

**PEACH:** *Prunus persica* (L.), 'Babygold 5'

## **EFFICACY OF REGISTERED AND EXPERIMENTAL MITICIDES, 2005**

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European red mite (ERM): *Panonychus ulmi* (Koch)  
Predatory mite (TP): *Typhlodromus pyri* (Scheuten)

This trial was conducted in a commercial orchard of 9-yr-old processing peach trees in Wayne Co., NY. The block consisted of single-tree plots separated by 1–2 trees and staggered in adjacent rows to minimize drift. The experimental design was RCB with 4 treatments and 4 replicates. Treatments were applied to runoff on 1 Aug using a hand-held gun from a truck-mounted sprayer operating at 400 psi and delivering approximately 6 gal per tree. Twenty-five leaves per tree were collected from each replicate and kept cool during transportation and storage. The mites were brushed from the leaves with a leaf brushing machine and collected on a revolving sticky glass plate. The composite leaf sample on the plate was counted using a stereoscopic microscope. Mite populations were sampled 3 days before and 3, 7, 14, and 24 days after treatment. Mite populations are reported as a composite of motile forms of tetranychid (ERM) or predator (TP) mites. Data were analyzed with analysis of variance and mean separation used Fisher's Protected LSD test.

Mite pressure was moderate and relatively late to develop in this test, compared with the potentially high populations that can occur in peach plantings in this region. All 3 treatments provided significant population reduction compared with the check by 3 DAT (4 Aug), but Acramite and Agri-Mek provided longer-term control of ERM, whereas the activity of A8612 diminished after the 14 DAT (15 Aug) evaluation. By 24 DAT (25 Aug), the Acramite treatment showed fewer predator mites than in either the A8612 or untreated check plots.

Table 1.

Treatment/ formulation	Rate amt product/acre	Tetranychid mites/leaf				
		29 July	4 Aug	8 Aug	15 Aug	25 Aug
Agri-Mek 0.15EC + Damoil	12 fl oz 1.0 gal	7.76a	3.16a	3.03b	5.68a	2.94 a
A8612 + Damoil	12 fl oz 1.0 gal	12.87a	8.05a	2.91b	6.73a	6.50b
Acramite 50WS	1.0 lb	13.45a	4.08a	0.68a	3.34a	1.05a
Untreated check	---	12.44a	16.53b	7.14c	15.48b	9.98b

Means within columns not followed by the same letter are significantly different (Fisher's Protected LSD test,  $P=0.05$ ).

Table 2.

Treatment/ formulation	Rate amt product/acre	Predator mites/leaf				
		29 July	4 Aug	8 Aug	15 Aug	25 Aug
Agri-Mek 0.15EC + Damoil	12 fl oz 1.0 gal	0.00a	0.10a	0.05a	0.00a	0.23ab
A 8612 + Damoil	12 fl oz 1.0 gal	0.00a	0.10a	0.04a	0.12b	0.34b
Acramite 50WS	1.0 lb	0.04b	0.06a	0.02a	0.04a	0.12a
Untreated check	---	0.01a	0.03a	0.07a	0.00a	0.44b

Means within columns not followed by the same letter are significantly different (Fisher's Protected LSD test,  $P=0.05$ ).

## **PART II-Materials Tested for Arthropod Management**

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