

(D2)

MANDARIN (SATSUMA): *Citrus unshi* Marcovitch, 'Owari'

EVALUATION OF ACARICIDES FOR CONTROL OF CITRUS RED MITE ON SATSUMA MANDARIN, 2004

Henry Y. Fadamiro

Department of Entomology & Plant Pathology
Auburn University
301 Funchess Hall, Auburn AL 36849
Phone: (334) 844-5098
Fax: (334) 844-5005
E-mail: fadamhy@acesag.auburn.edu

Terry Hargroder

Alabama Agricultural Experiment Station
Gulf Coast Regional Research & Extension Center
8300 State Hwy 104, Fairhope, AL 36532
Phone: (251) 928-2740
Fax: (251) 990-8912

Monte L. Nesbitt

Citrus red mite: *Panonychus citri* (McGregor)

The efficacy of some reduced risk acaricides (Kanemite, Comite, FujiMite, Cinnacure) and Agri-Mek were compared against CRM in Jun 2004. Trials were conducted in an orchard in Fairhope, AL on 'Owari' Satsuma trees planted on 15 × 22 ft spacing. Treatments were assigned to single-tree plots in a RCB design and replicated six times. All replicate trees were buffered on four sides by untreated trees. Pre-treatment densities of CRM were evaluated on 4 Jun, and counts were used to assign treatments. Treatments were applied on 4 Jun using a hand-sprayer at 300 psi and calibrated to deliver 200 gpa. On each evaluation date, trees were sampled by collecting five leaves from the periphery of four corners of each tree (20 leaves per tree). The number of CRM adults was recorded for each tree. Three weekly post-treatment evaluations were conducted with the last counts taken on 29 Jun. Data were analyzed using ANOVA followed by Tukey-Kramer HSD ($P \leq 0.05$).

Pre-treatment densities of CRM were very high in the test orchard and significantly greater than the economic threshold of eight adult female CRM per leaf. While significant reductions in CRM densities were recorded on the treated trees, high numbers of adult CRM were recorded on water-treated check trees throughout the four-wk evaluation. All treatments resulted in significant reduction in the density of CRM adults throughout the study compared with water-treated trees. All four reduced-risk acaricides provided acceptable control, similar to Agri-Mek.

Treatment/ formulation	Rate amt product/acre	Mean no. of motile CRM per leaf			
		Pre-treatment ^a	11 Jun	21 Jun	29 Jun
Agri-Mek 0.15EC	15.0 oz	45.42a	2.83b	0.54b	1.50b
Kanemite SC	31.0 oz	36.35a	1.46b	0.17b	0.38b
Comite 6.55EC	3.0 pt	16.60a	0.90b	0.00b	0.20b
FujiMite 5EC	3.0 pt	37.25a	1.13b	0.13b	0.21b
Cinnacure A3005	2.0 gal	24.04a	5.83b	0.46b	0.54b
Check (water)	---	27.79a	19.96a	20.00a	11.67a

Means within a column followed by the same letter are not significantly different (Tukey-Kramer HSD, $P > 0.05$).

^aPre-treatment counts were taken on 4 Jun 2004.