



Summer Squash

(Zucchini, Summer Crookneck, Early Straightneck, White Scallop, and Cocozelle)

Climatic requirements

Summer squash can be grown successfully year-round in Hawaii, although warm weather is required for best growth and production. For minimum risk of crop failure caused by unfavorable weather conditions, it is best to plant between late spring and late summer.

Varieties

Types of summer squash most commonly grown in Hawaii are zucchini, summer crookneck, early straightneck, white scallop, and cocozelle. Most of the varieties or hybrids available for each type will grow well in Hawaii.

Soil requirements and preparation

Squashes can be grown on a wide variety of soil types but will do best on medium-textured soils. Good yields can be produced on lighter and heavier soils if they are properly managed. The soil should be well drained and well supplied with organic matter. Squashes grow best at a soil pH of 6.0–7.0. Manure or compost at 10–20 lb per 100 square ft, worked into the soil to a depth of 6–8 inches, will improve soil condition and fertility. Drainage can be improved by working the soil to break up any hardpan. If nematodes are a problem, the soil may be treated with a nematicide^z after cultivation and preparation; allow for the interval given on the nematicide label before planting.

Planting

Summer squash is planted at the rate of 2 oz of seed per 100 ft of row. As summer squash produces fairly

large bushes, spacing between rows and between plants is important. Distance between rows should be 3–4 feet, and distance between plants within the row should be 24–30 inches. Plant seeds directly into the seedbed at a depth of $\frac{1}{2}$ –1 inch.

Cultivation and irrigation

Cultivate whenever necessary, particularly when the squash plants are small; weeding will become more difficult as they become bushy. Squashes have a shallow root system, so shallow cultivation is necessary to avoid injuring it. Irrigation frequency depends on soil type and weather conditions. Lighter soils require more frequent irrigation than heavier soils. As the plants begin to set fruit, more frequent irrigation becomes necessary.

Fertilization

A general garden fertilizer such as 10-30-10 can be used at the rate of 2–3 lb per 100 square ft. Half of the fertilizer is applied at planting in a single band placed 2–3 inches to one side of and below the seed. The remaining half of the fertilizer can be applied four weeks later. Additional nitrogen may be applied at the beginning of harvest to prolong plant vigor and fruit production.

Insect control

Insects that commonly attack squashes are aphids, cutworm, leaf miner, melon fly, and white fly. Some measure of control is necessary to ensure a successful crop. A general-purpose insecticide^z spray, available under various trade names at garden shops, can be used

^zRead any pesticide's label carefully to ensure that its use on summer squash is allowed, and follow the label directions.

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according to directions on the label. The best insect control practice is the use of a regular spray schedule to prevent build-up of insects.

The melon fly is probably the most destructive insect pest of squash. The adult female lays eggs in the stem and young fruits. The developing larvae feed on the surrounding plant tissues and may kill the plant and destroy the fruit. The regular use of insecticide^z sprays and bagging of young fruits with brown paper (Kraft) bags soon after pollination may help control melon fly damage. Squashes depend on bees for pollination. Because insecticides are toxic to honey bees, spraying or dusting should be done in the late afternoon, when flowers are not fresh and the bees are less active.

Disease control

Diseases most commonly affecting squash production are damping-off, nematodes, powdery mildew, and mosaic viruses. Damping-off and nematodes can be controlled by preplant soil treatments with fungicide^z for damping-off and nematicide^z for nematodes, or by planting in soil that is free of those organisms. Powdery

mildew can be controlled by the use of fungicides^z. Watermelon mosaic virus, squash mosaic virus, and cucumber mosaic virus may be problems in squash production. There are no controls for these viruses, and infected plants should be destroyed. The best prevention against viruses is to control the insects that spread them and the weeds that are their alternate hosts.

Harvesting

Summer squashes usually produce fruit ready for harvest 50–60 days after planting. Fruit should be picked at an immature stage, when the flesh and skin are tender and succulent. The squash fruit grows rapidly, so daily or every-other-day harvesting is necessary. The length of the harvest period will depend on plant vigor and freedom from disease.

Seed availability

Seeds of squash are usually available on seed racks in local garden shops, from seed stores, or from mail-order seed companies.

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