

Fertilize Peach Soils When Trees are Dormant

TO maintain the fertility of peach soils, they should receive applications of essential fertilizers. This work, in some instances, should be done in fall after the leaves drop. For the peach, fertilizers that contain plenty of



Properly Packed Peaches

potash and phosphoric acid are required, and only small quantities of nitrogen. The proportion and quantity required for a particular orchard will vary with the texture and condition of the soil, and the amount and availability of the plant foods it already contains. The only way to determine the wants of the soil is to experiment and watch the results.

POTASH

The most essential element of fertility in a peach orchard is potash. It induces fruitfulness rather than excessive wood growth. Chemically speaking, it forms salts of the organic acids in the plant, it is supposed to assist in the formation of starch, and the assimilation of carbon, and it influences the flavor. Also, when abundantly supplied, it causes the fruit to color up better. It is often deficient in peach soils, and must be supplied artificially.

The most economical source of potash is unleached hardwood ashes. These also supply a small amount of phosphoric acid. The potash in wood ashes is immediately available. Forty to fifty bushels an acre is the usual rate of application. Muriate of potash is a form of potash that also gives excellent results with peach trees. It is a definite compound containing about 50 per cent. of actual potash, and may be used at the rate of 200 pounds an acre. This and other references to the amount required are merely suggestions. Local conditions and experiment alone can tell.

A common potassium salt used as manure is kainite. It is an impure form of muriate of potash, containing about 13 per cent. of potash. Sulphate of potash is also used by some growers.

Potassic manures should be spread over the ground when the trees are dormant in fall or spring, and worked in with a cultivator. Wood ashes may be applied at any time.

PHOSPHORIC ACID

Phosphoric acid in some commercial form is essential to the growing of good peaches. The tree, the fruit, and the seed are benefited most decidedly by its application. Peach soils, being light and sandy, are likely to be deficient in this constituent. In heavier soils, it is often present in an unavailable form, and requires cultivation to liberate it. Phosphoric acid is usually applied to the soil in the form of bone meal or superphosphates. Bone meal also supplies a small quantity of nitrogen. Superphosphates are apt to be strongly acid, and should be applied in the fall or winter when the tree is dormant, and at the rate of about 200 pounds an acre. Thomas or basic slag is a form of phosphoric acid that gives very good results on sandy soils. It must be very finely ground, as it parts with its fertility very slowly. Dissolved South Carolina rock is another valuable form of this fertilizer

NITROGEN

An over supply of nitrogen is ruinous to peach trees. It has been found that "the peach is the healthiest and yields the best fruit on soils which for most

one must be cautious when using nitrogenous fertilizers.

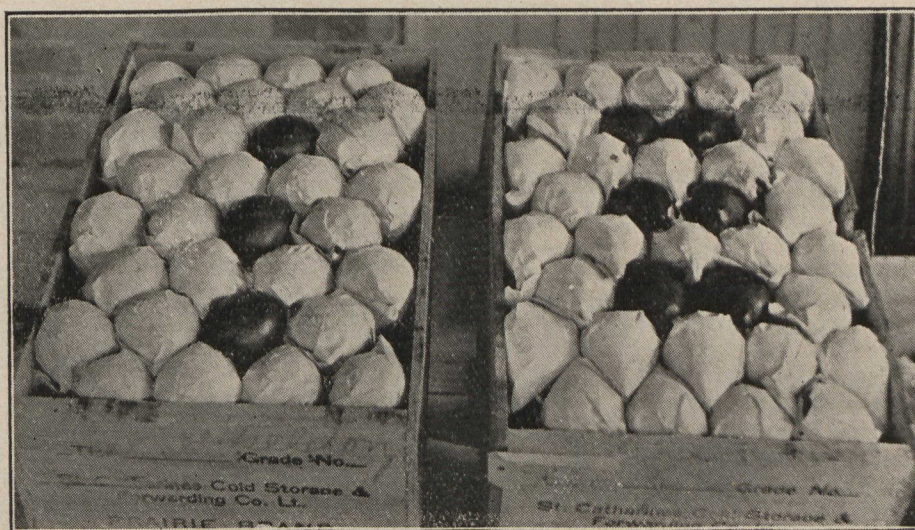
A liberal application of nitrogen is important, however, for young growing trees and for mature trees when the leaves appear smaller than natural, and take on a yellowish color. Although this condition of the leaves usually indicates a lack of nitrogen, it also may indicate an excess of moisture in the soil. Too much nitrogen is indicated by unusually dark green foliage, rank growth, large crops of small, poorly-colored fruit, or no crop at all, and immaturity of the wood in fall.

When nitrogen is required to stimulate early growth or restore impoverished bearing trees, it is most effectively applied in the form of nitrate of soda. Another commercial form is sulphate of ammonium. This, also, may be used for peaches, but it is not so quick in its action as the nitrate.

The most economical method of furnishing nitrogen is by means of tillage and green leguminous manures; the former promotes nitrification, the latter indirectly adds nitrogen to the soil from the air, and it also prevents the leaching of nitrates already in the soil. On poor, gravelly knolls some commercial form of nitrogen may be used with advantage, and it should be applied early in the season, as late applications tend to prevent a proper ripening of the wood for winter.

BARNYARD MANURE

Barnyard manure as a fertilizer for peach trees is not favored by the major-



A Uniform and Correct Pack for Pears

crops would be considered deficient in nitrogen." Also, that trees suffer from winter-killing when overfed with nitrogen, are more liable to be infected with brown rot, and produce later and poorer crops of fruit. It is obvious, then, that

ity of orchardists. Its use seems to encourage fungous diseases, more so than artificial fertilizers. Mr. J. H. Hale, the "peach king," says that peaches stimulated by stable manure are more liable to yellows than those fertilized by com-