

TABLE 6

MEAN TICK COUNTS - <i>R. evertsi evertsi</i> MALES AND FLAT FEMALES												
WEEK	UNTREATED CONTROL ANIMALS						ALPHA-CYPERMETHRIN TREATED ANIMALS					
	1	2	3	4	5	MEAN	6	7	8	9	10	MEAN
0	15	8	23	3	16	13.0	21	15	9	9	17	14.2
1	13	n/c	27	7	30	19.3	0	0	2	0	6	1.6
2	15	20	9	8	21	14.6	0	0	0	0	0	0.0
3	16	0	7	3	13	7.8	0	0	n/c	0	0	0.0
4	15	n/c	6	1	8	7.5	0	0	0	0	0	0.0
5	9	n/c	1	0	1	2.8	0	0	0	0	0	0.0
7	1	n/c	0	0	0	0.3	0	0	0	0	0	0.0
9	0	n/c	0	0	0	0.0	0	0	0	0	0	0.0

TABLE 7

MEAN TICK COUNTS - <i>R. evertsi evertsi</i> ENGORGING FEMALES (1/4 F, 1/2 F & FULL)												
WEEK	UNTREATED CONTROL ANIMALS						ALPHA-CYPERMETHRIN TREATED ANIMALS					
	1	2	3	4	5	MEAN	6	7	8	9	10	MEAN
0	4	4	5	4	7	4.8	8	2	0	1	7	3.6
1	2	n/c	8	1	3	3.5	1	0	0	0	3	0.8
2	0	1	0	0	1	0.4	0	0	0	0	1	0.2
3	0	0	0	0	0	0.0	0	0	n/c	0	0	0.0
4	0	n/c	0	0	0	0.0	0	0	0	0	0	0.0
5	0	n/c	0	0	0	0.0	0	0	0	0	0	0.0
7	0	n/c	0	0	0	0.0	0	0	0	0	0	0.0
9	0	n/c	0	0	0	0.0	0	0	0	0	0	0.0

We claim:

1. A formulation which contains a melt extrudate consisting essentially of polyvinylpyrrolidone homopolymer having a K value of about 20 to 40 and an insecticidally effective amount of a pyrethroid insecticide, wherein the polyvinylpyrrolidone in the extrudate is present in the amount of from about 50 to 90 percent w/w and wherein a solid solution of pyrethroid in said polyvinylpyrrolidone is formed.

2. An aqueous dispersion comprising the formulation of claim 1 and water.

3. The aqueous dispersion according to claim 2 for the treatment of animals.

4. A method of treating or protecting animals from insects comprising administering to the animals a liquid formulation of claim 1.

5. A method of combating insects harmful to animals comprising contacting the insects with a liquid formulation of claim 1.

6. The formulation according to claim 1 for the treatment of animals.

7. A formulation which contains a melt extrudate consisting essentially of polyvinylpyrrolidone homopolymer having a K value of about 20 to 40 and an insecticidally effective amount of alpha-cypermethrin, wherein the polyvinylpyrrolidone in the extrudate is present in the amount of from about 50 to 90 percent w/w and wherein a solid solution of alpha-cypermethrin in said polyvinylpyrrolidone is formed.

8. The formulation of claim 7 for the treatment of animals.

9. A formulation containing a melt extrudate having a glass transition temperature of greater than about 75° C. to

less than about 155° C. consisting essentially of a polyvinylpyrrolidone homopolymer having a K value of about 20 to 40 and an insecticidally effective amount of a pyrethroid insecticide, wherein the polyvinylpyrrolidone in the extrudate is present in the amount of from about 50 to 90 percent w/w and wherein a solid solution of pyrethroid in said polyvinylpyrrolidone is formed.

10. The formulation of claim 9 further containing an agent for rendering said formulation effervescent in water.

11. The formulation of claim 10 wherein the agent is selected from the group consisting of an acid and a base.

12. The formulation of claim 9 further containing an agent for aiding disintegration of said formulation in water.

13. The formulation of claim 9 having at least one ingredient selected from the group consisting of a surface active agent, corrosion inhibitor, stabilizer and inert filler.

14. A method of treating or protecting animals from insects comprising administering to the animals a liquid formulation of claim 9.

15. A method of combating insects harmful to animals comprising contacting the insects with a liquid formulation of claim 9.

16. A formulation containing a melt extrudate consisting essentially of a polyvinylpyrrolidone homopolymer having a K value of about 20 to 40 and an insecticidally effective amount of a pyrethroid insecticide having the formula: