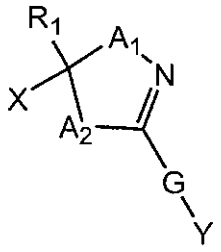
WHAT IS CLAIMED IS:

1. A dihydroazole compound of formula (I), or a pharmaceutically or agriculturally acceptable salt thereof:



(I)

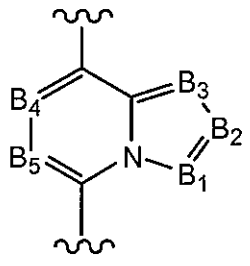
wherein:

R_1 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 $-NO_2$;

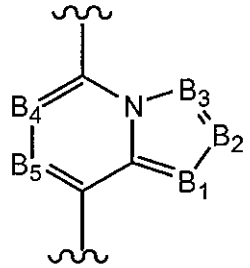
X is aryl or heteroaryl, which may be unsubstituted or substituted by one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-,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

A_1 and A_2 are independently oxygen, NR_2 or CR_7R_8;

G is G-1 or G-2;



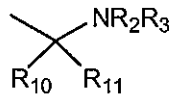
G-1

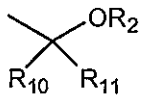


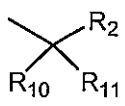
G-2

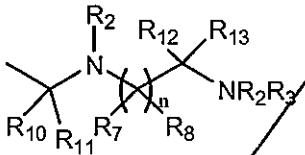
B_1, B_2, B_3, B_4 and B_5 are independently N or C-R_9;

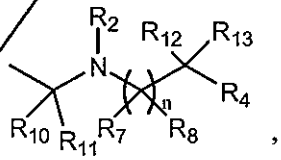
Y is hydrogen, halogen, -CN; or Y is alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, aryl, or heterocyclyl or heteroaryl each of which is unsubstituted or substituted with one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl,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

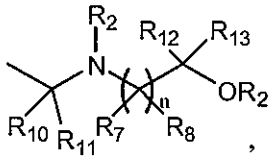

Y-1

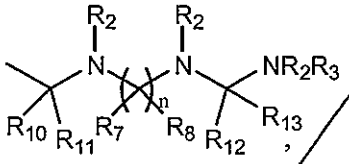

Y-2

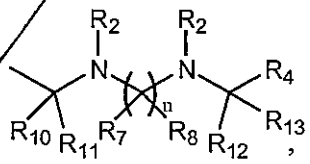

Y-3

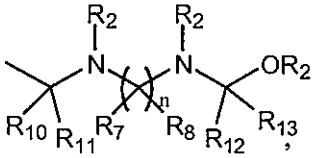

Y-4

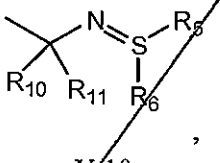

Y-5

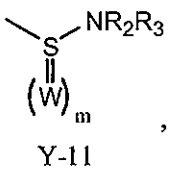

Y-6

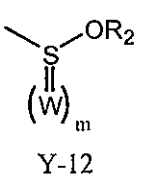

Y-7


Y-8

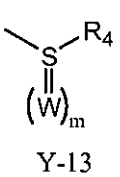

Y-9


Y-10


Y-11


Y-12

or


Y-13

R_2, R_3 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxylakyl, 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, alkoxylakyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, aryl or heteroaryl;

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

R_9 is 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, alkoxylakyl, 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.

2. The compound of claim 1, wherein G is G-1.

3. The compound of claim 1, wherein G is G-2.

4. The compound of claim 1, wherein:

G is G-1;

A_1 is oxygen; and

X is optionally substituted aryl.

5. The compound of claim 1, wherein:

G is G-2;

A_1 is oxygen; and

X is optionally substituted aryl.

6. The compound of claim 1, wherein:

A_1 is oxygen;

X is optionally substituted aryl;

R_1 is hydrogen, halogen, alkyl or haloalkyl; and

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.

7. The compound of claim 1, wherein:

A_1 is oxygen;

X is optionally substituted aryl;

R_1 is hydrogen, halogen, alkyl or haloalkyl; and

Y is pyrazolyl or triazolyl.

8. The compound of claim 1, wherein:

G is G-1;

B_1, B_2, B_3, B_4 and B_5 are each C-R_9;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_3, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

9. The compound of claim 1, wherein:

G is G-2;

B_1, B_2, B_3, B_4 and B_5 are each C-R_9;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_3, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

10. The compound of claim 1, wherein:

G is G-1;

B_1, B_2, B_4 and B_5 are each C-R_9;

B_3 is N;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-

C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_3, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

11. The compound of claim 1, wherein:

G is G-2;

B_2, B_3, B_4 and B_5 are each C-R_9;

B_1 is N;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_3, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

12. The compound of claim 8, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

13. The compound of claim 9, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

14. The compound of claim 8, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

15. The compound of claim 9, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

16. The compound of claim 8, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are hydrogen.

17. The compound of claim 10, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

18. The compound of claim 11, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

19. The compound of claim 10, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

20. The compound of claim 11, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are each hydrogen.

21. The compound of claim 10, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are hydrogen.

22. The compound of claim 11, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

R_2 and R_4 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl; and

R_3, R_7 and R_8 are hydrogen.

23. A composition for the treatment or prevention of a parasitic infection or infestation in an animal comprising an effective amount of a compound of formula (I) of claim 1 in combination with a pharmaceutically acceptable carrier.

24. A composition for the protection of crops, plants, plant propagation material or material made from wood from pests comprising a pesticidally effective amount of a compound of formula (I) of claim 1 in combination with an agriculturally acceptable carrier or diluent.

25. A method for the treatment or prevention of a parasitic infection or infestation in an animal, comprising administering to the animal a parasiticidally effective amount of a compound of formula (I) of claim 1 to the animal.

26. A method for protecting crops and growing plants from attack or infestation by animal pests, comprising contacting a plant, or soil or water in which the plant is growing, with a compound of formula (I) of claim 1.

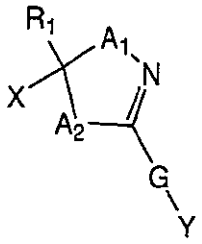
27. A method for preventing or controlling infestation of animal pests at a locus, comprising administering a pesticidally effective amount or a parasiticidally effective amount of a compound of formula (I) of claim 1 to the locus.

28. Use of the compound of claim 1 in the treatment or prevention of a parasitic infection or infestation in an animal.

29. Use of the compound of claim 1 in the manufacture of a medicament for the treatment or prevention of a parasitic infection or infestation in an animal.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A dihydroazole compound of formula (I), or a pharmaceutically or agriculturally acceptable salt thereof:



(I)

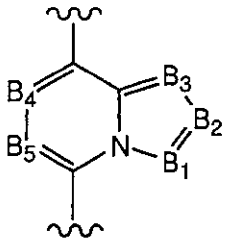
wherein:

R_1 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 $-NO_2$;

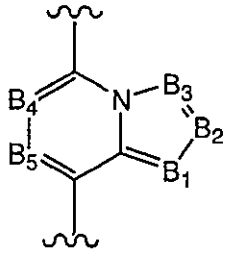
X is aryl or heteroaryl, which may be unsubstituted or substituted by one or more of halogen, hydroxy, amino, alkyl- or di(alkyl)amino, alkyl, cycloalkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-,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

A_1 and A_2 are independently oxygen, NR_2 or CR_7R_8;

G is G-1 or G-2;



G-1

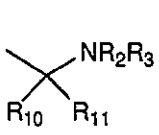


G-2

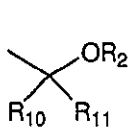
B_1, B_2, B_3, B_4 and B_5 are independently N or C-R_9;

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,

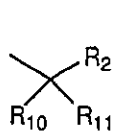
haloalkynyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio, $R_7S(O)$-, $R_7S(O)_2$-, $R_7C(O)$-, $R_7R_8NC(O)$-, $R_7OC(O)$-, $R_7C(O)O$-, $R_7C(O)NR_8$-, -CN or $-NO_2$; or Y is Y-1, Y-2, Y-3, Y-4, Y-5, Y-6, Y-7, Y-8, Y-9, Y-10, Y-11, Y-12 or Y-13;



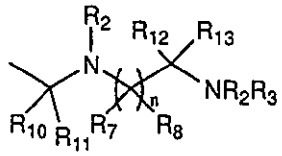
Y-1



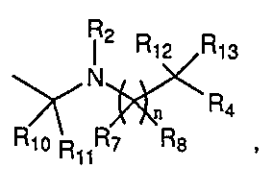
Y-2



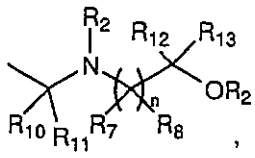
Y-3



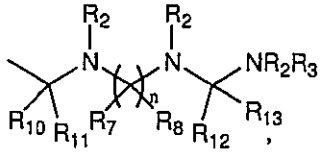
Y-4



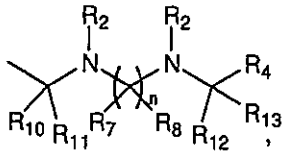
Y-5



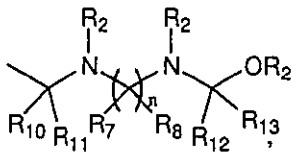
Y-6



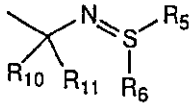
Y-7



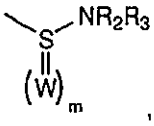
Y-8



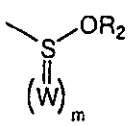
Y-9



Y-10

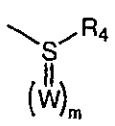


Y-11



Y-12

or



Y-13

R_2, R_3 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxylakyl, 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, alkoxylakyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, cycloalkyl, aryl or heteroaryl;

R_7 and R_8 are independently hydrogen, alkyl, haloalkyl, thioalkyl, alkylthioalkyl, hydroxyalkyl, alkoxylakyl, 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, alkoxylakyl, 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.

2. The compound of claim 1, wherein G is G-1.

3. The compound of claim 1, wherein G is G-2.

4. The compound of claim 1, wherein:

G is G-1;

A_1 is oxygen; and

X is optionally substituted aryl.

5. The compound of claim 1, wherein:

G is G-2;

A_1 is oxygen; and

X is optionally substituted aryl.

6. The compound of claim 1, wherein:

A_1 is oxygen;

X is optionally substituted aryl;

R_1 is hydrogen, halogen, alkyl or haloalkyl; and

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.

7. The compound of claim 1, wherein:

A_1 is oxygen;

X is optionally substituted aryl;

R_1 is hydrogen, halogen, alkyl or haloalkyl; and

Y is pyrazolyl or triazolyl.

8. The compound of claim 1, wherein:

G is G-1;

B_1, B_2, B_3, B_4 and B_5 are each C-R_9;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

R_3 and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_2, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

9. The compound of claim 1, wherein:

G is G-2;

B_1, B_2, B_3, B_4 and B_5 are each C-R_9;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

$R_3$and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_2, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

10. The compound of claim 1, wherein:

G is G-1;

B_1, B_2, B_4 and B_5 are each C-R_9;

B_3 is N;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

$R_3$and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-

C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_2, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

11. The compound of claim 1, wherein:

G is G-2;

B_2, B_3, B_4 and B_5 are each C-R_9;

B_1 is N;

R_1 is C_1-C_4alkyl or C_1-C_4haloalkyl;

X is phenyl, which may be unsubstituted or substituted by one or more halogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

A_1 is oxygen;

A_2 is CR_7R_8;

Y is Y-1, Y-4, Y-5, Y-6;

$R_3$and R_4 are independently hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl, C_1-C_4akoxy-C_1-C_4alkyl or C_1-C_4alkylthio-C_1-C_4alkyl; and

R_2, and R_9 are independently hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl.

12. The compound of claim 8, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_3 is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

13. The compound of claim 9, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

R_3 is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

14. The compound of claim 8, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

R_3 is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

15. The compound of claim 9, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

$R_3$is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

16. The compound of claim 8, wherein:

A_2 is CH_2;

R_9 is hydrogen;

R_{10} together with R_{11} form =O;

R_{12} together with R_{13} form =O;

$R_3$is hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are hydrogen; and

Y is Y-1 or Y-4.

17. The compound of claim 9, wherein:

A_2 is CH_2;

R_9 is hydrogen;

R_{10} together with R_{11} form =O;

R_{12} together with R_{13} form =O;

R_3 is C_1-C_4haloalkyl or C_1-C_4-alkylthio-C_1-C_4-alkyl;

R_2, R_7 and R_8 are hydrogen; and

Y is Y-1 or Y-4.

18. The compound of claim 10, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

$R_3$is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

19. The compound of claim 11, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

$R_3$is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

20. The compound of claim 10, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

$R_3$is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

21. The compound of claim 11, wherein:

A_2 is CH_2;

R_9 is hydrogen;

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

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

$R_3$is hydrogen, C_1-C_4alkyl, C_1-C_4haloalkyl;

R_2, R_7 and R_8 are each hydrogen; and

Y is Y-1 or Y-4.

22. The compound of claim 10, wherein:

A_2 is CH_2;

R_9 is hydrogen;

R_{10} together with R_{11} form =O;

R_{12} together with R_{13} form =O;

R_3 is hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl;

R_2, R_7 and R_8 are hydrogen ; and

Y is Y-1 or Y-4.

23. The compound of claim 11, wherein:

A_2 is CH_2;

R_9 is hydrogen;

R_{10} together with R_{11} form =O;

R_{12} together with R_{13} form =O;

R_3 is hydrogen, C_1-C_4alkyl or C_1-C_4haloalkyl or C_1-C_4alkylthio-C_1-C_4alkyl;

R_2, R_7 and R_8 are hydrogen ; and

Y is Y-1 or Y-4.

24. The compound of claim 17, wherein:

Y is Y-1; and

R_3 is $-CH_2CH_2SCH_3$.

25. The compound of claim 17, wherein:

Y is Y-4; and

R_3 is $-CH_2CF_3$.

26. A composition for the protection of crops, plants, plant propagation material or material made from wood from pests comprising a pesticidally effective amount of a compound of formula (I) of any one of the preceding claims in combination with an agriculturally acceptable carrier or diluent.

27. A method for protecting crops and growing plants from attack or infestation by animal pests, comprising contacting a plant, or soil or water in which the plant is growing, with a compound of formula (I) of any one of the preceding claims.

28. Use of the compound of any one of the preceding claims in the manufacture of a medicament for the treatment or prevention of a parasitic infection or infestation in an animal.