

SCIENTIFIC NOTES

POPULATION TRENDS OF MITES ON PEACHES IN FLORIDA¹—*(Note)*. Seasonal trends of phytophagous (Tetranychidae, Tydidae, Eriophyidae) and predacious (Phytoseiidae) mites on foliage were followed (1976) in a 2 yr old peach orchard at Monticello, FL. Trees had not received foliar pesticide treatments since planting. Ten leaves per tree were collected at ca. 1 wk intervals from 3 trees in each of 4 varieties ('June Gold', 'Rio Grande', 'Sunlite', 'Sunrich') and the number of mites on each leaf were recorded. Between tree differences in population size and development occurred but was not consistent within varieties; therefore, data are pooled from all varieties (Table 1). Pooling did not distort major trends, as population peaks on most trees coincided with peaks in the pooled sample.

Spider mites, *Tetranychus urticae* (Koch) and *Panonychus ulmi* (Koch), were found at low densities early in the study and disappeared from the samples after 15 June. Tydeids were present at each sample date; however, densities did not exceed 1 per leaf on any tree. Eriophyids, the most abundant group, were present throughout the study. The 1st phytoseiids were found on 11 May and peak densities occurred at ca. 1 per leaf in late July, 1 week after the eriophyids had peaked. Some of the trends differed from those reported for mites on peaches and nectarines in the San Joachin Valley of California (Rice et al. 1976. Environ. Ent. 5: 557-64), which is probably due to differences in climate and species-complex. There, *T. urticae* and *P. ulmi* peaked around mid-summer while eriophyids and phytoseiids were most abundant in late summer and fall.

Spider mite outbreaks, particularly *T. urticae*, occur periodically in commercial peach orchards in north Florida. This generally happens near harvest, approximately mid-May to early July. From petal fall to harvest, cover sprays for disease and insect control are applied at 7 to 14 day intervals. The coincidence of spider mite outbreaks with the cover spray period suggests that certain pesticides may be responsible. At this time, phytoseiids are scarce and any material that selectively destroys phytoseiids or the alternate prey (tydeids and eriophyids) without a commiserate impact on the spider mites could induce an outbreak.—J. C. BALL, ARC, University of Florida, Monticello, FL 32344.

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TABLE 1. MEAN NUMBER OF MITES PER LEAF ON PEACH TREES, 1976.

	Mar		Apr		May			June			July			Aug			
	30	6	6	13	11	18	26	15	23	29	6	13	20	27	4	11	18
Tetranychidae	0.04	0.2	0.02	0.02	0.12	0.02	0	0.01	0	0	0	0	0	0	0	0	0
Tydeidae	0.02	0.04	0.08	0.01	0.18	0.16	0.21	0.11	0.15	0.17	0.1	0.16	0.41	0.36	0.54	0.38	0.5
Eriophyidae	0.02	0.02	0.29	0.15	1.7	7.5	10	18	26	17	14	26	32	12	3.2	1.3	1.6
Phytoseiidae	0	0	0	0	0.04	0.02	0.02	0.03	0.04	0.07	0.11	0.47	0.41	0.83	0.47	0.28	0.45