
Bulbs

The term "bulb", is often used to describe a plant which utilizes an underground plant part to store energy to enable it to survive periods with less than optimal conditions (i.e., drought, freezes, fires, etc.). From a botanical perspective, what most people call "bulbs" can be either true bulbs, corms, tubers, or rhizomes.

Onions, lilies, daffodils, and tulips are examples of true bulbs. From the plant science perspective, a true bulb is a large bud that consists of a very short stem with fleshy leaves or scales. Energy (sugar and/or starch) is stored at the thickened bases of the leaves. Roots grow from the base of the stem.

Corms appear similar to bulbs but differ by having thinner, smaller leaves which have no energy storage function. Instead, energy is stored within the stem of the corm. Gladiolus, crocus, and cyclamen grow from corms.

Tubers are swollen underground roots that have buds or "eyes" as found on potatoes. Each bud produces a separate plant. Dahlias, ranunculus, anemones and some begonias grow from tubers. Rhizomes are very similar to tubers, are usually found growing near the soil surface and in a horizontal position. German irises grow from rhizomes. Both tubers and rhizomes serve as energy storage structures.

Spring flowering bulbs bring early color to beds and perennial borders. Many bulbs require little attention after planting and will bloom year after year. In addition, there are hundreds of species and varieties in a broad range of shapes and sizes. Tried and true choices include tulips, hyacinth, crocus, daffodils, bearded iris, and narcissus. Some lesser-known spring flowering bulbs are Dutch iris, scilla, snowdrops, checkered lily (*Fritillaria*), and allium. Hardy spring flowering bulbs should be planted in late summer or early fall (September and October) and will bloom between January and May.

Before purchasing, consider time of bloom, color, and mature height to create a pleasing design. Buy only high quality bulbs. This is important because the flower that will bloom next spring has already formed inside the bulb. Poor quality bulbs will produce poor quality flowers. If you buy bulbs early, store them in a cool (below 70 degrees F), dry place and preferably in peat moss or vermiculite.

Most bulbs need full sun. Five to six hours of full sun is a minimum. Bulbs left in the ground year after year will do better with eight to ten hours of sun. Plantings on south and west exposures will bloom earlier than those on north and east exposures.

Soils must be well-drained and preferably dry and friable at planting time. Avoid planting bulbs in areas with shallow caliche or otherwise restricted drainage. Organic matter additions are necessary to improve drainage, increase nutrient holding ability and help acidify our alkaline soils. Manure will work, but it must be well decomposed and should be worked into the soil six weeks before planting. Spade the soil 10 to 12 inches deep adding compost liberally as you work. Dried leaves, grass clippings, or other organic matter could be substituted as these materials will break down further over time prior to the bloom period.

Add one pound 5-10-10 fertilizer per 50 square feet of bed. Phosphorus (the middle number) is especially critical. This can be placed in a layer two or so inches below the bulbs or mixed with the soil. Do not allow a bulb to be in direct contact with concentrated areas of fertilizer, as it will damage the bulb. This fertilizer will provide nutrients to boost flowering the following year as well.

Planting depth can vary with local conditions. In general, bulbs should be planted at a depth two to three times the diameter of the bulb. Reputable local nurseries and successful growers may provide you with additional hints on specific species and varieties. I recommend mass plantings or groupings that are randomly placed rather than narrow rows of like bulbs. Try mixing your various bulbs together, tossing them on the bed and planting exactly where they land. After planting, mulch the soil with at least two inches of organic matter (leaves, grass clippings, or straw).

Supplemental irrigation will usually improve the quality and quantity of flowers produced and increase the longevity of the bulbs. The real trick for successful flowering year after year is to promote sufficient foliage growth to store enough energy in the bulb for successive years. After flowering, remove flowers before they produce seeds. Seed production takes energy away from the plant. This energy is much better used to produce the following year's flowers. The leaves conduct photosynthesis to produce the energy needed for flowering and to satisfy the metabolic needs of the plant during dormancy. By promoting leafy growth, you are also allowing the bulbs, corms, tubers and rhizomes to store energy for the future. A light application of 5-10-10 fertilizer after blooming will improve the following year's blooms. Fertilizer should be kept off the leaves to prevent foliar damage.

Spring flowering bulbs can usually be left to themselves for many years. However, over time, they may become too crowded. Digging and dividing should only be done after flowering and growth have ceased and the foliage has died to the ground. You can share the extras with neighbors and friends. If the bulbs appear puny or unhealthy, you may consider replacing them with new ones. Finally, remember that javelina love tulips and are curious about many other bulbs. Narcissus, daffodils, and bearded iris are best used in unprotected/unfenced areas.

June 23, 2024

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