

Recommended annuals for containers:

Flowering

Ageratum *Ageratum houstonianum* (SP)
Alyssum *Lobularia maritima* (SP)
Begonia *Begonia semperflorens-cultorum* (PF)
Black-eyed Susan vine *Thunbergia alata* (S)
Celosia *Celosia plumosa* (S)
Cosmos *Cosmos sulphureus* (S)
Dahlberg Daisy *Thymophylla tenuiloba* (S)
Dwarf French marigold *Tagetes patula* (S)
Fan Flower *Scaevola aemula* (S)
Gazania *Gazania rigens* (S)
Geranium *Pelargonium* × *hortorum* (S)
Globe Amaranth *Gomphrena globosa* (S)
Impatiens *Impatiens wallerana* (PF)
Lantana *Lantana camara* (S)
Lobelia *Lobelia erinus* (P)
Moss rose *Portulaca gradiflora* (S)
Nasturtium *Tropaeolum majus* (S)
Nierembergia *Nierembergia hippomanica* (SP)
Pansy *Viola* × *wittrockiana* (SP)
Petunia *Petunia* × *hybrida* (SP)
Salvia *Salvia splendens* (S)
Silver Bells *Browallia speciosa* (PF)
Trailing Petunia *Calibrachoa* hybrids (S)
Verbena *Verbena* sp. (S)
Vinca *Catharanthus roseus* (SP)
Wishbone-flower *Torenia fournieri* (P)
Zinnia (dwarf varieties) *Zinnia elegans* and
Zinnia angustifolia (S)

Foliage:

Asparagus fern *Asparagus densiflorus*
'Sprengeri' or *Asparagus setaceus* (SPF)
Coleus *Coleus* × *hybridus* (SPF)
Dusty Miller *Senecio cineraria* (S)
Foxtail fern *Asparagus meyeri* (SPF)
Licorice plant *Helichrysum petiolare* (SP)
Plectranthus *Plectranthus* species (SP)
Polka-dot plant *Hypoestes phyllostachya* (SP)
Spikes *Cordyline indivisa* (SPF)
Vinca vine *Vinca major* (SPF)

S = full sun P = partial shade F = full shade

Fertilization

Plants grown in containers require regular fertilization because they have less soil from which to draw essential nutrients, and because frequent watering leaches fertilizers through the soil mix. Soluble fertilizers can be applied weekly at one-fourth the recommended monthly rate. Thus, if the label calls for 1 tablespoon to a gallon of water applied once a month, use 1/4 tablespoon per gallon of water and apply the solution weekly. Slow release fertilizers also can be used. These release a small amount of fertilizer every time the plant is watered. Check labels for application rates.

Maintenance

Remove dried leaves and spent blooms regularly to promote continuous bloom and keep the plants more attractive. It may be necessary to prune petunia plants or other annuals in the middle of the summer when the stems become long and leggy, with only a few blooms. Cut the stems back to about four to six inches, fertilize, and water well. Within a couple weeks, the plants will branch out and bloom beautifully for the remainder of the season.

For more information

Visit ISU Horticulture—
www.yardandgarden.extension.iastate.edu

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GARDENS
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Growing Annuals in Containers



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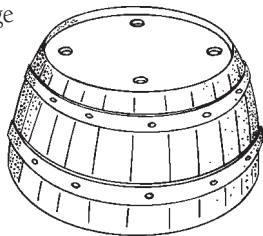
Gardening in containers is perfect for the person who truly wants to have a garden but has limited time or space. Container gardens adapt beautifully to today's lifestyles. They can be moved from one spot to another or even from one home to another. They add interest and color to overhead areas and say "welcome" on patios, porches, steps, and walkways.

Container selection

Select containers that fit the setting and will accent the plant's beauty without dominating it. Containers should be sturdy and must have drainage holes. Clay pots provide excellent drainage and allow air movement through the pot. Since clay pots are porous, they tend to dry out more rapidly than plastic and glazed ceramic pots. Plants in clay pots usually require more frequent watering than those in nonporous containers. Large clay pots should be emptied and stored in a protected place over winter to avoid cracking and chipping.

Garden centers, nurseries, and catalogs offer a wide variety of containers to choose from—window boxes, wood planters, wire hanging baskets, flat-sided baskets to mount on the wall, as well as planters that can be hung on the railings of decks and patios. Just about anything that holds soil and drains well is a potential container for a garden.

Half (whiskey) barrels are popular planters because they are attractive, can accommodate several plants, and do not dry out as fast as clay or terra cotta pots. Before planting, check the bottom of the barrel for drainage holes. If it lacks drainage holes, bore four or five $\frac{3}{4}$ -inch diameter holes in the bottom. To reduce the volume of soil needed for the barrel and to lighten



the weight of the planted container, fill the bottom one-fourth to one-third with plastic packaging "peanuts." Fill in the remaining volume with potting soil.

Plant selection

Choose plants that will grow best where the container will be placed. How many hours of direct or filtered sunlight does the site receive? Is it protected from wind or out in the open? Does the site require plants that can tolerate full sun and the reflected heat of a cement or brick patio, or are shade-tolerant plants needed because of persistent shade?

When combining a variety of plants in one container or grouping several pots in the same location, select plants that have similar growing requirements. Sun-loving and shade-loving plants are not very compatible unless the sun-loving plants serve as an umbrella for the shade-loving plants.

Also consider flower and foliage color and plant habit. Trailing or cascading plants are good for hanging baskets. Upright or mound-shaped plants look better in pots set on the ground. Foliage plants, such as asparagus fern, spikes, dusty miller, coleus, and polka-dot plant, provide textural and height changes to the planter.

Growing media

A well-drained growing medium is essential. Do not use garden soil alone as it compacts when placed in a container, resulting in poor water drainage and aeration. It also pulls away from the inside of the container when it dries, making it difficult to properly water plants. To prepare a homemade potting soil, mix equal amounts of soil, sphagnum peat moss, and perlite.

Commercial soil-less potting mixes also can be used. They are lighter weight and especially useful in hanging baskets. Before planting into a

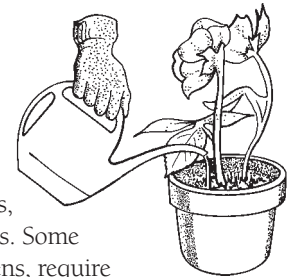
soil-less mix, moisten the medium with warm water. After planting, check the containers often because soil-less mixes may dry out quickly and require frequent watering. The quality of some inexpensive commercial soil-less mixes is rather poor. These poor quality soil-less mixes are black, heavy, and don't drain well. However, drainage and aeration can be improved by mixing them with an equal amount of perlite.

Planting

Plants are often spaced closely in containers. In fact, twice as many plants can be used in a container compared to planting in the same amount of garden space. For example, if alyssum requires a six-inch spacing in the garden, it can be planted three inches apart in a container. Unless the container is only visible from one side, it's usually best to place the taller-growing plants in the center with the short-growing and trailing plants around the edges. Set plants at the depth they were growing in the cell pack or pot. Water thoroughly after planting.

Watering

Water requirements will vary considerably depending on the size and type of the container, plant species, and weather conditions. Some plants, such as impatiens, require moist soil conditions; others, such as vinca, dusty miller, petunia, and alyssum can tolerate drier soils.



Containers should be checked daily for water needs. Some plants, such as New Guinea impatiens and fuchsia may require water twice a day; others may need watering only every couple days. Always apply enough water to thoroughly soak the soil, until the excess water flows out the drainage holes in the bottom of the container.