

Table 1. Leaf Analysis Levels in Peach

| | Low Range | Optimum Range |
|--------------------------------------|------------------|----------------------|
| —percent of dry weight basis— | | |
| Nitrogen (N) | less than 2.8 | 3.00 - 3.50 |
| Potassium (K) | less than 1.0 | 1.10 - 2.00 |
| Phosphorus (P) | less than 0.15 | 0.17 - 0.29 |
| Calcium (Ca) | less than 0.80 | 0.90 - 1.50 |
| Magnesium (Mg) | less than 0.30 | 0.30 - 1.00 |
| —parts per million dry weight basis— | | |
| Zinc (Zn) | less than 16 | 17 - 60 |
| Manganese (Mn) | less than 30 | 40 - 100 |
| Copper (Cu) | less than 4 | 7 - 18 |
| Iron (Fe) | less than 40 | 50 - 100 |
| Boron (B) | less than 20 | 25 - 80 |

Peach orchards in Florida are usually mature at the beginning of the fourth year. Differences in cultivar and grove practices dictate variation in fertilization practices. It is suggested that the recommended fertilizers be applied in quantities sufficient to supply 80 to 100 lbs/a (80 to 100 kg/h) of nitrogen each year. Use $\frac{1}{3}$ of the fertilizer in the first application 2 to 3 weeks ahead of bloom, and $\frac{2}{3}$ in the second application in late May or, in the case of later ripening cultivars, after the crop is harvested.

Excessive nitrogen can delay fruit ripening up to 10 days. Very fertile areas may need only 20 to 30 lbs/a (20 to 30 kg/h) nitrogen per acre in the spring application. Weeds must be controlled so fertilizer is made available to the trees.

In central Florida applications of 20 to 30 lbs/a (20 to 30 kg/h) of additional nitrogen in mid-August may help control leaf drop from rust and subsequent premature bloom.

As a guide to fertilization, some growers have leaf samples analyzed. Samples should be taken from mid-shoot areas of average terminals in June or July. Based on limited experience, the following levels are suggested (Table 1.)

Irrigation

Irrigation of bearing trees has materially improved fruit development and significantly increased young tree growth. Most major commercial orchards are equipped for irrigation with volume guns, perforated pipes, or sprinklers. The cultivars of commercial interest in Florida ripen in late April and May when rainfall is usually light. Trees probably need at least 4 in (100 mm) of water per month—from soil storage, rainfall, or from irrigation—for maximum fruit growth. Applications should be made