Section VIII.
Mites & Sap-Sucking Insects

## CONTROL OF CYCLAMEN MITE IN STRAWBERRY

Lynell K. Tanigoshi and Jeanette R. Bergen Washington State University Vancouver Research & Extension Unit Vancouver, WA 98665-9752 (360 576-6030 tanigoshi@wsu.edu

A postharvest cyclamen mite trial was conducted in replicated plots on a 'Totem' field at the Vancouver REU to compare two rates of Acaramite (bifenazate) and Thiodan (endosulfan) applied two weeks after mowing and again one day after the second mowing. These two application dates were selected with the idea of evaluating coverage and penetration into the crowns of strawberry plants where the adult females overwinter. This suppression, combined with possible winter mortality and a spring application, when the plants are just beginning to push out their branch crown and inflorescences, could prevent onset of stunting, distortion of spring emerging foliage, flowers, dwarfed fruit early in the life of the grower's planting.

The two postharvest timings were conducted with the main idea of taking advantage of the standard practice of mowing down or topping the foliage soon after harvest. This cultural practice would provide ideal plant conditions for drenching the crowns for cyclamen mite control. When applied two weeks after mowing, the 4 oz rate of Acaramite was comparable with Thiodan after 7 DAT. When applied one day after mowing, the 2 and 4 oz rates of Acaramite and recommended field rate of Thiodan were significantly different compared with the untreated check. Next year we will increase the rates of Acaramite to the recommended rates of 8-16 oz per acre for spider mite control on strawberries (Tables 1-2).

Table 1. Cyclamen Mite Control on Strawberry, 2000.

	Mites / Trifoliate*				
Treatment	Rate/acre	Precount	3 DAT	7 DAT	
Acaramite 50WS	2 oz	66.1a	41.3a	46.4b	
Acaramite 50WS	4 oz	70.3a	28.9a	23.7c	
Thiodan 50WP	16 oz	62.9a	41.5a	27.2c	
Check		60.1a	27.2a	67.9a	

Means within columns following by the same letter are not significantly different (Tukey HSD test, P < 0.05).

Table 2. Cyclamen Mite Control on Strawberry, 2000.

Treatment	Mites / Trifoliate*				
	Rate/acre	Precount	3 DAT	7 DAT	
Acaramite 50WS	2 oz	26.5a	29.7ab	25.0b	
Acaramite 50WS	4 oz	31.3a	13.4ab	8.5b	
Thiodan 50WP	16 oz	28.6a	7.3b	5.6b	
Check		34.8a	57.6a	67.8a	

Means within columns following by the same letter are not significantly different (Tukey HSD test, P < 0.05).

<sup>\*</sup>Plants were cut back to 1-2 inches on 22 Aug.

<sup>\*</sup>Plants were cut back to 2-inches the day before treatment.