Chemical Control

Twospotted Spider Mite and Pear Psylla: Chemical Evaluations

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This trial was conducted in a block of Comice pear trees to evaluate the efficacy of a number of psyllicides and/or acaricides. The initial numbers of pear psylla were fairly high when the first application was made on May 21st. Mite levels were very low early in the season, no spider mites were observed prior to July. All materials were reapplied on July 20th. The seasonal means following the initial application for pear psylla, twospotted spider mite, and pear rust mite are shown below. The entire block was treated with Penncap-M on July 8th and azinphos-methyl on August 19th. Mite levels in the check increased rapidly late in the season and treatment with the nicotenoid compounds, Provado or CGA 293343, appeared to accelerate this increase. All the materials tested reduced the level of pear psylla for at least three weeks after the mid-season application as compared to the check. However, with regards to the seasonal mean, the lower rates of Gowan-1701 and the sugar ester did not result in a significantly lower number of pear psylla when compared to the check.

Two applications (May 21 and July 20, 1998) of psyllicides and/or acaricides to Comice pear
Applications made with handgun sprayer (200 gpa)
Data shown are averages from four single tree replicates

Post treatment averages (6/4—9/15), number per leaf

Material	Rate (form.) per acre	Twospotted spider mite (all stages)	Pear psylla (eggs and nymphs)	Pear rust mite
Gowan-1701	1 pt	2.91 a	0.82 cde	0.90 a
Gowan-1701	2 pt	2.01 a	1.05 de	2.03 a
Gowan-1701	3 pt	0.81 a	0.43 abcd	0.30 a
Pyramite 60W	8.8 oz	2.73 ab	0.60 abcd	1.53 ab
Pyramite 60W	13.2 oz	1.78 a	0.31 a	2.60 ab
Pyramite 60W and Savey 50W	8.8 oz 4 oz	0.63 a	0.23 a	0.51 a
Sugar ester	80 oz	2.39 a	0.67 bcde	22.05 bc
CGA 293343 25W	81 gm	16.09 c	0.45 abc	26.20 c
Provado 1.6 F	20 fl oz	23.88 c	0.39 ab	35.05 c
Agrimek 0.15 EC and oil	20 fl oz 0.5 gal	0.38 a	0.48 abcd	0.20 a
Check	----	16.99 bc	1.08 e	6.98 ab

Means within a column followed by the same letter are not significantly different (P=0.05 Fisher's protected LSD). Data were subjected to the log(x + 1) transformation prior to analysis.