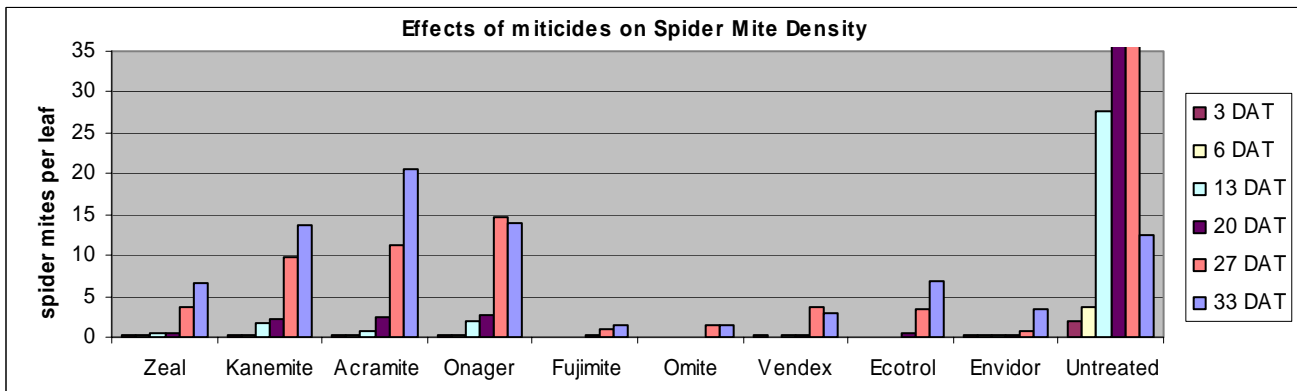


2006 Almond Miticide Trial Report-

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During the summer of 2006 we evaluated 9 miticides for their effects on Pacific spider mite. The trial was located near Blackwell's Corner, Kern Co., on two-year old, non-bearing trees. Each miticide was sprayed on five 2.1 acre plots (~6 rows x 30 trees per plot) that were organized in to a randomized complete block design. Plots were sprayed at night on 14 July using commercial air-blast sprayers at 200 GPA. All treatments were done with the addition of either 1% 415 Oil, which is noted in the tables, or with 16 fl oz of the non-ionic surfactant Exit™ (Miller Chemical and Fertilizer Corp., Hanover, PA). Due to a large amount of mite-induced damage in the untreated check, these five plots were oversprayed with a miticide on 8 August (25 DAT). Mite densities were evaluated in each plot prior to treatment on 13 July and then 3, 6, 13, 20, 27, and 33 days after treatment. On each evaluation date two random leaves were collected from each of 20 trees in the center two rows of each plot.

The figure and table below show the effects of miticides on the density of spider mites per leaf. There were no significant differences in precounts which ranged from 0.4 to 4.8 mites per leaf. On evaluation dates 3, 6, 13, and 20 DAT all treatments resulted in significant reductions in mite density compared to the untreated check, yet there were no significant differences among treatments. By 21 DAT Envirdor, Fujimite and Omite maintained mite densities below 2 per leaf at a level significantly lower than Acramite or the untreated check; other miticides were also lower than the untreated check but were inseparable from any other treatments. By 33 DAT, mite densities in plots treated with Fujimite and Omite were the only ones with mite densities at or below those when the trial began (2.3 mites per leaf average in the precounts).



Treatment/ Formulation	Rate amt product per acre or v/v	Spider mite motiles per leaf						
		Precounts	3 DAT	6 DAT	13 DAT	20 DAT	27 DAT	33 DAT
Acramite 50WS+ Oil	1 lb + 1% v/v	3.7 a	0.1 a	0.1 a	0.9 a	2.4 a	11.1 b	20.6 c
Ecotrol 10EC	96 fl oz	4.3 a	0.1 a	0.0 a	0.0 a	0.4 a	3.4 ab	6.8 ab
Envirdor 2SC + Oil	18 fl oz + 1% v/v	3.1 a	0.2 a	0.2 a	0.2 a	0.4 a	0.7 a	3.5 ab
Fujimite 5EC + Oil	32 fl oz + 1% v/v	1.4 a	0.1 a	0.0 a	0.0 a	0.2 a	1.0 a	1.4 a
Kanemite 15SC	31 fl oz	0.9 a	0.3 a	0.1 a	1.8 a	2.2 a	9.8 ab	13.8 bc
Omite 6E	64 fl oz	1.7 a	0.0 a	0.0 a	0.1 a	0.1 a	1.5 a	1.4 a
Onager 1EC	20 fl oz	0.9 a	0.1 a	0.2 a	1.8 a	2.7 a	14.7 ab	14 bc
Vendex 50WP	2.5 lb	1.7 a	0.1 a	0.0 a	0.2 a	0.2 a	3.8 ab	3 ab
Zeal 72WDG	3 oz	0.4 a	0.2 a	0.3 a	0.5 a	0.5 a	3.7 ab	6.5 ab
Untreated check		4.8 a	1.9 b	3.6 b	27.5 b	55.9 b	*76 c	*12 bc

*Due to mite-induced damage, untreated check plots were oversprayed with a miticide on 9 August (25 DAT). Data for the untreated check 27 DAT were collected on 9 August (25 DAT) prior to the spraying, and data shown 33 DAT represent mite densities 8 days after retreatment.