Container Gardening

Container gardens are an option for persons with limited space. Residents of apartments, condominiums, retirement homes, or houses on small lots can still enjoy gardening. Containers are mobile, allowing a gardener to take the plants along or move them for an instant splash of color.

You can enjoy your plants more fully by growing them on patios, balconies, and window boxes. Older gardeners can tend container gardens when standard gardening becomes too strenuous. And, what better way for children to observe the miracle of plant growth?

Container gardening involves special considerations, especially in Kansas. A container plant growing in an exposed location is under more stress, and requires more frequent watering. The effects of hot, dry winds may be more severe than in conventional gardens. Large containers can be expensive and are difficult to move when filled with potting mix. But, the advantages far outweigh these considerations.

Soil Mixes

When ordinary soil is saturated with water, the air spaces are filled, removing essential air from the roots. This is why a soil substitute, often called potting mix, is recommended for container gardening. The mix may contain some soil—called soil mix—or no soil at all, a soilless mix. Additional ingredients such as peat moss, vermic-ulite, and perlite allow rapid drainage but still hold sufficient water for plant growth.

You can purchase potting mix from nursery or garden centers under a variety of trade names: Jiffy Mix, Pro Mix, Metro Mix, Pro Soil and others. If you have only a few containers, you may want to take them to the local greenhouse and fill them with the greenhouse potting mix for a fee.

You also can make your own potting mix. Remember, to keep it simple. You don't need a different mix for each type of plant. One common formula mixes 2 parts sandy loam soil, 1 part sphagnum peat moss, and 1 part perlite or builders' sand. There are many varieties of this basic recipe. Potting mixes should be free of disease organisms, insects, or weeds. Any mix containing soil has not been pasteurized to kill weeds or disease organisms, so use these mixes for established plants.

Consult references in your local library or K-State Research and Extension office for additional information on container gardening, including recipes for making large quantities of potting mix from a variety of ingredients.

Containers

Containers come in a variety of styles and sizes. You can recycle old buckets, cans, and

similar containers. It is essential that the container have holes in the bottom for draining excess water.

Plastic. Plastic containers are available in various sizes, shapes, and styles. Many plastics are breakable and may not hold up well over several seasons.

Clay. This old favorite is preferred by many gardeners for its earth-tone color. Clay is porous and allows water loss from the sides of the container. Clay pots are breakable and may not hold up well if mobility is required.

Wood. Wood is a popular material for containers. Both redwood and cedar are relatively rot resistant and can be used without staining or painting. Exterior grade plywood and other types of wood also can be used. Avoid using wood treated with creosote, penta, or other phenolic compounds, because vapors can injure some plants. Always use copper-treated lumber if preservative-treated lumber is needed. Wooden containers are excellent for portability and can be purchased or built in various sizes and styles. Several container garden references offer plans for building attractive containers.

How big should the container be? That depends on the type of plants you plan to grow. There is a balance between the top growth and root systems of plants. Small plants can be grown in fairly small, shallow containers, while larger plants need a larger container. Plants in locations such as a hot patio exposed to west or southwest winds, or in elevated locations, may need a slightly larger container than those in more protected areas.

Most small vegetables will grow in containers ranging from 5-inch pots to gallon-size. Larger vegetables, such as dwarf tomatoes, peppers, and cucumbers will require 1- to 3-gallon containers. Full-size tomatoes require at least a 3-gallon container.

Fertilizer

Since potting mixes drain water rapidly, causing fertilizer to be washed out of the containers as you water, you will need to replace lost fertilizer. Lighter mixes will require more frequent fertilizing than heavier mixes containing soil. Remember, you are growing a plant with a small, constricted root system so regular fertilizing and watering is important.

Many gardeners prefer to apply a dilute fertilizer solution at every other watering. Several water-soluble fertilizers, including Rapid Gro, Hyponex, and Miracle Grow, are available at garden centers. If you fertilize at every other watering, use only one-fourth the recommended rate unless the instructions state otherwise for continuous feeding.

Controlled-release or time-release fertilizers also are widely available. These are pellets designed to release fertilizer gradually over a long period of time. Use these according to label directions.

Watering

Since containers are usually placed in an exposed location, water is lost from the containers quickly. Smaller containers have a smaller reservoir for holding water until needed. There is no rule of thumb on how often to water because it varies with the type of plant, potting mix, weather, and type of container.

You may find that daily watering is needed during hot, dry periods. One advantage of using a potting mix is that it is nearly impossible to over-water, as the water quickly drains from the container. Check your plants regularly and look for signs of wilting to indicate a need for water. Another method is to stick your finger into the upper inch or so of the potting mix to feel the dryness. Always apply sufficient water to allow a small amount to come out of the bottom drain hole. This indicates the container is thoroughly saturated with water.

Potting mixes can be easily washed out of a container, so never water with a direct stream of water from a hose. Always use a "breaker" nozzle to break up the stream of water or a sprinkling can to apply water. A sprinkling can is handy for applying fertilizer as you water.

Because regular watering is required, you will need to arrange for plant care when you vacation. Grouping plants will reduce water use. The most reliable method of plant watering while you are away is to arrange for someone to care for your plants. They can water plants as well as check for problems that may develop.

Culture and Care

Plants need care and attention throughout the season. Insects and disease can be concerns because plants are growing under more stress and with limited root systems. Control measures are similar to those for conventional gardening (see page 33). Contact your local K-State Research and Extension office for additional information or publications dealing with garden pest problems.

What To Grow

Vegetables require sunny locations and will vary in productivity depending on the type of crop. Check seed catalogs for new varieties developed for container gardens. There are also several types of "ornamental" vegetables adapted for growing in containers. Flowering cabbage and flowering kale are attractive relatives of standard varieties. Lettuce is available in a variety of colors and leaf textures. Red chard is another popular container plant because of its bright red stalks.

Many gardeners grow herbs near the kitchen to use in cooking. Basil, chives, marjoram, and thyme are all easy to grow in containers. Many gardeners keep mint in containers as it is an aggressive plant that spreads. Some herbs are perennial and can be moved indoors for winter use or held in the container until next year. Many gardeners dig a hole in the garden to store pots of perennial herbs until next season.

Varieties

Vegetables for Spring/Fall

Beets (3-inch spacing): Detroit Dark Red, Early Wonder, Red Ace

Carrot (3-inch spacing): Little Finger, Short 'n Sweet, Royal Chantenay, Red Cored Chantenay, Thumbelina

Leaf lettuce (6-inch spacing): Grand Rapids, Oakleaf, Salad Bowl, Ruby

Butterhead lettuce (6-inch spacing): Tom Thumb, Bibb, Buttercrunch

Onion (2- to 3-inch spacing): Use any standard variety; best grown for green onions

Radish (3-inch spacing): Cherry Belle, Champion, White Icicle

Vegetables for Summer

(Plant after danger of frost is past.)

Bean (4-inch spacing; Pole beans yield more per area — trellis them): Blue Lake, Kentucky Wonder, Fortex

Cucumber (8-inch spacing): Bush Whopper, Salad Bush, Patio Pickle, Spacemaster, Bush Champion

Eggplant (12-inch spacing): Fairy Tale, Bambino, most standard varieties

Muskmelon (12-inch spacing): Minnesota Midget, Sweet 'n Early

Pepper (12-inch spacing): Sweet, hot or banana varieties can be grown in larger containers

Squash (1 per pot): Golden Nugget, Gold Rush, various zucchini hybrids

Tomato (Dwarf; 12-inch spacing): Patio, Pixie, Orange Pixie, Tiny Tim, Small Fry, Tumbling Tom

Tomato (Small-Vined; 1 per pot): Mountain Belle (cherry), Mountain Glory, Celebrity, Sunmaster

Watermelon (1 per pot): Sugar Bush