

Chemical Control/New Products

EVALUATION OF TWO NEW ACARICIDES IN PEAR

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Two trials were conducted mid to late season in 2000. In the first trial, materials were applied to 10-year-old Comice pear trees (5 m x 3.5 m) on July 19 with a small plot speedsprayer. All treatments were applied to four single tree replicates at a spray volume of 173 gallons per acre. Three rates of V-1283 and two rates of Acramite (UCC-D2341) were compared to a standard treatment of Agri-Mek and an untreated control. The second trial, which was not replicated, was applied on August 10 by speedsprayer (183 gpa) and compared Acramite to an Agri-Mek standard and an untreated control. Treatments were applied to a row of Seckel pear trees, approx. 30 years old and planted in a 12 ft x 24 ft spacing. In both trials cluster leaves were sampled and brushed to determine the level of twospotted spider mite (TSM).

**Results and Discussion**

In the first trial Acramite and V-1283 gave effective control of TSM following treatment (Table 1). On six of the eight sample dates after treatment, the experimental compounds had significantly lower levels of TSM motiles than the check. Agri-Mek was also effective although on the final sample date, Sept. 12, Agri-Mek was the only treatment where TSM motiles were not significantly lower than the check. In the second trial, TSM levels in the check climbed to a maximum of 32 motiles per leaf, while treatment with Acramite resulted in very low numbers of TSM for the duration of the sampling which was terminated at the end of September. As seen in this trial, late season treatment with Agri-Mek often provides only limited control of TSM.

**Table 1.** Twospotted spider mite motiles per leaf, posttreatment means, 2000

Trial #1			Trial #2		
Material	Rate form/acre	TSM/leaf	Material	Rate form/acre	TSM/leaf
V-1283 72WDG	0.09 lb	0.15 a	Acramite 50WP	1.0 lb	0.30
V-1283 72WDG	0.125 lb	0.08 a	Agri-Mek	16 oz	9.57
V-1283 72WDG	0.1875 lb	0.08 a	Check	-----	14.89
Acramite 50WP	0.75 lb	0.20 a			
Acramite 50WP	1.0 lb	0.20 a			
Agri-Mek	16 oz	0.35 a			
Check	-----	3.56 b			