

Container gardening is an ideal 4-H project because it is challenging, rewarding, and possible without a large garden area. It is the beginning project in a series where you discover the fun of growing, using, and caring for plants in containers. The advanced project is Experimental Container Gardening.

You can develop many skills in container gardening. The project involves careful planning; selection of containers; soil mixes and fertilizers; planting; irrigation; pest control; and other cultural practices.

Your Container Gardening Project

A container garden may include:

- One or more vegetable plant(s), one or more flower plant(s), or a combination of both grown outdoors. For example:
 - -One tomato plant
 - -Several small vegetable plants
 - —A combination of one tomato plant and several small vegetable plants
 - —One or more annual or perennial ornamental flowering plants
 - —Any combination of the above
- A houseplant grown indoors
- A terrarium or dish garden of plants indoors
- An azalea growing in a pot
- A palm tree growing indoors in a planter tub
- Hanging baskets indoors or outdoors
- Bonsai
- WASHINGTON

- A herb garden
- Spring flowering bulbs (e.g., tulip, narcissus, crocus)
- A moss garden indoors or outdoors in shade
- A fern garden or combination of moss garden and fern garden
- A woodland garden

A container project may last for less than a year if you decide to grow an annual vegetable or flower crop. When you enter the intermediate and senior project years, you may select longer-lived houseplants or woody trees and shrubs to extend your project indefinitely.

Requirements

- Plan, plant, and grow a container garden.
- Keep records. Records show what you did and why you received results. Records help you remember when you planted, fertilized, and watered. They also show when plants flowered, reached maturity, and other important times

Suggestions for recordkeeping

- Names of plants
- Descriptions of containers
- How many were planted, how many survived
- Dates of planting
- Dates of harvest or end of project
- A "garden calendar"
- Your evaluation of results
- Ideas for next year
- Photographs of plants
- Description of diseases or other problems with remedies

Plant requirements

1. Vegetables

- a. Root: radish, carrot, onion, beet, potato, chives, garlic
- b. Leaf: chard, spinach, parsley, lettuce, cabbage, celery, kale, herbs
- c. Fruit: tomato, pepper, beans, corn, peas, squash

2. Flowers

- Seed: calendula, marigold, coleus, petunia, snapdragon, nasturtium, zinnia, gourd
- b. Sets: fibrous begonia, geranium, chrysanthemum, pansy, salvia, impatiens, phlox
- c. Roots: tuberous begonia, dahlia, lily, iris
- d. Bulbs: cyclamen, gladiola, dylily, anemone, tulip, narcissus
- Houseplants: velvet plant, wandering Jew, sansevieria, aloe

3. Permanent container plants

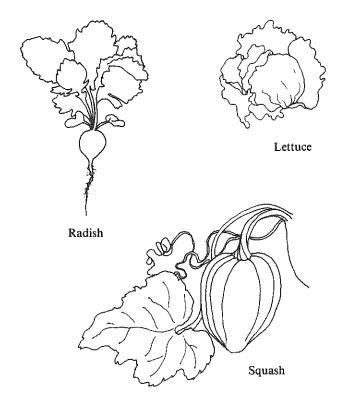
Ferns, pothos, philodendron, jade plant, ficus, African violet, bonsai, sansevieria, dieffenbachia

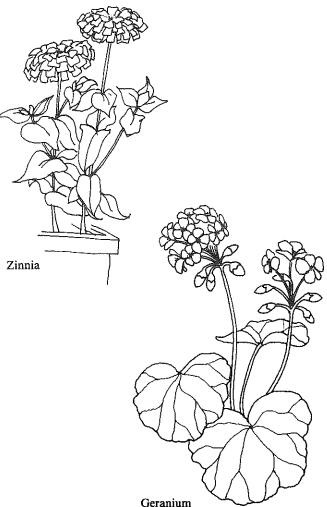
4. Types of containers

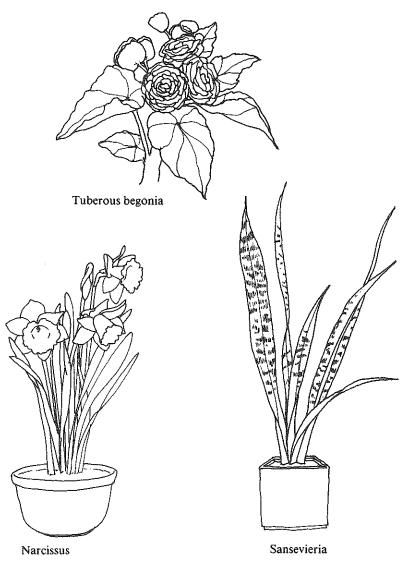
- a. With drainage: clay, plastic or pulp nursery pots; hanging baskets, window boxes, wood patio planters. Any container that will hold soil can be used. Containers can be made from scrap lumber, old boots, or cooking pots from Goodwill. Use your imagination. Poke several holes for drainage.
- b. Without drainage: dish gardens, bottles, terrariums.

Requirements for age groups

- Junior (ages 9 to 11). Plant and care for three types of vegetables and three types of flowers. These may be grown one to a container or be combined in a terrarium or dish garden.
- Intermediate (ages 12 to 14). Plant and care for either:
 - —two vegetables of each type and two flowers of each type (14 total). These may be interplanted (several different kinds in a single container), grown separately. Or.
 - —Six selections from among permanent container examples. These plants must be grown from seed or starts and planted and grown to maturity.
- Senior (15 and older). Plant and care for any one of the following:
 - —Three vegetables and flowers of each type (21 total).
 - —Two hanging baskets, two flowers, and two vegetables of each type grown in three different containers.
 - —One bonsai, plus growing and flowering one plant, having specific light requirements for bloom (e.g., Christmas cactus, poinsettia, jasmine).









Carrying Out The Project

Suggestions*

- Exhibit. Container gardens are easy to transport to fairs and shows.
- Tours. Visit container garden projects and nurseries.
- Records. Keep accurate records. These will be helpful to you and others in evaluating methods, results, consequences, and recognition.
- Decoration. Use your container plantings to dress up the patio, the home, or the yard.
- Discuss the project with your family. Decide with them the best locations for your garden. Remember that indoor plants must be near a window; some plants must have direct, full sun to grow well while others prefer indirect light.
- Attend 4-H meetings and be an active member of the group.

Planning

- Select your project from "Requirements."
- Find suitable containers. Containers must accommodate mature plants, be sturdy, and have adequate drainage.
- Select an indoor or outdoor site. Determine your plants' sun requirements. Protect containers from too much wind, sun, animal traffic, hose damage, etc. Place containers where you can see, feed, and enjoy them.

Planting

Use a loose, well-drained soil for container gardening. You may prefer buying a readymade mix, or you can mix equal parts of garden soil, sand, and peat moss. Place a layer of crushed rock or gravel in the bottom of containers without drain holes. Add drain holes to containers whenever possible. Fill the container with moist soil mix; do not pack down.

Plant several seeds to a pot, about twice their width deep. After the plants sprout, thin them to avoid crowding. Sets are young plants, either purchased or grown in a transplant pot or flat. To plant sets, make a hole in the soil large enough for the roots of the plant. Place roots in the hole and carefully firm the soil around the roots and lower stem.

Give the young plants room to grow. Here are some suggestions for spacing:

- Plant 1 inch apart. Green onions, radishes, carrots, parsley, beets, chives.
- Plant 4 to 6 inches apart. Peas, marigold, snapdragon, green beans, chard, leaf lettuce, nasturtium, zinnia.
- Plant 8 to 12 inches apart. Petunia, geranium, cabbage.
- Plant individually in own containers. Kale, tomato, pepper, squash, tuberous begonia.

^{*} In some states these suggested activities may be requirements. Check with your local leader before you begin your project to be sure of the total requirements in your state.

Growing

A container plant depends on you to supply its water and fertilizer needs. If it were growing in the ground, Mother Nature would take care of it for short periods when you forget. But in a container, it depends on you!

- Watering Water plants when the soil feels dry. Water containers with drain holes until water runs out the bottom. Lightly water those containers without drain holes—just enough to dampen the soil. Containers in full sun or windy areas will need watering more frequently than those in shady, protected areas. Hanging baskets may need watering several times a day during hot, dry weather.
- Feeding. It is easy to overfeed container plants. Vegetables and annual flowers grow quickly and will need fertilizer every week. Houseplants and woody plants that live in containers for several years need to be fed weekly while making active growth. When they stop growing for their rest period, limit feeding to every 4 or 6 weeks. Use a liquid fertilizer until you learn more about the fertilizers you can use with container gardening.
- Weeding. Weeds growing in a container garden are a sign of neglect. Weeds compete with desirable plants for fertilizer and water and usually grow faster than other plants. Pull or clip them off at the base as you see them.
- Moving. One advantage of a container garden is that the container can be moved to take advantage of sunlight, shade, wind protection. It can also be placed in a favorable spot for everyone to see and enjoy.

Enjoy and show

Take advantage of all the fun things to do in 4-H Container Gardening. These might include tours to other members' gardens, visits to nurseries, community gardens, and information sharing with other gardeners.

Show your container gardening project at fairs. Juniors should show one container or picture of their container

project. Intermediates should show two containers or pictures of container-grown plants appropriate to the project level. Seniors should show two containers and/or pictures showing plants appropriate to the project level. Show uniqueness in design, plant care, and training or an outstanding feature of the project.

Mount pictures and include a description of the garden. A picture of the garden is a nice finishing touch to the exhibit. The most important thing to remember is to try new gardening ideas and to have fun.

Pacific Northwest cooperative Extension bulletins are joint publications of the three Pacific Northwest states—Washington, Oregon, and Idaho. Similar crops, climate, and topography create a natural geographic unit that crosses state lines. Since 1949, the PNW program has published over 200 titles. Joint writing, editing, and production has prevented duplication of effort, broadened the availability of faculty specialists, and substantially reduced costs for the participating states.

Prepared by Ray McNeilan, Extension agent, Oregon State University. Bill Boldt, Extension youth specialist, and Aileen Young, Extension volunteer master gardener, made significant contributions in the development of the publication. Specialists from the University of Idaho and Washington State University also reviewed the material.

Published and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914, by the Oregon State University Extension Service, Henry A. Wadsworth, director; Washington State University Cooperative Extension, J. O. Young, director; the University of Idaho Cooperative Extension Service, H. R. Guenthner, director; and the U. S. Department of Agriculture cooperating.

The three participating Extension Services offer educational programs, activities, and materials without regard to race, color, national origin, or sex, or disability as required by Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. The Oregon State University Extension Service, Washington State University Cooperative Extension, and the University of Idaho Cooperative Extension Service are Equal Opportunity Employers. 25/25/25