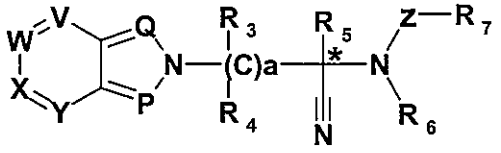
30. The compound of claim 25, wherein the compound is administered in combination with an effective amount of an avermectin or milbemycin compound.

31. The compound of claim 30, wherein the avermectin or milbemycin compound is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, milbemectin, milbemycin D, moxidectin, nemadectin, a 5-oxo avermectin or milbemycin derivative, a 5-oxime avermectins or milbemycin derivative, or a combination thereof.

32. The compound of formula (I) in claim 1 wherein the compound is (+)-*N*-[2-(6-Bromo-2*H*-pyrazolo[4,3-*b*]pyridin-2-yl)-1-cyano-1-methylethyl]-4-trifluoromethoxybenzamide.

WHAT IS CLAIMED IS:

1. An aryloazol-2-yl-cyanoethylamine compound of formula (I) that is enriched in an enantiomer which is the eutomer, or a salt thereof:



(I)

wherein:

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is N;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is N;

X is C-R_{10};

Y is C-R_{11};

or

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is N;

Y is $C\text{-}R_{11}$;

or

P is N;

Q is $C\text{-}R_2$ or N;

V is $C\text{-}R_8$;

W is $C\text{-}R_9$;

X is $C\text{-}R_{10}$;

Y is N;

R_8, R_9, R_{10} and R_{11} are independently of one another hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, arylthio, C_1-C_6-alkoxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1 -C_5-alkylcarbonyl, C_1 -C_5-alkoxycarbonyl, halo-C_1 -C_5-alkoxycarbonyl, C_1 -C_5-alkylsulfinyl, halo-C_1-C_5-alkylsulfinyl, SF_5, C_1-C_5-alkylsulfonyl, halo-C_1-C_5-alkylsulfonyl, C_1-C_5-alkylamino, di(C_1-C_5-alkyl)amino, C_1 -C_5-alkylcarboxylamino, C_1 -C_5-alkylamino-C_1-C_5-alkoxy, di-C_1-C_5-alkylamino-C_1 -C_5-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH, unsubstituted or substituted phenyl, wherein the substituents, independent of one another, may be one or more of halogen, C_1-C_6-alkyl, halo- C_1-C_6-alkyl, or halo- C_1-C_5-alkoxy,;

R_2 is hydrogen, halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy, halo- C_1-C_6-alkoxy, C_1-C_6-alkoxy- C_1-C_6-alkoxy, C_1-C_5-alkylamino-C_1-C_5-alkoxy, C_1-C_5-alkylamino-C_1-C_5-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di- C_1-C_6-alkylamino- C_1-C_6-alkyl, or amino- C_1-C_6-alkyl;

R_3 and R_4 are independently of one another hydrogen, C_1-C_5-alkyl, or halo- C_1-C_6-alkyl,;

R_5 is C_1-C_5-alkyl, halo-C_1-C_6-alkyl, hydroxy-C_1-C_5-alkyl, C_1-C_6-alkylthio-C_1-C_6-alkyl, C_1-C_6-alkoxy-C_1-C_6-alkyl, C_1-C_6-alkylsulfinyl-C_1-C_6-alkyl, C_1-C_6-alkylsulfonyl-C_1-C_6-alkyl, or C_1-C_6-alkylsulfonyloxy-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl;

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independent of one another cyano, nitro, halogen, C_1-C_6-alkyl, halo- C_1-C_6-alkyl, unsubstituted or substituted phenyl, unsubstituted or substituted phenoxy, C_1-C_6-alkylthio, halo- C_1-C_6-alkylthio, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy, C_1-C_5-alkylcarbonyl, halo-C_1-C_5-alkylcarbonyl, C_1-C_5-alkoxycarbonyl, halo- C_1-C_5-alkoxycarbonyl, C_1-C_5-alkylsulfinyl, halo-C_1-C_5-

alkylsulfinyl, C_1-C_5-alkylsulfonyl, halo-C_1-C_5-alkylsulfonyl, amino, C_1-C_5-alkylamino, or di(C_1-C_6-alkyl)amino or SF_5;

Z is a C(O);

a is 1; and

wherein the weight:weight ratio of the eutomer:distomer is at least approximately 1.5 higher in favour of the eutomer.

2. The compound of claim 1, wherein:

R_5 is hydrogen, C_1-C_5-alkyl, or halo-C_1-C_5-alkyl.

3. The compound of claim 1, wherein:

R_3 and R_4 are hydrogen;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, amino, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

4. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, R_{10} and R_{11} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-

cycloalkyloxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino,C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3 and, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

5. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is N;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_9, R_{10} and R_{11} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-

alkylamino, di(C_1-C_6-alkyl)amino, C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, -C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, amino, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

6. The compound of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is N;

Y is C-R_{11};

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, and R_{11} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1- C_6-alkyl)amino,C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted

or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, amino, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

7. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is C-R_8;

W is C-R_9;

X is C-R_{10};

Y is N;

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, and R_{10} are, independently of one another, hydrogen, amino, amido, cyano, nitro, halogen, C_1-C_6-alkyl, C_2-C_6-alkenyl, C_2-C_6-akynyl, C_3-C_7-cycloalkyl, hydroxy-C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, phenoxy, C_1-C_6-alkoxy-C_1-C_6-alkoxy, C_3-C_7-cycloalkyloxy, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino,C_1-C_6-alkylcarboxylamino, C_1-C_6-alkylamino-C_1-C_6-alkoxy, di-C_1-C_6-alkylamino-C_1-C_6-alkoxy, C_1-C_6-alkylamino-C_1-C_6-alkyl, di-C_1-C_6-alkylamino-C_1-C_6-alkyl, amino-C_1-C_6-alkyl, formyl, -C(O)OH; unsubstituted or substituted phenyl, whereby the substituents may each be independent of one another and are selected from the group consisting of halogen, C_1-C_6-alkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkoxy or halo-C_1-C_6-alkoxy;

R_3, R_4 are each independently H, C_1-C_6-alkyl, or halo-C_1-C_6-alkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or C_1-C_6-alkyl; and

R_7 is unsubstituted or substituted phenyl, wherein the substituents may each be independently cyano, nitro, halogen, C_1-C_6-alkyl, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkyl, C_1-C_6-alkylthio, halo-C_1-C_6-alkylthio, C_1-C_6-alkoxy, C_3-C_7-cycloalkyl, halo-C_1-C_6-alkoxy, C_1-C_6-alkylcarbonyl, halo-C_1-C_6-alkylcarbonyl, C_1-C_6-alkoxycarbonyl, halo-C_1-C_6-alkoxycarbonyl, C_1-C_6-alkylsulfinyl, halo-C_1-C_6-alkylsulfinyl, C_1-C_6-alkylsulfonyl, halo-C_1-C_6-alkylsulfonyl, C_1-C_6-alkylamino, di(C_1-C_6-alkyl)amino or SF_5.

8. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P is N;

Q is C-R_2 or N;

V is N;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, Cl, Br, methoxy;

R_3, R_4 and R_6 are hydrogen;

R_5 is methyl;

R_7 is phenyl substituted by one or more of cyano, halogen, SF_5, OCF_3 or SCF_3;

R_9, R_{10} and R_{11} are, independently of one another, hydrogen, Cl, Br, I or methyl;

Z is C(O); and

a is 1.

9. The aryloazol-2-yl-cyanoethylamine of claim 1, wherein

P and Q are N;

V is N or C-R_8;

W is C-R_9;

X is C-R_{10};

Y is C-R_{11};

R_2 is hydrogen, Cl, Br, methoxy;

R_3, R_4 and R_6 are hydrogen;

R_5 is methyl;

R_7 is phenyl substituted by one or more of cyano, halogen, SF_5, OCF_3 or SCF_3;

R_8, R_9, R_{10} and R_{11} are, independently of one another, hydrogen, Cl, Br, I or methyl;

Z is C(O); and

a is 1.

10. The aryloazol-2-yl-cyanoethylamine of claim 8, wherein:

Q is C-R_2;

R_2 is hydrogen or methoxy;

R_3, R_4 and R_6 are hydrogen;

R_5 is methyl;

R_7 is phenyl substituted by one or more of cyano, OCF_3 or SCF_3;

R_9, R_{10} and R_{11} are, independently of one another, hydrogen, Cl, Br, I or methyl;

Z is C(O); and

a is 1.

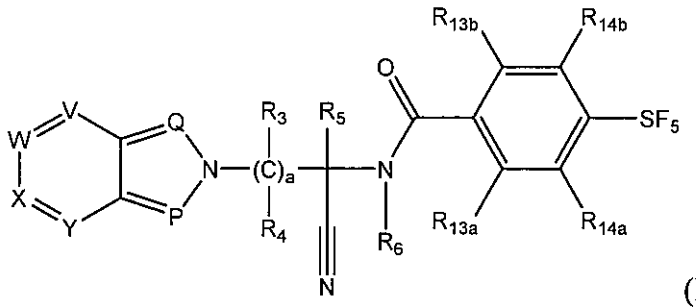
11. The arylozaol-2-yl-cyanoethylamine of claim 1, wherein the arylozaol-2-yl-cyanoethylamine is:

(+)-*N*-[1-Cyano-1-methyl-2-(4,5,7-trichloro-2*H*-benzotriazol-2-yl)-ethyl]-4-trifluoromethoxybenzamide, or (-)-*N*-[1-cyano-1-methyl-2-(4,5,7-trichloro-2*H*-benzotriazol-2-yl)-ethyl]-4-trifluoromethoxybenzamide .

12. The arylozaol-2-yl-cyanoethylamine of claim 1, wherein the arylozaol-2-yl-cyanoethylamine is:

(+)-*N*-[2-(6-Bromo-2*H*-pyrazolo[4,3-*b*]pyridin-2-yl)-1-cyano-1-methylethyl]-4-trifluoromethoxybenzamide, or (-)-*N*-[2-(6-bromo-2*H*-pyrazolo[4,3-*b*]pyridin-2-yl)-1-cyano-1-methylethyl]-4-trifluoromethoxybenzamide.

13. An aryloazol-2-yl-cyanoethylamino pentafluorothiobenzamide derivatives of formula (IH):



(IH)

Wherein:

P is N;

Q is C-R_2 or N;

V is C-R_8 or N;

W is C-R_9 or N;

X is C-R_{10} or N;

Y is C-R_{11} or N;

R_2 is hydrogen, halogen, C_1-C_6-alkyl, C_1-C_6-haloalkyl, C_1-C_6-alkoxy, halo-C_1-C_6-alkoxy or C_1-C_6-alkoxy-C_1-C_6-alkoxy;

R_8, R_9, R_{10} and R_{11} are independently of one another hydrogen, amino, amido, cyano, nitro, halogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, haloalkyl, alkylthio, haloalkylthio, arylthio, alkoxy, phenoxy, alkoxyalkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl, haloalkylsulfinyl, SF_5, alkylsulfonyl, haloalkylsulfonyl, alkylamino, di(alkyl)amino, alkylcarbonylamino, alkylaminoalkoxy, dialkylaminoalkoxy, alkylaminoalkyl, dialkylaminoalkyl, aminoalkyl, formyl, -C(O)OH, unsubstituted or substituted phenyl, wherein the substituents, independent of one another, may be one or more of halogen, alkyl, haloalkyl, alkoxy or haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl;

R_3 and R_4 are independently of one another hydrogen, alkyl or haloalkyl;

R_5 is hydrogen, C_1-C_6-alkyl or halo-C_1-C_6-alkyl;

R_6 is hydrogen or alkyl;

R_{13a}, R_{13b}, R_{14a} and R_{14b} are each independently of one another cyano, nitro, halogen, alkyl, haloalkyl, alkylthio, haloalkylthio, alkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, alkylsulfinyl, haloalkylsulfinyl, alkylsulfonyl, haloalkylsulfonyl, SF_5, alkylamino, amino or di(alkyl)amino; and

a is 1, 2 or 3.

14. The compound of claim 13, wherein P is N and Q is N or C-R_2.

15. The compound of claim 13, wherein P is N, Q is N or C-R_2, and V is N.

16. The compound of claim 13, wherein P is N, Q is N or C-R_2, and X is N.

17. The compound of claim 13, wherein P is N, Q is N or C-R_2, and Y is N.

18. The compound of claim 13, wherein:
P is N;
Q is N or C-R_2;
R_3 and R_4 are hydrogen;
R_5 is hydrogen, C_1-C_3-alkyl, or halo- C_1-C_3-alkyl;
R_6 is hydrogen or C_1-C_6-alkyl; and
a is 1.

19. The compound of claim 13, wherein:
P is N;
Q is N or C-R_2;
R_3, R_4, R_6 are hydrogen;
R_5 is methyl; and
a is 1.

20. The compound of claim 13, wherein the compound is enriched in an enantiomer.

21. A paraciticidal composition comprising a compound of claim 1 or claim 13 and a pharmaceutically acceptable carrier.

22. The composition of claim 21 which further comprises one or more additional active agents.

23. The composition of claim 21, wherein the additional active agent is an avermectin or milbemycin.

24, The composition of claim 23, wherein the avermectin or milbemycin is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, milbemectin, milbemycin D, moxidectin, nemadectin, a 5-oxo avermectin or milbemycin derivative, a 5-oxime avermectins or milbemycin derivative, or a combination thereof.

25. A compound of formula (I) in claim 1 or formula (IH) in claim 13 for treating or preventing parasitic infection or infestation in an animal.

26. The use of claim 25, wherein the parasite is *Anaplocephala, Ancylostoma, Anecator, Ascaris, Brugia, Bunostomum, Capillaria, Chabertia, Cooperia, Cyathostomum, Cylicocyclus, Cylicodontophorus, Cylicostephanus, Craterostomum, Dictyocaulus, Dipetalonema, Dipylidium, Dirofilaria, Dracunculus, Echinococcus, Enterobius, Fasciola, Filaroides, Habronema, Haemonchus, Metastrongylus, Moniezia, Necator, Nematodirus, Nippostrongylus, Oesophagostumum, Onchocerca, Ostertagia, Oxyuris, Paracaris, Schistosoma, Strongylus, Taenia, Toxocara, Strongyloides, Toxascaris, Trichinella, Trichuris, Trichostrongylus, Triodontophorous, Uncinaria, Wuchereria,* or combinations thereof.

27. The use of claim 25, wherein the parasite is *Haemonchus contortus, Ostertagia circumcincta, Trichostrongylus axei, Trichostrongylus colubriformis, Cooperia curticei, Nematodirus battus* or combinations thereof.

28. The use of claim 25, wherein the parasites are fleas, ticks, mites, mosquitoes, flies, fly larvae, lice, or combinations thereof.

29. The use of claim 25, wherein the parasites are fleas or ticks.

30. The use of claim 25, wherein the compound is administered in combination with an effective amount of an avermectin or milbemycin compound.

31. The use of claim 30, wherein the avermectin or milbemycin compound is abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin, milbemectin, milbemycin D, moxidectin, nemadectin, a 5-oxo avermectin or

milbemycin derivative, a 5-oxime avermectins or milbemycin derivative, or a combination thereof.

32. The compound of formula (I) in claim 1 wherein the compound is (+)-*N*-[2-(6-Bromo-2*H*-pyrazolo[4,3-*b*]pyridin-2-yl)-1-cyano-1-methylethyl]-4-trifluoromethoxybenzamide.

33. The compound according to claim 25, wherein the treatment or prevention shows an efficacy of greater than 95% against *Haemonchus placei* and *Nematodirus helvetianus*.

34. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 1, enriched in the eutomer in a weight:weight ratio of 2 or higher.

35. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 1, enriched in the eutomer in a weight:weight ratio of 5 or higher.

36. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 1, wherein the eutomer shows significant in vitro and in vivo activity with a favorable toxicity profile over other corresponding enantiomer (the distomer).

37. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 36, wherein the in vitro activity is inhibiting the motility of *Haemonchus contortus* larvae or Caenorhabditis elegans.

38. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 1, wherein the in vivo activity is inhibiting the motility of *Haemonchus contortus* larvae or Caenorhabditis elegans in sheep.

39. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 1, wherein the eutomer shows greater than 100 times more potency, in vitro, than the other corresponding enantiomer (the distomer) at inhibiting the motility of *Haemonchus contortus* larvae or Caenorhabditis elegans.

40. An aryloazol-2-yl-cyanoethylamine compound of formula (I) according to claim 1, wherein the eutomer shows greater than 95% efficacy against ivermectin-resistant strains of *Haemonchus contortus, Ostertagia circumcincta* and *Trichostrongylus columbriformis.*