

Chemical Control/New Products

V-71639 and Supracide for Control of San Jose Scale on Apples

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This study was designed to evaluate the effects of applying V-71639 0.86EC (Valent) and Supracide 2EC (Ciba Geigy) for control of San Jose scale (*Quadraspidiotus perniciosus*) (SJS) when applied to apples (*Malus domestica*).

Evaluations were made using double-sided Scotch tape (2 inches long and one inch wide). Four sticky tapes were put on each of 4 limbs (2.5 to 3 inches in diameter) on 3 different trees in each plot (12 replications per plot). The tapes were taken to the laboratory and the number of San Jose crawlers on the tape edges was recorded on 24 and 28 June and 1 July. New tapes were put up on 24 and 28 June. On 14 August the number of San Jose scale was recorded on 10 apples from each plot.

Conclusion

V-71639 applied at delayed dormant gave good control of San Jose scale crawlers. V-71639 applied at delayed dormant and adult flight gave good control of San Jose scale crawlers. V-71639 applied at delayed dormant and crawler emergence gave good control of San Jose scale crawlers. V-71639 applied at crawler emergence gave good control of San Jose scale crawlers. Supracide applied at delayed dormant gave good control of San Jose scale crawlers.

The single application of V-71639 at delayed dormant gave as good control as two applications. The percent control with a single application at crawler emergence was not as good as with the other treatments.

Table 1. Effect of insecticide treatments applied to apple trees on San Jose Scale (SJS) crawlers found on sticky tapes, Benton City, WA, 1996.

Treatment	Timing	Rate/acre	No. SJS crawlers on different dates		
			24 Jun	28 Jun	1 Jul
V-71639 0.86EC	Delayed dormant	40 g (AI)	2a	3a	0.7a
V-71639 0.86EC	Delayed dormant + adult flight	40 g (AI)	4a	2a	4a
V-71639 0.86EC	Delayed dormant + crawler emergence	40 g (AI)	0a	3a	0.3a
V-71639 0.86EC	Crawler emergence	40 g (AI)	10a	40a	7a
Supracide 2EC	Delayed dormant	2 lb (AI)	2a	4a	3a
Untreated check		--	118b	200b	42b

Means within a column followed by the same letter are not significantly different at the $P=0.05$ level, Newman-Keuls studentized range test.

Table 2. Effect of insecticide treatments applied to apple trees on San Jose Scale (SJS) crawlers found on sticky tapes, Benton City, WA, 1996.

Treatment	Timing	Rate/acre	Percent control of SJS crawlers on different dates		
			24 Jun	28 Jun	1 Jul
V-71639 0.86EC	Delayed dormant	40 g (AI)	94	98	98
V-71639 0.86EC	Delayed dormant	40 g (AI)	98	98	90
	+ adult flight				
V-71639 0.86EC	Delayed dormant	40 g (AI)	100	99	99
	+ crawler emergence				
V-71639 0.86EC	Crawler emergence	40 g (AI)	89	80	84
Supracide 2EC	Delayed dormant	2 lb (AI)	98	97	94

Table 3. Effect of insecticide treatments applied to apple trees on San Jose Scale (SJS) crawlers found on sticky tapes, Benton City, WA, 1996.

Treatment	Timing	Rate/acre	Mean no. scale/apple
V-71639 0.86EC	Delayed dormant	40 g (AI)	0
V-71639 0.86EC	Delayed dormant	40 g (AI)	0
	+ adult flight		
V-71639 0.86EC	Delayed dormant	40 g (AI)	0.2
	+ crawler emergence		
V-71639 0.86EC	Crawler emergence	40 g (AI)	0
Supracide 2EC	Delayed dormant	2 lb (AI)	0.2
Untreated check		--	8.6