

VEGETABLE GARDENING

Growing Potatoes

*The authors are Harwood Hall, Farm Advisor, Susan Wada, Technician,
and Ronald E. Voss, Extension Vegetable Specialist.*

POINTS TO REMEMBER

Plant certified seed potatoes.

One potato vine will yield from 2 to 4 pounds of potatoes.

Potatoes are a cool season crop.

Potatoes need a light, well-drained soil.

Store potatoes in a cool, dark place.

PLANTING CALENDAR

North Coast (Monterey County-north):

March through June

South Coast (San Luis Obispo County-south): March through May, July through August

Interior Valleys: December through March, July through August

Imperial and Coachella Valleys: November through January

Division of Agricultural Sciences
UNIVERSITY OF CALIFORNIA

LEAFLET
2802

VARIETIES

White Rose: long white; early medium maturity (100 to 120 days after planting); does not store well; good for boiling and potato salad.

Red la Soda: round red; early maturity (90 to 100 days after planting); does not store well; good for boiling and potato salad.

Norgold Russet: blocky russet; early maturity (90 to 100 days); does not store well; good for baking and boiling.

Kennebec: blocky white; early medium maturity (100 to 120 days); stores moderately well; good for frying and hash browns.

Russet Burbank: long russet; late maturity (120 to 140 days); stores well; good for baking, frying, hash browns; doesn't grow well in hot areas.

SOIL PREPARATION

Potatoes need -a well-drained sandy-to-loam soil. They do not grow well in heavy soils.

Cultivate the seedbed well, making sure that it is in a loose, friable condition before planting. Mulching the soil with an organic mulch before planting is a good idea. Fertilize at planting time following instructions given below.

FERTILIZATION

Before planting apply 3 pounds of fertilizer labeled 5-10-5 or 10-10-5, or equivalent, to 100 square feet of soil. (These numbers refer to the respective percentages of nitrogen, phosphorus, and potassium in the fertilizer. Law requires that these percentages be listed on all commercial fertilizer labels.) Fertilizer

may be mixed into the soil or applied as a band. To apply as a band, dig a furrow alongside the planting row about 2½ inches deeper than you'll plant seed pieces; sprinkle the fertilizer evenly along this furrow and cover with at least 2 inches of soil before planting.

PLANTING METHODS

Potatoes are started from sections of tubers. Buy certified seed potatoes. (The California Department of Food and Agriculture annually publishes a list of certified seed growers. However, not all of them will supply small quantities. Contact local suppliers ahead of planting to insure that you will be able to purchase the necessary amount of certified seed.) Non-certified seed may have been treated with a sprout inhibitor and probably has potato virus disease, which will reduce yield. Cut seed potatoes into pieces weighing from 1½ to 2 ounces, each having one or more eyes. Store cut pieces at room temperature and preferably in a humid place for 1 to 2 days before planting to allow the cut surface to form a callus. This decreases rotting. Prepare a planting furrow 3 inches deep, drop seed pieces into the furrows, and fill the furrows to ground level. The rows should be 36 to 39 inches apart and the seed pieces planted 6 to 10 inches apart, depending on the size of the potatoes you want to harvest.

Leave the furrow this way for 4 to 6 weeks, and then add 3 more inches of soil so that the seed pieces will be buried 6 inches deep.

IRRIGATION

Potatoes are shallow-rooted and need frequent light irrigation, 1 to 2 times a week. Constant soil moisture is necessary. If soil dries after tubers have formed, a second growth will start when soil gets moist. This

will cause knobby potatoes and multiples. Alternate wet and dry conditions can also cause "hollow heart," or cavities near the center of the potato.

CULTIVATION

Cultivate carefully to remove weeds, taking care not to injure roots and tubers near ground surface.

PEST CONTROL

The two insects most likely to cause problems are aphids and potato tuber moth. Standard garden procedures for killing aphids may be used. Potato tuber moth can be avoided by seeing that potato tubers are always covered with soil and that the soil does not crack. The only disease that can be chemically controlled is blight. Fungicide sprays or powders may be used.

HARVESTING

Potatoes are a good source of vitamin C. When freshly cooked, one medium potato provides one-half the adult recommendation (RDA) for vitamin C. It also provides small but useful amounts of other vitamins and minerals such as thiamin, niacin and iron. By itself, the potato is relatively low in calories; but that doesn't include the caloric content of the gravy or sauce often served with it. One medium potato contains about 75 calories, only a little more than the caloric content of an apple. The potato is exceptionally low in sodium content, making it useful for sodium-restricted diets. It also is essentially fat-free and easy to digest.

Recommended Daily Dietary Allowance, National Research Council, revised 1974.

Small immature tubers can be "robbed" from growing plants if care is taken not to disturb the roots and remaining tubers on the plant. However, most of the crop should be harvested when vines die and/or the skin of the tubers is firm, not flaky. Remove vines before digging.

Potatoes that mature in the fall where frost and/or heavy rains are not a threat can be left in the ground until needed. If tubers are left in the ground, take care not to expose them to light or soil cracks.

After digging, potatoes should be held at room temperature for a week, then ideally stored at 40' to 50a F. They will keep for 6 to 15 weeks at 40" to 50' F if properly cured (depending on the variety). Higher temperatures decrease their storageability. They will keep longest at 36a to 40' F, but may taste sweet and fry dark.

COOPERATIVE EXTENSION

UNIVERSITY OF CALIFORNIA

This information is provided by Cooperative Extension, an educational agency of the University of California and the United States Department of Agriculture. Support for Cooperative Extension is supplied by federal, state, and county governments. Cooperative Extension provides the people of California with the latest scientific information in agriculture and family consumer sciences. It also sponsors the 4-H Youth Program. Cooperative Extension representatives, serving 56 counties in California, are known as farm, home or youth advisors. Their offices usually are located in the county seat. They will be happy to provide you with information in their fields of work.

The University of California's Cooperative Extension Programs are available to all, without regard to race, color, or national origin.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. James B. Kendrick, Jr., Director, Cooperative Extension, University of California.