

# RODALE'S Organic Life

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## Container Gardening 101

No space? No problem! You can grow flowers, herbs, and even vegetables in pots.

Pots, tubs, and half barrels overflowing with flowers add appeal to any garden, but container gardening can serve a practical purpose too. Container gardening is ideal for those with little or no garden space. In addition to growing flowers, gardeners limited to a balcony, small yard, or only a patch of sun on their driveway can produce a wide variety of vegetable crops in containers. Basil, chives, thyme, and other herbs also are quite happy growing in pots, which can be set in a convenient spot right outside the kitchen door.

Container gardening also adds versatility to gardens large and small. Plants lend instant color, provide a focal point in the garden, or tie in the architecture of the house to the garden. Place them on the ground or on a pedestal, mount them on a windowsill, or hang them from your porch. A pair of matching containers on either side of the front walk serves as a welcoming decoration, while container gardening on a deck or patio can add color and ambiance to such outdoor sitting areas. You can use single large containers for outdoor decoration, but also consider arranging groups of pots, both small and large, on stairways, terraces, or anywhere in the garden. Clusters of pots can contain a collection of favorite plants—hen-and-chicks or herbs used both for ornament and for cooking, for example—or they may feature annuals, dwarf evergreens, perennials, or any other plants you'd like to try. Houseplants summering outdoors in the shade also make a handsome addition to container gardening. Window boxes and hanging baskets offer even more ways to add instant color and appeal.

Containers planted with a single species—rosemary or a bold variegated ornamental grass, for example—can be stunning garden accents. Containers planted with a mix of plants are fun to create and offer almost unlimited possibilities of combinations. The best combinations depend on plants that feature handsome foliage and flowers produced over a long bloom season. One easy guideline for choosing the plants to combine in a container is to include "a thriller, a spiller, and a filler." That translates to at least one focal-point plant (the thriller), such as coleus or a geranium with multicolored leaves, for example, combined with several plants that spill over the edge of the pots—such as petunias, bacopa, creeping **zinnias**, or ornamental sweet potatoes. Finally, add the fillers, which are plants with smaller leaves and flowers that add color and fill in the arrangement all season long. Good fillers include salvias, verbenas, ornamental peppers, and wax begonias, as well as foliage plants like parsley or licorice plants. You may also want to include a plant for height, such as an ornamental grass like purple fountain grass. Add a trellis or pillar to a container and you can use a vine to add height to the composition. You'll need a total of five or six plants for an 18- or 24-inch container, for example.

### Size

Keep in mind that it's easier to grow plants in large containers than small ones. That's because large containers hold more soil, which stays moist longer and is less subject to rapid temperature fluctuations. Small hanging baskets are especially prone to drying out, and during hot summer weather, you may have to water them twice a day to keep plants alive.

It's also important to decide what plant you want to grow in each container. Several factors help determine how large and deep the container must be. Consider the size and shape of a plant's root system; whether it is a perennial, annual, or shrub; and how rapidly it grows. Rootbound plants, which have filled up every square inch of the soil available, dry out rapidly and won't grow well. Choose a large pot or tub for a mixed planting, one that will offer enough root space for all the plants you want to grow. Light-colored containers keep the soil cooler than dark containers.

The maximum size (and weight) of a container is limited by how much room you have, what will support it, and whether or not you plan to move it. If your container garden is located on a balcony or deck, be sure to check how much weight the structure will safely hold.

## Drainage

Whatever container you choose, drainage holes are essential. Without drainage, soil will become waterlogged and plants may die. The holes need not be large, but there must be enough so that excess water can drain out. If a container has no holes, try drilling some yourself. A container without holes is best used as a cachepot, or cover, to hide a plain pot. Cachepots (with holes and without them) are useful for managing large plants and heavy pots: Grow your plant in an ordinary nursery pot that fits inside a decorative cachepot so you can move them separately.

Self-watering, double-walled containers, hanging baskets, and window boxes are available. These are a useful option for dealing with smaller plants that need frequent watering.

**Materials** Each type of container has merits and disadvantages:

- Clay or terra-cotta containers are attractive but breakable and are easily damaged by freezing and thawing. In Northern areas, most need to be stored in a frost-free location to prevent cracking and are not suitable for hardy perennials or shrubs that will be kept outdoors year-round.
- Cast concrete is long-lasting and comes in a range of sizes and styles. These can be left outside in all weather. You can even make attractive ones yourself. Plain concrete containers are very heavy, so they are difficult to move and not suitable for using on decks or balconies. Concrete mixed with vermiculite or perlite, or concrete and fiberglass blends, are much lighter.
- Plastic and fiberglass pots and planters are lightweight, relatively inexpensive, and available in many sizes and shapes. Choose sturdy and somewhat flexible containers and avoid thin, stiff ones—they become brittle with cold or age.
- Containers made of polyurethane foam weigh up to 90 percent less than terra cotta or concrete containers, yet they look remarkably like their much-heavier cousins. Polyurethane foam containers resist chipping and cracking and also can insulate roots against both hot and cold temperatures, making them a good choice for potting up plants that will stay outside year-round.
- Wood is natural looking and protects roots from rapid temperature swings. You can build wooden planters yourself. Choose a naturally rot-resistant wood such as cedar or locust, or use pine treated with a nontoxic preservative. (Don't use creosote, which is toxic to plants.) Molded wood-fiber containers are sturdy and inexpensive.
- Metals are strong, but they conduct heat, exposing roots to rapid temperature fluctuations. Metal must be lined with plastic for growing edibles.

## Prep

Since containers are heavy once they are filled with soil, decide where they will be located and move them into position before filling and planting. If keeping them watered during the day is a problem, look for sites that receive morning sun and are shaded during the hottest part of the day, even if you are growing plants for full sun. Afternoon shade will reduce the amount of moisture plants need.

While your containers must have drainage holes, it's not necessary to cover the holes with pot shards or gravel before you add potting mix. The covering won't improve drainage, and pot shards may actually block the holes. Instead, prevent soil from washing out by placing a layer of paper towel or newspaper over the holes before adding mix. If your container is too deep, you can put a layer of gravel or Styrofoam in the bottom to reduce the amount of potting soil required.

Plain garden soil is too dense for container gardening. For containers up to 1 gallon in size, use a houseplant soil mixture; see the Houseplants entry for a recipe. For larger containers, use a relatively coarse soilless planting mixture to maintain the needed water and air balance. Buy a commercial planting mix or make your own from equal parts of compost, pulverized pine or fir bark, and perlite or vermiculite. For each cubic foot of mix add 4 ounces of dolomitic limestone, 1

pound of rock phosphate or colloidal phosphate, 4 ounces of greensand, 1 pound of granite dust, and 2 ounces of blood meal.

Many of the components of potting soil are lightweight, dust-producing materials that can irritate your eyes, skin, and lungs. In particular, vermiculite can contain low levels of asbestos; compost and peat moss can contain mold spores. When you mix potting soil, observe the following precautions:

- Work outdoors or in a well-ventilated garage or garden shed.
- Wear a dust mask.
- Dampen individual ingredients before mixing them together to minimize the amount of dust released.
- When you're finished, wash your hands thoroughly. If you've been working with vermiculite, be aware that the dust can cling to your clothing. Remove and wash dusty clothing as soon as possible to avoid dispersing asbestos inside your house.

You may want to mix in one of the special super-absorbent polymers—synthetic substances that hold large amounts of water available for plants. They will improve water availability without making the soil soggy. While these products are not naturally occurring substances, they appear to be inert and to have no toxic breakdown products.

Premoisten soil either by watering it before you fill containers or by flooding the containers with water several times and stirring. Be sure the soil is uniformly moist before planting.

If you are planting a mixed container, ignore spacing requirements and plant densely; you will need to prune plants once they fill in. For trees and shrubs, trim off any circling roots and cover the root ball to the same level as it was set at the nursery. Firm the planter mixture gently and settle by watering thoroughly. Don't fill pots level to the top with soil mixture—leave space for watering.

## Selecting Plants

Almost any vegetable, flower, herb, shrub, or small tree can grow successfully in a container. Dwarf and compact cultivars are best, especially for smaller pots. Select plants to suit the climate and the amount of sun or shade the container will receive. If you are growing fragrant plants, such as heliotrope (*Heliotropium arborescens*), place containers in a site protected from breezes, which will disperse the perfume.

Use your imagination, and combine upright and trailing plants, edibles, and flowers for pleasing and colorful effects. Container gardening can be enjoyed for one season and discarded, or designed to last for years. When designing permanent containers, remember that the plants will be less hardy than usual because their roots are more exposed to fluctuating air temperature. Nonhardy plants will need to have winter protection or be moved to a sheltered space. So consider how heavy the container will be and decide how you will move it before choosing a nonhardy plant.

## Vegetables + Herbs

You can grow vegetables in individual containers—from large pots to 5-gallon buckets or half barrels, the largest of which will accommodate a single tomato plant or several smaller vegetables such as broccoli or cabbage. Dwarf or bush forms of larger vegetables such as tomatoes, pumpkins, and winter squash are most suited to container gardening. Theme gardens also are fun to try. Plant a salad garden with colorful lettuces, dwarf tomatoes, chives, and parsley. Or perhaps try a pizza garden, with different types of basil, plus tomatoes and peppers. Or plant a container with edible flowers such as marigolds, pansies (*Viola × wittrockiana*), and nasturtiums (*Tropaeolum majus*).

## Annuals

For containers that remain attractive all summer long, look for warm-weather annuals that bloom all summer or have foliage that remains attractive. Geraniums, marigolds, wax begonias, coleus (*Solenostemon scutellarioides*), scarlet sage (*Salvia splendens*), and flowering tobaccos (*Nicotiana* spp.) are all good choices, but you will find many, many more in garden centers and seed catalogs. Experiment, and if one plant doesn't work out, don't worry about it—just cut it down and try something else. For large containers, dwarf cannas and dwarf dahlias also make satisfying additions.

## Perennials + Shrubs

Containers planted with hardy perennials and shrubs can be grown and enjoyed from year to year. Hostas and daylilies are great container gardening plants, but many other perennials work as well. Try ferns, European wild ginger (*Asarum europaeum*), sedges (*Carex* spp.), lavender, lamiums (*Lamium maculatum*), sedums, and lungworts (*Pulmonaria* spp.). Ornamental grasses are great in container gardening, too, as are dwarf conifers and small shrubs.

## Container Gardening Care

Water container plants thoroughly. How often depends on many factors such as weather, plant size, and pot size. Don't let soil in containers dry out completely, as it is hard to rewet. To keep large containers attractive, spread a layer of mulch as you would in the garden. This will also help retain moisture. Be sure to keep mulch an inch or so away from plant stems.

Container gardening plants need regular feeding. Fertilize them by watering with diluted fish emulsion, seaweed extract, or compost tea. Or foliar feed by spraying the leaves with doubly diluted preparations of these solutions. Start by feeding once every 2 weeks; adjust the frequency depending on plant response.

Since containers are focal points in the garden, you will probably want to give them special attention to keep them looking their best. Remove tattered leaves and deadhead spent flowers. Prune back plants that get leggy or stop blooming. To keep mixed pots attractive, dig out or cut back any plants that don't grow well or that clash. You can add something else or let other plants in the container fill the space. Keep an eye out for pests like aphids and mites.