

**1216
Fertilizing fruit trees**

Fruit trees require nutrients to develop properly, so work phosphorus and potassium into the soil before you plant. The amounts you apply should be based on a soil-test report. Keep in mind that these nutrients move very little in soil. Applying phosphorus and potassium to the soil surface around fruit trees, rather than into the soil itself, seldom corrects deficiencies of these nutrients.

However, you can apply nitrogen to the soil surface because it moves down to the roots where it's needed. Nitrogen can be applied late in fall or early spring. In spring, nitrogen should be applied before bud break. The amount applied depends on the type of fruit tree and its growth status. Trees should be fertilized with enough nitrogen to promote optimal, annual shoot growth.

For non-bearing apple trees, shoot growth should be between 24 to 36 inches; for pears, 12 to 26 inches; and for peaches, 16 to 24 inches. In fruit-producing apple trees, shoot growth should be between 12 to 24 inches; for pears, 6 to 12 inches; and for peaches, 10 to 18 inches.

Growth at less than the recommended rates results in reduced fruiting wood and less fruit production. If you're starting a fertilizer program for stone fruits such as peaches or apricots, apply nitrogen to the soil around the trees at the rate of one-eighth pound for every one inch of trunk diameter. Take the trunk-diameter measurement one foot above ground level. With apples or pears, apply one-tenth pound of nitrogen for every one inch of trunk diameter.

The amount of nitrogen needed is determined by the previous year's growth. If more growth is needed, increase the amount of nitrogen. If too much growth occurred, it's best to reduce or eliminate nitrogen. Also, it's important to keep records of how much of a specific nutrient you apply each year.

Fruit trees in lawn areas may get adequate nitrogen from applications of lawn fertilizer. In some cases, fruit trees grow too much as a result of excess water and fertilizer they receive from lawns. Do not apply "weed-and-feed" products because they contain herbicides that may be harmful to fruit trees. If fruit production is desired in these instances, reduce the frequency of watering and the amount of fertilizer applied to the lawn.

Excessive pruning also will stimulate shoot growth and should be avoided.

For "Organic vs. manufactured fertilizers" refer to message number [1619.](http://www.ext.colostate.edu/ptlk/1619.html)