



HAWAII COOPERATIVE EXTENSION SERVICE

College of Tropical Agriculture and Human Resources

University of Hawaii

GENERAL HOME GARDEN SERIES No. 30

PLAN YOUR VEGETABLE GARDEN

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Careful planning is the major key to success in vegetable gardening. It makes the most effective use of the available area, provides for a continual supply of fresh vegetables, saves time, and avoids disappointment. Planning should be done well in advance of planting.

Basics of Planning

Your plan should include the following basic steps:

1. Choose the best site available for the garden. There should be adequate sunlight. The soil should be fertile, well drained, and easily managed. The garden should be located for easy access and maintenance.
2. Make a list of all the vegetables that you would like to plant. Study their growth habits; determine their adaptation to your climate and soil conditions. Note their space and cultural requirements. Check the length of their growing season and harvest period. If your garden area is too small to grow all of the vegetables you want, eliminate some from your list.
3. Choose good seeds of varieties that are adapted to your conditions. (The University of Hawaii Seed Laboratory produces seeds of many vegetables adapted to Hawaii.) Purchase seeds so that you will have them in plenty of time for planting. Start seeds early for those plants to be transplanted into the garden.
4. Keep a record of your results. If a plant or variety proves unsatisfactory, eliminate it from your future plans. Eventually you will have a list of vegetables that will grow well in your garden with the amount of work and care that you are willing to give.

Draw a Plan for Your Garden

Make a sketch or plot of your garden area. Use a heavy grade of paper, and use a pencil to draw the outline of your garden area. Draw the area to

scale; for example, $\frac{1}{4}$ inch equals 1 foot. Then draw in each row, showing the direction of the row, the space between rows, and the space between plants within each row. Show the name and variety of the vegetables to be grown.

When drawing the plan, consider the following guidelines:

1. Perennial plants should be planted at one side of the garden. These plants will remain in the area for several crops, seasons, or years, depending on the vegetable and the care that they receive.
2. Tall-growing crops should be planted so that they do not shade the low-growing crops. Shading will reduce the yield and quality of these plants.
3. Provide for a succession of crops. This is especially desirable in small garden areas where space is limited.
4. Crops that mature at about the same time should be grouped together. This will provide space for successive planting.
5. Rotate crops within the limits allowed by the size of your area. In small areas it may be desirable to plant green manure crops, both to change crop sequence and to add organic matter to the soil.
6. Provide wind protection by use of constructed or planted windbreaks. This reduces mechanical damage to the plants and excessive moisture loss from soil and plants; it also increases the temperature of the soil and air behind the windbreak.
7. On sloping areas the rows should be planted across the slope or on the contour to reduce soil erosion and conserve water.
8. Long rows generally are better than short rows as they conserve space and save time in care and cultivation.
9. Provide plenty of vegetables for your family.

If you plan to freeze or can the vegetables, be sure to allow sufficient produce for this purpose.

10. Show location of water faucets, irrigation lines, and walkways in the garden area.
11. Grow those vegetables that your family will eat, but remember that experimenting with new vegetables or varieties may prove rewarding and introduce variety in your diet.

Careful consideration of these factors will ensure the most efficient use of your space and provide delicious fresh vegetables for your family.

Choose Good Seed

Good seeds are necessary for strong, healthy plants. The seeds should be free of disease and insect damage. They should be protected from these pests by proper handling and storage. Seeds should also be free of weed seeds or seeds of other crops. Weeds will compete with your vegetables for light, water, nutrients, and space.

The seeds should be for the current season. Look for this information on the container. Poor results have often been obtained because old seeds were used. Seeds that have been stored in a cool, dry place may be used for successive plantings. In Hawaii, however, seeds should be stored in a refrigerator in an airtight container to maintain their viability.

Begin early to look at seed catalogs and visit your seed stores and garden shops to determine what is available. Also visit the University of Hawaii Seed Laboratory for those varieties especially developed for conditions in Hawaii. Buy the seeds so you will have them when needed.

Plan for Soil Preparation

Proper soil preparation is essential in planning. The soil is one of the most important elements in growing the garden, as it is the primary source of support, water, and nutrients for the plant. The soil should have a proper pH for the vegetables to be grown. If the pH needs adjusting, this should be done in sufficient time for it to reach the proper level before planting. The soil should have adequate organic matter. This can be added as raw plant material—sawdust, straw, grass clippings—or as manure or compost. When raw materials are added, sufficient nitrogen is also required

to accomplish decomposition and prevent the deficiency of this nutrient. Both these materials—organic matter and nitrogen—should be added in sufficient time for decomposition to take place before planting the vegetables. Finally, the soil should have good drainage and aeration. It should be friable, or crumbly, and easily cultivated, and it should have an adequate supply of plant nutrients.

The University of Hawaii provides a free soil testing service that measures the pH (how acid or alkaline the soil is) and recommends the proper soil amendment to adjust the pH to the correct level for the vegetables to be grown. Testing also gives the levels of phosphorus, potassium, calcium, and magnesium in the soil and recommends the rate and analysis of fertilizer needed for the plants you plan to grow.

Good planning will provide a schedule of what is needed and when the necessary operations must be performed so that the soil is ready to be planted on time.

For additional advice on planning and soil preparation for your home garden consult your local county agricultural agent.

For More Information

Constructed Windbreaks. 1973. University of Hawaii Cooperative Extension Service Circular 473. 16 pp.

Splittsloessu, W.E. Vegetable Growing Handbook. Westport, Connecticut: AVI Publishing Co., Inc.

Take Good Soil Samples for Fertility Recommendations. 1968. University of Hawaii Cooperative Extension Service Circular 428. 10 pp.

Trees and Shrubs for Windbreaks in Hawaii. 1979. University of Hawaii Cooperative Extension Service Circular 447. 56 pp.

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