

Fertilizing Ornamental Plants

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Ornamentals grow best in a well-drained soil with moderate fertilization. Most soils need some added fertilizer to maintain health and vigor and to improve growth of flowers and fruit. Fertilizers usually stimulate growth, so the plants may require more pruning.

Place fertilizer within the general root area, which normally extends from a little past the drip-line of the plant halfway back to the trunk. Place the fertilizer in the soil if you can do so without disturbing the roots extensively. It is best to fertilize ornamental plants in the early spring as soon as vigorous growth starts, or to divide the application between spring and early summer. Foliar feeding requires the use of small amounts of fertilizer at frequent intervals. This method should supplement and not replace spring soil applications.

Do not overfertilize

Heavy fertilization, (especially with nitrogen) often produces excessive, weak growth and may reduce bloom and fruiting. Very heavy applications may injure by burning and even may kill plants. Watering after fertilizing helps in distribution and reduces the possibility of injury.

Lawn and garden fertilizers usually contain nitrogen, phosphorus, and potassium. Most of our flowers and shrubs get along well if they are fertilized annually with one of these "complete" mixtures. Many of the common mixtures contain from 5 to 10% nitrogen and are used for ornamentals at the rate of 2 to 3 pounds for each 100 square feet of planting area. If the percent of nitrogen in the mixture is higher, cut the application rate accordingly. If there is a smaller percent of nitrogen, apply more accordingly. Oregon law requires that the amount of each material in the mixture be plainly printed on the container.

Azaleas and rhododendrons

Use a heavy mulch of leaf mold, peat moss, or old sawdust over the root area of azaleas and rhododendrons. This protects the roots from injury caused by cold or heat, prevents excessive evaporation, and helps in weed control. Watering helps to spread fertilizer over the mulch and carry it down to the roots.

These plants require an acid soil for good growth. Garden supply stores usually have acid-type fertilizer mixtures available. Instructions for their use are given on the label. If only regular, complete garden fertilizers are available, choose mixes containing ammonia (am-

monium) nitrogen, because of their acid reaction. Use one teaspoonful for each 6 inches (diameter) of branch spread.

Camellias

Camellias do best with a specially prepared mixture available in most garden supply stores. Follow instructions for use if given on the container.

If such a mixture is not available, use 4 pounds of a garden fertilizer containing 6% nitrogen for each 100 square feet covered by the plants. This is the total annual application, and it should be divided among several applications, starting in the early spring and running through July 15.

Roses

Roses prefer a good mulch as well as fertilization. If well-rotted manure is available, use 5 bushels for each 100 square feet of planting area, in the early spring. This treatment can be repeated in midsummer. To this manure, add 3 or 4 pounds of a complete garden fertilizer (about a 5-10-5 formula) when the new shoots have made 4 to 6 inches of growth. This can be repeated in about eight weeks if needed. Commercial fertilizer should be spread in a broad band on the mulch beneath the plants. Keep it away from the base of the plant. Always water in thoroughly and continue watering to keep the soil in the root zone moist.

If manure is not available, mulch the plants with peat moss, leaf mold, compost, old sawdust, or straw, and use commercial fertilizers four or five times (not later than August 15).

Other shrubs

Most shrubs use less fertilizer than those listed above. An annual spring application of 2 to 3 pounds per 100 square feet covered should be enough. This would be around $\frac{1}{2}$ cup for a plant with a 2- to 3-foot spread.

Annual flowers

If rotted barnyard manure is available, work a 2-inch layer into the soil before planting. An inch of rabbit or poultry manure can be used, or about 4 inches of spent mushroom spawn. In using manures, except the mushroom spawn, there is danger of bringing in weed seeds and symphylans, a small white centipede-like pest injurious to many types of plants.



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If you use commercial fertilizers, work 2 to 3 pounds per 100 square feet into the soil before planting and then supplement with applications of one pound per 100 square feet every six to eight weeks, watering in thoroughly.

Perennial and biennial flowers

Fertilize the soil before planting, as for annuals. Each spring, after planting, use 2 to 3 pounds of the commercial mixture. Instead of broadcast application, fertilizer can be applied in a ring around each plant, using 2 ounces per plant (a small handful). A second application in July or August is desirable for the late-blooming flowers. Mix the fertilizer into the topsoil if this can be done without injury to roots.

Bulbs

Use same rate as for perennials. Apply all fertilizer before planting or divide into three applications: before planting, in spring as plants emerge, and at flowering time. After the first year, make an application in the spring of 2 to 3 pounds per 100 square feet.

Gladiolus

Use 2 pounds of fertilizer per 100 square feet, or 3 to 4 pounds per 100 feet of row. Mix all the fertilizer in the soil before planting, or use half at planting and sidedress the rest about six weeks later.

Iris

Iris do not require heavy fertilizing. Apply 2 to 3 pounds of complete fertilizer per 100 square feet in the spring.

Lilies

Use the same fertilizer as for iris, or work in one tablespoon around each plant in the spring.

Perennial phlox

Use 6 to 7 pounds of the complete fertilizer per 100 square feet each spring; supplement this with 3 rounded teaspoons of superphosphate worked into the soil around each plant as growth starts.

Chrysanthemums

Use 2 to 3 pounds of fertilizer per 100 square feet each spring and again during the summer. If easier, use 3 tablespoons per plant three or four times during the growing season. Stop fertilizing at least two weeks before blooming. Potted plants require a scant teaspoon per month.

Dahlias

Use 2 to 3 pounds of fertilizer per 100 square feet at planting time and again in midsummer. If organic matter is used, the decomposed material should be applied about two months before planting.

Geraniums

Bedding plants. If soil is fertile, little fertilizer is needed. For poor soils, use 2 pounds of fertilizer per 100 square feet early in the season.

Potted plants. Use no manure or fertilizer in the potting soil. After roots are well established, add $\frac{1}{2}$ teaspoon of fertilizer per 6 inches of pot.

Tuberous begonias

Before planting, mix 2- to 4-inch layer of manure, spent mushroom spawn, or compost and a little bone meal with soil. During the growing season, use water-soluble fertilizer as needed. This may be every week or 10 days. If foliage is cupped up and light-colored, the plants need feeding.

Fuchsias

This plant does best in a soil mix of two parts good loam and one part each of sand, leaf mold, and well-rotted manure. Use a low-nitrogen liquid fertilizer regularly every two weeks. This should provide a healthy growth and continuous flowering.

Container plants

A good soil mix is essential for container plants. Equal parts of garden soil, sand, and peat normally will serve very well. The mixture given for fuchsias is also good. Apply fertilizer with every third watering, using a complete water-soluble fertilizer.

House plants

Potting soil should be mixed with fertilizer prior to potting. Use one teaspoon of fertilizer per 6-inch pot, $\frac{1}{2}$ teaspoon per 4-inch pot, or 3 teaspoons per 8-inch pot. After potting, use of a dilute liquid fertilizer would be helpful. Use it about every three to four weeks, but only when the plant is in active growth. Most supply stores have a good house plant fertilizer.

Peonies

A good time to fertilize is after the blooms have faded. Carefully work in a handful of complete fertilizer around each plant. The amount to use will depend on how well the plant is doing.