



Cucumber

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Climatic Requirements

Cucumber is a warm-weather crop that can be grown year-round in Hawai'i. Best growth is obtained when the temperature is 70°F or higher. Temperatures below 60°F or above 90°F slow growth.

Pollination

Many cucumber varieties require [pollination](#) to obtain fruit set. In areas where honey bees are not abundant or when cucumbers are grown in a greenhouse, parthenocarpic varieties of cucumber that do not require pollination may be used (see list below).



Soil Requirements and Preparation

Cucumbers can be grown in any soil type that has a high water-holding capacity and good drainage with a pH range of 5.5 to 7.0. Application of 10 to 20 pounds of manure or compost per 100 square feet will improve the soil condition and fertility. Work the soil to break up any hardpan and then work in the manure or compost to a depth of 6 to 8 inches. If nematodes are present, you can rotate with plants that discourage nematodes such as [sunn hemp](#) and [sorghum-sudan-grass hybrids](#).

Varieties to Plant

There are many cucumber varieties that do well in Hawai'i. Here is a partial list:

Western slicing type: 'Dasher II', 'Genuine', 'Sweet Success', 'Tasty King'

Japanese: 'Tasty Green', 'Burpless 69', 'Spring Swallow', 'Tasty Bright', 'Tasty King', 'Southern Delight', 'Summer Express' (Korean), 'Tokiwa', 'Summer Delight', 'Soarer'

Examples of parthenocarpic cucumbers include these:

Western slicing type: 'Diva', 'Sweet Success'

Beit Alpha (Persian): GVS 609, 'Socrates', 'Sultan'

European (greenhouse): 'Jawell'

Cocktail: 'Unistars'

Planting

Cucumbers can either trail on the ground or grow on upright trellises that are 5 to 6 feet tall. Trellising will result in fewer fruits lost to slug/snail damage and soil rot. Seeds are planted at the rate of 1 ounce of seed per 100 feet of row. Cucumber seeds may also be started in small pots or cell packs and then transplanted. When transplanting, be very careful not to damage the roots. Spacing between rows should be 4 to 5 feet, and spacing between plants should be 15 to 18 inches. Plant seeds directly into the seedbed at a depth of ½ to ¾ inch.

*This document replaces Hawai'i Cooperative Extension Service Home Garden Vegetable Series no. 17, "Cucumber," 1979.

Cultivation and Irrigation

Weed whenever necessary when the cucumber plants are small. Weeding will become more difficult when the plant starts to vine. Use shallow cultivation to avoid injury to the cucumber roots. Frequency of irrigation is largely dependent upon soil type and weather conditions. In general, lighter soils require more frequent irrigation than heavier soils. If pot culture is used in growing cucumbers, daily watering is necessary after the plant begins to set fruit.

Fertilization

Lime and fertilizer recommendations specific to your soil can be obtained by [testing your soil](#) at the UH Agricultural Diagnostic Service Center. If you haven't done a soil test, you can follow these general instructions. A general garden fertilizer such as 10-30-10 or 10-20-20 can be applied at the rate of 2 to 3 pounds per 100 square feet. For organic fertilization, 4 pounds of Sustane 8-2-4 or 8 pounds of Sustane 4-6-4 can be applied per 100 square feet. One-half of the fertilizer should be applied at planting, placed 2 to 3 inches away from the seed and 3 inches below in a single band. The remaining half of the fertilizer can be applied 3 to 4 weeks later. Additional nitrogen may be applied at the beginning of harvest to prolong vine vigor and fruit production.

Insect Control

Insects commonly attacking cucumbers are melon flies, [pickleworms](#), whiteflies, aphids, slugs/snails, and leafminers. Control measures may be necessary for melon flies and pickleworms if they are present. Bagging the young fruit soon after pollination (the flower is withering) with brown paper bags will help to prevent melon-fly and pickleworm damage to the fruit. Melon flies can be managed using the "[Easy as 1-2-3](#)" program that uses a three-pronged approach including sanitation, trapping, and a protein bait. Slugs and snails can be managed by using a [combination of methods](#) including [baits](#). Leafminers and whiteflies are usually kept at tolerable levels by natural enemies.

Disease Control

Disease commonly affecting cucumber are damping-off, rootknot nematodes (see above), and [powdery mildew](#). Planting cucumbers in well-drained soil and not over-watering will help to minimize problems with damping off.

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