HAWAII COOPERATIVE EXTENSION SERVICE
College of Tropical Agriculture and Human Resources
HOME GARDEN VEGETABLE SERIES No. 9

IRISH POTATOES

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Climatic Requirements

Irish potatoes should be grown in the cool season in Hawaii. Good yields can be expected with temperatures ranging between 60°F. and 70°F. Cool night temperatures are more important than cool day temperatures. At elevations above 2,500-feet, potatoes may be grown all year around; at low elevations satisfactory production may be expected from October through March.

Varieties

For high elevations the following varieties are recommended for planting: Red Pontiac, Bliss Triumph, Red La Soda, Kennebec, Pele and Waimea. Red Pontiac, Bliss Triumph, and Red La Soda are red-skinned varieties. Pele and Waimea are varieties released by the Hawaii Agricultural Experiment Station and are quite tolerant to late blight. For low elevations, Kennebec, Red Pontiac and Bliss Triumph are recommended for growing from October through March.

Soil Management & Fertilization

The best soils for potato growing are well-drained, loose and well supplied with nutrients. For home gardening, the soil requirement is not as exacting. The pH of the soil should not be lower than 4.8, which is undesirable for the potato crop, nor above pH 5.5, which favors scab. The soil should be relatively free of nematodes. Apply fertilizer (10–30–10 or 10–20–20) at the rate of 2-pounds per 100 square feet. Apply in two applications—one-half at planting and one-half 4-weeks later.

Planting

Obtaining good seed is a major problem for the home gardener. It is not recommended that potatoes bought at the grocery store be used for seed. Certified seed should be used for planting. It is also not recommended that growers keep their own seed unless they take necessary precautions to ensure disease-free seed. Seed pieces used for planting should weigh approximately 1½-ounces and have at least one eye and as little cut surface exposed as possible. Disinfect cutting knives frequently. Treat seed pieces with Captan, Polyram or Dithane M-45 before planting. Plant 2- to 3-inches deep in rows approximately 36-inches apart with 9- to 14-inches between plants.

Irrigation & Cultivation

Properly timed irrigation is usually needed for good yields of quality potatoes, especially on light soils. Irregular moisture supply may result in off-shape and "knobby" tubers. Excess water may result in poor root growth and higher incidence of diseases.

Cultivate potatoes to control weeds, and hill the rows to provide soil cover for the developing tubers to protect them from greening and potato tuberworm damage.

Insect Control

The most common insect pests are aphids, leafminer, mites, leafhoppers and tuberworm. These pests can be controlled by spraying with malathion, dimethoate (Cygon), or carbaryl (Sevin).

Disease & Nematode Control

Late blight is the most serious disease of potatoes. Early blight and mosaic virus diseases are common. The blights may be controlled by weekly applications of Maneb, Dithane M-45 or Difolatan.

Root-knot nematode is a serious soil-borne pest of potatoes. The nematodes cause galls and deformed tubers that are unsightly but edible. Nematodes may be controlled by preplant treatment with nematicides.

CAUTION: When applying insecticides, fungicides or nematicides be sure to accurately read and follow directions on the label.

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Harvesting

Potatoes can be harvested in 90- to 140-days, depending on the season, location, and variety. The leaves will turn yellow and the plants will dry down when the crop reaches harvest stage.

Storage

After harvest the potatoes should be cured before storing. To cure the potatoes, keep them at room temperature and at high humidity for 1- to 2-weeks. For short-term storage, potatoes can be kept at 50°F. to 60°F. in the dark.

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