



## HAWAII COOPERATIVE EXTENSION SERVICE

College of Tropical Agriculture and Human Resources

University of Hawaii

GENERAL HOME GARDEN SERIES No. 31

### PLANTING THE HOME GARDEN

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Planting is the culmination of planning and preparation for the home garden. It is the time when seeds and plants are placed in the garden to begin the production of vegetables for the family.

#### Use Your Plans

Use the plans that you have carefully worked out during the planning phase. Take the sketch that you made into the garden and use it in laying out rows, placing the seed or plants in the row, and laying out work areas. Study the plan carefully so that you can follow it in planting operations. All seed, plants, and fertilizer should be on hand and the soil properly prepared before you begin planting.

#### How to Plant

Some vegetables are difficult to start by planting in the garden. These should be planted in flats, pots, or similar containers several weeks before you plan to transplant them into the garden. They should be planted in a sterile medium to eliminate disease and insect problems. Peat, vermiculite, perlite (a volcanic pumice), or similar materials are satisfactory. The seeds should be sown or planted according to instructions on the container. After germination, they are allowed to grow until 4 to 6 inches high before transplanting into the soil. These plants need to be properly fertilized to produce strong, healthy plants. They should also be hardened before transplanting. Hardening is exposing the plants to garden conditions over a period of time to help reduce shock when transplanted.

You may also buy plants from nurseries, garden shops, and private growers. Inspect these plants to be sure that they are free of disease and insects. They should be compact with sturdy leaves and stems rather than tall and spindly. The color should be dark green rather than yellow or yellow-

ish green. They should show no purple or purplish-red colors. They should be a uniform color with no mottling or discoloration of the interveinal tissue. The plants should not be too old; those already flowering or fruiting will produce small quantities of produce. Good plants will produce high yields of high quality produce when properly cared for.

#### Materials for Planting

Tools required are a garden rake and hoe. Planters may be needed for larger areas. Use stakes and string to lay out the rows. Contour rows, useful on a slope, are made by using the natural line connecting all points at the same elevation on the slope. Rows on the contour may be marked with a garden plow or other tools. Fertilizers will be needed according to the recommendations based upon a soil test. Weigh out the proper amount of fertilizer for the rows.

#### Planting the Seed

The seed container generally gives instructions on how to plant the seed. Note the depth of planting, row spacing, and spacing between plants in the row. These recommendations should be followed. Fertilizer should be applied at the time of planting. Use a hoe or similar tool to open the furrow for the fertilizer and the seed. For small-seeded vegetables such as carrots and lettuce, open a furrow about 3 inches deep, place the fertilizer in the bottom of the furrow, and cover with soil to a depth of 2 to 2½ inches. Place the seed in a shallow furrow directly above the fertilizer. Cover the seed with about ¼ inch of soil and firm the soil around the seed by patting with your hand or tamping lightly with the hoe blade. If the soil has a tendency to crust after watering, you may use vermiculite, peat moss, or similar material to cover the seed. This prevents crusting of the soil and also helps maintain moisture around the seeds until they have germinated. To ensure

straight rows, stretch a line tightly between two stakes. Follow the line as you open the row for both fertilizer and seeds.

For large-seeded plants such as beans and corn, use the hoe and open a furrow about 4 inches deep, placing the fertilizer in the bottom of the furrow. Use the hoe blade and open a row about 1½ inches deep alongside the fertilizer row so that the fertilizer is covered by the soil from this row. Place the seed in the row according to instructions on the seed package. Cover the seed and fertilizer with remaining soil from the two rows. The soil should be firmed around the seed to maintain proper moisture conditions. Vermiculite or peat moss generally is not needed for large seeds as they have sufficient energy to push through all but the most compacted soils. The use of the stakes and line will keep the rows straight.

### **Transplanting**

Prepare the row or hills by applying the fertilizer 2 to 2½ inches to the side and 2½ to 3 inches below the level of the crown of the plant. Fertilizer for plants in hills may be placed in a circle 5 to 6 inches in diameter and 2½ to 3 inches deep. The rows or hills may be opened with a hoe or similar tool. The fertilizer is placed in the row and covered with soil. Open the hole for the plant. Place the plant in the hole and firm the soil around the roots of the plant. If the soil is too dry, add water to the hole and allow it to be absorbed into the soil before transplanting. Water the plant soon after planting, and keep it moist until it is well established. The use of a starter solution will reduce the shock of transplanting and result in more rapid establishment. Growing the plants in peat pots so that both the pot and the plant can be placed in the soil will also result in more rapid establishment. Be sure that roots are not placed in the fertilizer or too close to it. Even many organic fertilizers can damage the plant if placed too near the roots.

### **Identifying the Plants**

It is often difficult to remember what has been planted in the row. To eliminate this problem, place the empty seed container on a stake at the end of the area where the seeds were planted. You may also identify what is in each row by labelling a stake or marker with the name of the seed. If plans were drawn and followed, you may have this information. Any changes made in your garden plan should be recorded immediately before they are forgotten.

For additional advice on home gardening, consult your local county agent.

### **For More Information**

Fertilizers for the Home Garden. 1974. University of Hawaii Cooperative Extension Service, General Home Garden Series No. 4. 2 pp.

Fertilizer Use in the Home Garden. 1974. University of Hawaii Cooperative Extension Service, General Home Garden Series No. 5. 2 pp.

Starter Solutions for the Home Garden. 1975. University of Hawaii Cooperative Extension Service, General Home Garden Series No. 16. 2 pp.

Take Good Soil Samples for Fertility Recommendations. 1972. University of Hawaii Cooperative Extension Service Circular 428. 10 pp.

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January 1982 (3M)