

Chemical Control/New Products

Control of Pear Psylla

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This study was designed to evaluate S-71639 0.83EC (Valent) and Comply 25WP (Ciba-Geigy) for control of pear psylla (*Cacopsylla pyricola*) when applied to pear (*Pyrus*).

The test was conducted in a 25-year-old commercial orchard of Anjou pears planted on a 9 x 20 foot spacing located near Gled, WA. A dormant oil was applied to the orchard on 3 March. Experimental design was 5 separate one-acre plots with subsamples taken within these large plots. In addition, pear psylla were sampled in the rest of the orchard where the grower used a delayed dormant of Comply + Thiodan + 3 gallons of Volck Supreme oil per acre. In the test plots, insecticides were applied as a delayed dormant application with 3 gallons of Volck Supreme oil per acre on 22 March between 9 and 10 am. A second application was done without oil at petal fall on 20 April between 9 and 10 am. Treatments and rates are given in the tables. Spray applications were done with a commercial tractor pulled airblast sprayer using 100 gal water per acre.

Evaluations were made post-application on 27 March and 7, 14, 22, 29 April and 6, 12, 20, 27 and 31 May and 9 and 23 June. Pear psylla adults were monitored using limb taps and a beating tray with 25 samples per plot. Pear psylla eggs (through 6 May) and nymphs (through 23 June) were counted on 30 leaf spur samples per plot.

Conclusion

S-71639 at 50 g (AI)/acre gave better control of pear psylla than the 2 lower rates. The high rate of S-71639 and Comply gave about the same degree of control of psylla nymphs. Although there were no significant differences, the combination of Comply + Thiodan appeared to give the best control of psylla nymphs.

Table 1. Effect of insecticide treatments applied to pears on 22 March on pear psylla nymphs, Gleeed, WA, 1994.

Treatment	Rate (AI)/acre	% control of pear psylla nymphs post-application				
		27 Mar	7 Apr	14 Apr	22 Apr	29 Apr
S-71639 0.83EC	30 g	NA	NA	100	100	73
S-76639 0.83EC	40 g	NA	NA	100	100	79
S-71639 0.83EC	50 g	NA	NA	100	100	91
Comply 25WP	57 g	NA	NA	100	100	89
Comply + Thiodan 3EC	57 g 2.3 lb	NA	NA	100	100	97

Treatment	Rate (AI)/acre	% control of pear psylla nymphs post-application				
		6 May	12 May	20 May	27 May	31 May
S-71639 0.83EC	30 g	92	76	91	36	89
S-76639 0.83EC	40 g	94	100	86	54	100
S-71639 0.83EC	50 g	95	100	94	92	100
Comply 25WP	57 g	95	88	92	85	100
Comply + Thiodan 3EC	57 g 2.3 lb	99	100	100	100	95

Treatment	Rate (AI)/acre	% control of pear psylla nymphs post-application	
		9 Jun	23 Jun
S-71639 0.83EC	30 g	64	0
S-76639 0.83EC	40 g	81	0
S-71639 0.83EC	50 g	96	73
Comply 25WP	57 g	96	67
Comply + Thiodan 3EC	57 g 2.3 lb	96	95