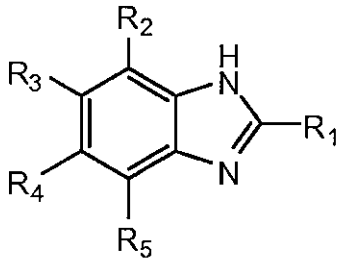
WHAT IS CLAIMED IS:

1. A compound of the formula:



(I)

wherein:

R_1 is (C_1-C_6)- alkyl, (C_2-C_5)- alkenyl, or (C_2-C_5)- alkynyl, each independently unsubstituted or substituted with two or more halogens;

R_2 is H or halogen;

R_3 is halogen, (C_1-C_6)- alkyl, (C_2-C_5)- alkenyl, or (C_2-C_5)- alkynyl, (C_1-C_6)- alkoxy, thienyl, furanyl, biphenyl, naphthyl, aryl, aryl ether, sulfonylaryl, sulfoxyaryl, thioaryl, (C_3-C_6)- cycloalkyl, or tetralin ether;

wherein the last seven substituents may be unsubstituted or substituted with one or more of halogen, (C_1-C_3)-haloalkyl, (C_1-C_3)-haloalkoxy or carboxyl;

R_4 is H or halogen;

R_5 is H or halogen.

2. A compound according to claim 1 wherein R_1 is (C_1-C_4)-alkyl substituted with fluorine.

3. A compound according to claim 1 wherein R_2 is Cl.

4. A compound according to claim 1 wherein R_3 is a mono- or bi-halogen substituted phenyl ether.

5. A compound according to claim 1 wherein R_3 is a bi- or tri-halogen substituted phenyl.

6. A compound according to claims 4 or 5 wherein the halogen is chlorine, bromine or fluorine.

7. A compound according to claim 1 wherein R_4 is chlorine.

8. A compound according to claim 1 wherein R_5 is hydrogen.

9. A compound according to claim 1 that is 6-chloro-5-(4-chlorophenyl)-2-trifluoromethylbenzimidazole. (#130)

10. A compound according to claim 1 that is 6-chloro-5-(2,3-dichlorophenoxy)-2-heptafluoropropylbenzimidazole. (#140)

11. A compound according to claim 1 that is 6-chloro-5-(3,5-dichlorophenyl)-2-trifluoromethylbenzimidazole. (#247)

12. A compound according to claim 1 that is 6-chloro-5-(3,4-dichlorophenyl)-2-trifluoromethylbenzimidazole. (#258)

13. A compound according to claim 1 that is 6-chloro-5-(2,4-dichlorophenyl)-2-trifluoromethylbenzimidazole. (#260)

14. A compound according to claim 1 that is 6-chloro-5-(2,3,5-trichlorophenyl)-2-trifluoromethylbenzimidazole. (#261)

15. A compound according to claim 1 that is 5-chloro-6-(2,4-dichlorophenoxy)-2-(heptafluoropropyl)-1H-1,3-benzodiazole. (#273)

16. A composition for treating helminth infestation comprising an anthelmintically effective amount of the compound of claims 1, 9, 10, 11, 12, 13, 14 or 15 and a pharmaceutically acceptable carrier.

17. A composition for treating helminth infestation according to claim 16 wherein the composition of formula (I) is combined with an additional active agent.

18. A composition for treating helminth infestation according to claim 17 wherein the active agent is a macrocyclic lactone.

19. A composition for treating helminth infestation according to claim 18 wherein the macrocyclic lactone is selected from the group consisting of abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin or ML-1,694,554.

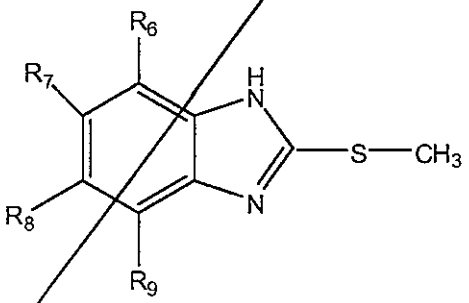
20. A composition for treating helminth infestation according to claim 17 wherein the composition of formula (I) is combined with verapamil.

21. A method for treating helminth infestation comprising administration of an anthelmintically effective amount of the compound of claims 1, 9, 10, 11, 12, 13, 14 or 15 to an animal in need thereof.

22. A method according to claim 21 in which the helminths are trematodes.

23. A method according to claim 22 in which the helminths are *Fasciola hepatica*.

24. A compound of the formula:



(II)

wherein:

R_6 is H;

R_7 is (C_1-C_6)- alkyl, (C_2-C_5)- alkenyl, or (C_2-C_5)- alkynyl, (C_1-C_6)- alkoxy, tetralin ether, bromophenoxy, phenoxy, sulfonylaryl, sulfoxyaryl, thioaryl, or (C_3-C_6)-cycloalkyl;

wherein the last four substituents may be unsubstituted or substituted with one or more of halogen or (C_1-C_3)-alkyl; and

wherein phenoxy is substituted with one or more of (C_1-C_3)-alkyl or trifluoromethoxy;

R_8 is H or halogen;

R_9 is H.

25. A compound according to claim 24 wherein R_7 is phenoxy substituted with one or more methyl groups.

26. A compound according to claim 24 wherein R_7 is 2-bromophenoxy.

27. A compound according to claim 24 wherein R_8 is chlorine or fluorine.

28. A compound according to claim 24 that is 6-chloro-5-(2,3-dimethylphenoxy)-2-methylthiobenzimidazole. (#19)

29. A compound according to claim 24 that is 6-chloro-5-(2-bromophenoxy)-2-methylthiobenzimidazole. (#14)

30. A compound according to claim 24 that is 6-chloro-5-hexyl-2-methylthiobenzimidazole. (#24)

31. A composition for treating helminth infestation comprising an anthelmintically effective amount of the compound of claims 24, 28, 29 or 30 and a pharmaceutically acceptable carrier.

32. A composition for treating helminth infestation according to claim 31 wherein the composition of formula (I) is combined with an additional active agent.

33. A composition for treating helminth infestation according to claim 32 wherein the active agent is a macrocyclic lactone.

34. A composition for treating helminth infestation according to claim 33 wherein the macrocyclic lactone is selected from the group consisting of abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin or ML-1,694,554.

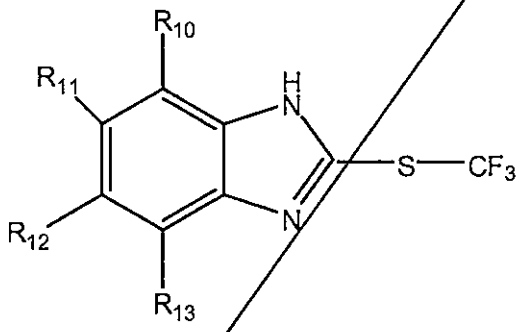
35. A composition for treating helminth infestation according to claim 32 wherein the composition of formula (I) is combined with verapamil.

36. A method for treating helminth infestation comprising administration of an anthelmintically effective amount of the compound of claims 24, 28, 29 or 30 to an animal in need thereof.

37. A method according to claim 36 in which the helminths are trematodes.

38. A method according to claim 37 in which the helminths are *Fasciola hepatica*.

39. A compound of the formula:



(III)

wherein:

R_{10} is H;

R_{11} is $(C_1\text{-}C_6)$- alkyl, $(C_2\text{-}C_5)$- alkenyl, or $(C_2\text{-}C_5)$- alkynyl, $(C_1\text{-}C_6)$- alkoxy, tetralin ether, aryl, aryl ether, sulfonylaryl, sulfoxyaryl, thioaryl, $(C_3\text{-}C_6)$-cycloalkyl, or;

wherein the last six substituents may be unsubstituted or substituted with one or more of $(C_1\text{-}C_6)$- alkyl, halogen, $(C_1\text{-}C_3)$-haloalkyl, or $(C_1\text{-}C_3)$-haloalkoxy;

R_{12} is H or halogen;

R_{13} is H.

40. A compound according to claim 39 wherein aryl is naphthyl, biphenyl or phenyl.

41. A compound according to claim 39 wherein R_{11} is phenoxy substituted with one or more halogens.

42. A compound according to claim 39 that is 6-chloro-5-(2,3-dichlorophenoxy)-2-trifluoromethylthiobenzimidazole. (#49)

43. A compound according to claim 39 that is 6-chloro-5-(4-chlorophenyl)-2-trifluoromethylthiobenzimidazole. (#102)

44. A compound according to claim 39 that is 6-chloro-5-(3-chlorophenyl)-2-trifluoromethylthiobenzimidazole. (#103)

45. A compound according to claim 39 that is 6-chloro-5-(2-butyl)-cyclopropyl-2-trifluoromethylthiobenzimidazole. (#108)

46. A composition for treating helminth infestation comprising an anthelmintically effective amount of the compound of claims 39, 42, 43, 44 or 45 and a pharmaceutically acceptable carrier.

47. A composition for treating helminth infestation according to claim 46 wherein the composition of formula (I) is combined with an additional active agent.

48. A composition for treating helminth infestation according to claim 47 wherein the active agent is a macrocyclic lactone.

49. A composition for treating helminth infestation according to claim 48 wherein the macrocyclic lactone is selected from the group consisting of abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin or ML-1,694,554.

50. A composition for treating helminth infestation according to claim 47 wherein the composition of formula (I) is combined with verapamil.

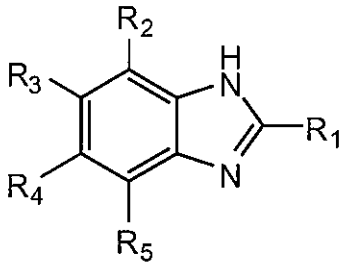
51. A method for treating helminth infestation comprising administration of an anthelmintically effective amount of the compound of claims 38, 42, 43, 44 or 45 to an animal in need thereof.

52. A method according to claim 51 in which the helminths are trematodes.

53. A method according to claim 52 in which the helminths are *Fasciola hepatica*.

Claims

1. A compound of the formula:



(I)

wherein:

R_1 is $(C_1$-$C_6)$- alkyl, substituted with two or more halogens;

R_2 is H or halogen;

R_3 is a bi- or tri-halogen substituted phenyl;

R_4 is H or halogen; and

R_5 is H or halogen.

2. A compound that is 6-chloro-5-(4-chlorophenyl)-2-trifluoromethylbenzimidazole.

3. A compound that is 6-chloro-5-(2,3-dichlorophenoxy)-2-heptafluoropropylbenzimidazole.

4. A compound according to claim 1 that is 6-chloro-5-(3,5-dichlorophenyl)-2-trifluoromethylbenzimidazole.

5. A compound according to claim 1 that is 6-chloro-5-(3,4-dichlorophenyl)-2-trifluoromethylbenzimidazole.

6. A compound according to claim 1 that is 6-chloro-5-(2,4-dichlorophenyl)-2-trifluoromethylbenzimidazole.

7. A compound according to claim 1 that is 6-chloro-5-(2,3,5-trichlorophenyl)-2-trifluoromethylbenzimidazole.

8. A compound according to claim 1 that is 5-chloro-6-(2,4-dichlorophenoxy)-2-(heptafluoropropyl)-1H-1,3-benzodiazole.

9. A composition for treating helminth infestation comprising an anthelmintically effective amount of the compound of claim 1 and a pharmaceutically acceptable carrier.

10. A composition for treating helminth infestation according to claim 9 wherein the composition of formula (I) is combined with an additional active agent.

11. A composition for treating helminth infestation according to claim 10 wherein the active agent is a macrocyclic lactone.

12. A composition for treating helminth infestation according to claim 11 wherein the macrocyclic lactone is selected from the group consisting of abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin and ML-1,694,554.

13. A composition for treating helminth infestation according to claim 10 wherein the composition of formula (I) is combined with verapamil.

14. A composition for treating helminth infestation comprising an anthelmintically effective amount of the compound of claim 2 and a pharmaceutically acceptable carrier.

15. A composition for treating helminth infestation according to claim 14 wherein the composition of formula (I) is combined with an additional active agent.

16. A composition for treating helminth infestation according to claim 15 wherein the active agent is a macrocyclic lactone.

17. A composition for treating helminth infestation according to claim 16 wherein the macrocyclic lactone is selected from the group consisting of abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin and ML-1,694,554.

18. A composition for treating helminth infestation according to claim 15 wherein the additional active agent is verapamil.

19. A composition for treating helminth infestation comprising an anthelmintically effective amount of the compound of claim 3 and a pharmaceutically acceptable carrier.

20. A composition for treating helminth infestation according to claim 19 wherein the composition of formula (I) is combined with an additional active agent.

21. A composition for treating helminth infestation according to claim 20 wherein the active agent is a macrocyclic lactone.

22. A composition for treating helminth infestation according to claim 21 wherein the macrocyclic lactone is selected from the group consisting of abamectin, dimadectin, doramectin, emamectin, eprinomectin, ivermectin, latidectin, lepimectin, selamectin and ML-1,694,554.

23. A composition for treating helminth infestation according to claim 20 wherein the additional active agent is verapamil.