

## Summer Flowering Bulbs

Summer flowering bulbs are easy to grow, and do well in all parts of the United States. Most of them are grown for their flowers, some for their foliage. Among the more popular summer flowering bulbs are tuberous rooted begonia, canna, dahlia, gladiolus, lily, and caladium.

Some bulbs may be grown as pot plants, some as pot or garden plants, and others as garden plants only. In the garden, various kinds of bulbs may be used as foundation plantings, as borders, in front of shrubs, or in groups for masses of color.

To grow summer flowering bulbs successfully:

- Select healthy, mature bulbs and store them in a cool, dry place until planting time.
- Prepare the soil in the planting site thoroughly.
- Plant at depths, distances apart, and planting times recommended for each kind of bulb.
- Water the plants at regular intervals.

### Selecting bulbs.

Bulbs are sold in nurseries, drug and variety stores, garden shops, and through florist or nursery catalogs. *Buy from a reputable dealer.*

Make sure bulbs are not diseased. Diseased bulbs look moldy, discolored, or soft and rotted. Bulbs should be firm and have an unblemished skin.

Buy bulbs of varieties that flower together and grow to about the same height. Be sure to buy enough of each color and type for a good display in your garden.

If you buy bulbs before planting time, keep them in a cool, dry area. A temperature of 60° to 65° F. is cool enough to prevent most bulbs from drying out until you plant them.

### Planting.

Some kinds of summer flowering bulbs are grown in the garden outdoors and others in pots indoors. You can start many bulbs in flats or pots indoors in winter or early spring and replant them outdoors when the danger of frost has passed in the spring.

Most bulbs need full sunshine. Try to select a planting site that will provide at least 6 to 10 hours of direct sunlight a day. Bulbs planted in a southern exposure near a building or wall bloom earlier than bulbs planted in a northern exposure.

Before preparing new flowerbeds, test the drainage of the soil. Dig a hole about a foot deep and fill it with water. The next day, fill the hole with water again and see how long it remains. If the water drains away in 8 to 10 hours, the soil is sufficiently well drained.

If water remains in the hole after 10 hours, it will be necessary to improve the drainage of the planting site. Dig furrows along the sides of the bed and add soil from the furrows to the bed. This raises the level of the bed above the level of the ground.

Dig and plant your flowerbeds when the soil is fairly dry. Wet soil packs tightly and retards plant growth. If you can crumble the soil between your fingers, it is dry enough for digging and planting.



Dahlia

Spade the soil 8 to 12 inches deep. As you dig, remove large stones and building trash, but turn under all leaves, grass, stems, roots, and anything else that will decay easily.

Add fertilizer, sand, and coarse peat moss to the soil. Use 1/2 pound (1 rounded cup) of 10-6-4 fertilizer for a 5 by 10 foot area, or a small handful for a cluster of bulbs. Place a 1 inch layer of sand and a 1 to 2 inch layer of peat moss over the bed. Thoroughly mix the fertilizer, sand, and peat moss with the soil.

Use a small handful of 10-6-4 fertilizer and equal parts of garden soil, peat moss, and sand for each pot plant. All bulbs require low levels of fertilizer. Avoid frequent applications of high nitrogen fertilizers; this will promote rotting in the bulbs.

Plant bulbs upright, and press the soil firmly over them to prevent air pockets underneath. Water the planted beds thoroughly to help settle the bulbs in the soil.

In loose, sandy soil, plant bulbs 3 to 4 inches deeper than the depths recommended in the list of bulbs.

Be sure to plant bulbs at recommended distances apart because many of them need room to develop new offshoots.

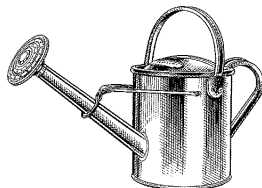
You may allow space for over-plantings of dwarf marigold, petunia, ageratum, alyssum, coleus, or verbena. These annuals provide excellent color contrast and flower display with your bulbs.

### **Care of plants.**

If weeds grow in your flowerbeds, you can usually pull them by hand. Be careful when you use a hoe or other weeding tool; these implements may injure plant stem and surface roots.

Normal rainfall usually provides enough moisture for summer flowering bulbs. But during dry weather, you should water the plants at weekly intervals.

When you water, soak the ground thoroughly.



When plants bloom, fertilize them lightly with 5-10-5 fertilizer. Use no more than 1/2 pound for a 5 by 10 foot flowerbed or a light ring around each plant. Many flowerbeds will be fertile enough from fertilizer used on other plants grown in the bed. Avoid high nitrogen fertilizers.

Be sure to keep fertilizer off the leaves and away from bulbs and roots; it will burn them.

In addition to 5-10-5 fertilizer, you can use bone meal as an extra source of nitrogen to promote plant growth for the next year. Bulbs decay when too much nitrogen is used at one time. But decay is unlikely when you use bone meal because it releases nitrogen slowly.

Apply bone meal at flowering time. Use no more than 3 pounds for a 5 by 10 foot bed. Mix it thoroughly into the soil. Do not use bone meal on pot plants.

When flowers fade, cut them off to prevent seed formation. Seeds take stored food from the bulbs.

After the leaves turn yellow, dig the bulbs and store them for replanting the next year. Destroy the dead stems and foliage of the plants. Foliage left on the ground may carry disease to new growth the next year. If disease is severe, plant bulbs in a new location.

### **Care of bulbs.**

Although bulbs, corms, and tubers are all referred to as bulbs, they differ in appearance.

A true bulb is composed of layers of flesh, or scales, that overlap each other like the layers of an onion. A complete flowering plant develops inside the bulb. Each year, the growing plant replaces the bulb either partially or entirely.

A corm is a swollen underground stem that grows upright. Each year, the growing plant produces a new corm on top of the old one. The plant grows from the top of the corm.

A tuber is the swollen end of an underground side shoot that has eyes, or growing points. Each eye produces a separate plant.

Tubers multiply from year to year and may be cut apart, or divided for replanting, each division must have eyes on it. Tubers without eyes will not grow.

Most summer flowering bulbs should be dug and stored when the leaves on the plants turn yellow. Use a spading fork to lift the bulbs from the ground.

Wash off any soil that clings to the bulbs, except for bulbs that are stored in pots or with the soil around them.

Leave the soil on achimenes, begonia, canna, caladium, dahlia, and ismene bulbs. Store these bulbs in clumps on a slightly moistened layer of peat moss or sawdust in a cool place. Wash and separate them just before planting.

Spread the washed bulbs in a shaded place to dry. When dry store them away from sunlight in a cool dry basement, cellar, garage, or shed at 60° to 65° F. Avoid temperatures below 50° or above 70° F.

Inspect your bulbs for signs of disease. Keep only large healthy bulbs that are firm and free of spots. Discard undersized bulbs.

If you have only a few bulbs, you can keep them in *paper* bags hung by strings from the ceiling or wall. Store large numbers of bulbs on trays with screen bottoms. Separate your bulbs by species or variety before storing them.

Be sure that air can circulate around your stored bulbs. Never store bulbs more than two or three layers deep. Deep piles of bulbs generate heat and decay.

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