

RESULTS OF PEACH BLOSSOM TREATED WITH TERGITOL TMN-6, 2002

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This is a continuation of a study that was initiated in 2000 at the Chilton Research and Extension Center in Clanton, Alabama, to test the efficacy of two surfactants as peach blossom thinners.

In 2002, the study was repeated using the same rates and application times as in 2001 [0% (control), 1%, 2%, and 3% concentrations at full bloom and petal fall]. The experimental design consisted of five blocks with single trees treated within each block. There were buffer trees between treated trees within each row and buffer rows between treated rows to reduce contamination by spray drift. Five limbs that were 12 to 18 inches long were tagged on each data tree and the number of flowers were counted and classified according to stage of development. The treatments

were applied using an airblast sprayer. All normal commercial practices were followed after treatment. Data collected included pretreatment flower counts, pre-hand thinning fruit counts on data limbs to determine fruit set, and number of fruit hand thinned per tree.

There were no significant differences in fruit weight at hand thinning and the number of fruit hand thinned per tree (see table). Amount of thinning did increase slightly with increasing chemical rate. There were no significant differences in time of application. There were no adverse effects on harvest or fruit quality at harvest by the chemical. These results do not reflect previous work with this chemical nor are there any apparent reasons for these differences from previous studies.

FLOWER REMOVAL AND FRUIT GROWTH OF 'FIREPRINCE' PEACH TREES TREATED WITH TERGITOL TMN-6, 2002

Concentration (%)	Fruit set	-Fruit hand thinned- weight (g/fruit)	number (no/tree)	Total fruit harvested (no/tree)	Yield (lbs/tree)	Fruit weight (g)
0	60.0 a ¹	12.8	356	548	163	143
1	61.0 a	12.9	368	698	187	135
2	54.0 a	14.2	337	590	161	145
3	40.0 b	14.0	328	689	255	167
Time of application						
Control	59	13	712	548	74	143
Full bloom	53	13	779	713	94	145
Petal fall	51	14	597	605	89	154

¹ Means separation within columns by Duncan's Multiple Range Test $p = 0.05$; columns without letters are not significantly different.