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Fall-planted bulbs and corms no. 7.410

by J.E. Ells, J. R. Feucht¹

Quick Facts...

There is a direct correlation between the size of a bulb and the size of the flower grown from that bulb.

Late September is the preferred time to plant bulbs so they root well before the ground freezes.

The selected site should have adequate sunlight, be well drained and show the flowers off to their best advantage.

Bulbs are planted much deeper than seed; therefore, soil preparation methods will differ. Plant bulbs with the growing tip up.

Fertilizer must be present in the root zone to be effective.

Selection

The earlier bulbs and corms are purchased in the fall, the better will be the selection. Select the largest bulbs of a variety since there is a direct correlation between bulb and flower size. Avoid those that show evidence of mold or mechanical damage.

While it is preferable to select bulbs and corms individually from open bins than to purchase them prepackaged, there is a chance that a customer may not put bulbs back in the proper bins. If the adjacent bins have similar bulbs, this mix-up will go undetected.

Generally, a gardener selects the site before the bulbs are purchased. Since bulbs represent an investment, this site usually is conspicuously located to show the flowers off to their best advantage. If the bulbs will remain in this location for more than one year, they need adequate sunlight to regenerate strong bulbs. A southern exposure, especially when close to the foundation, induces early emergence that may result in freezing injury. Provide drainage so the bulbs do not stand in water. Finally, a solid block of one color is more impressive from a distance than a mixture of colors and varieties.

Planting and Growing Fall Bulbs

September and October are the best months for planting bulbs because they can become well rooted before the ground freezes. Bulbs planted after October may not have time to root adequately and therefore may not flower uniformly in the spring.

Plant the bulbs at a depth consistent with the level indicated on the planting chart. As a general rule, this depth is four times the height of the bulb between the soil surface and the tip of the bulb. Plant bulbs with the growing tip up.

After the ground freezes, cover the bed with a 3-inch mulch to prevent alternate freezing and thawing that breaks roots and damages bulbs. For more information see fact sheet 7.214, *Mulches for home grounds*. This mulch may be removed in April before the shoots emerge, or left in place if the shoots can penetrate it easily.

Remove flowers as soon as they wither, because seed production diverts food that otherwise would be used to produce more vigorous bulbs. Apply nitrogen at the rate of 1/4 pound per 100 square feet before the foliage withers. After the foliage has withered completely, the bulb is dormant.

The bed usually is not dug up after the first year; however, after the second year, the developing bulbs begin to crowd and lose much of their original vigor. When this occurs, the gardener may wait until late August and dig the bulbs and allow them to dry for a few days in a shady, cool spot. Divide and replant only the



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Soil Preparation

- Bulbs are planted deeper than seed; therefore, soil preparation methods differ from those used in the garden.
- According to the bulb-planting chart (Figure 1), all bulbs root below 4 inches; and for fertilizer to be effective, it must be present in the vicinity of the roots.
- Excavate the bed to the bulbs' planting depth. Apply the fertilizer and soil amendments at this level, and spade or rototill the soil to a depth of 3 or 4 inches.
- Aeration is the most important aspect of soil preparation. Before the soil is shoveled back into the bed, mix it with some type of organic matter. Space the bulbs as desired, refill the bed and water to settle the soil around the bulbs.
- The flower bud and the food necessary to produce the flower are present inside a bulb when it is planted. Fertilizer is applied to make larger bulbs the following year.
- Apply phosphorus fertilizer at planting time so it is available to the roots, since it does not trans-locate in the soil. Adequate phosphorus may be supplied with 1/2 pound of 0-46-0 fertilizer (super phosphate) per 100 square feet.
- To improve the texture of the soil, add peat moss or well-decomposed compost using up to one-third of the volume of soil removed from the bed as described. Soil amended in this way offers less resistance to the shoot as it emerges and provides better aeration and drainage for root growth.
- Soils with a high clay content should be heavily amended.

best ones, preferably in a new location. If none of the bulbs are as large as the original ones, purchase new bulbs for better results. This is especially true of hyacinths, which are seldom worth transplanting.

When the bulb bed occupies a prominent place in the yard, many growers remove the bulbs after flowering, replacing them with annuals for the summer. It also is possible to interplant annuals among the withering bulb tops. However, do not remove the bulb tops until they are dead. The annuals grow faster and fill in the bed sooner if 5 pounds of 5-10-5 fertilizer per 100 square feet are worked into the soil rather than the 1/4 pound of N as suggested previously.

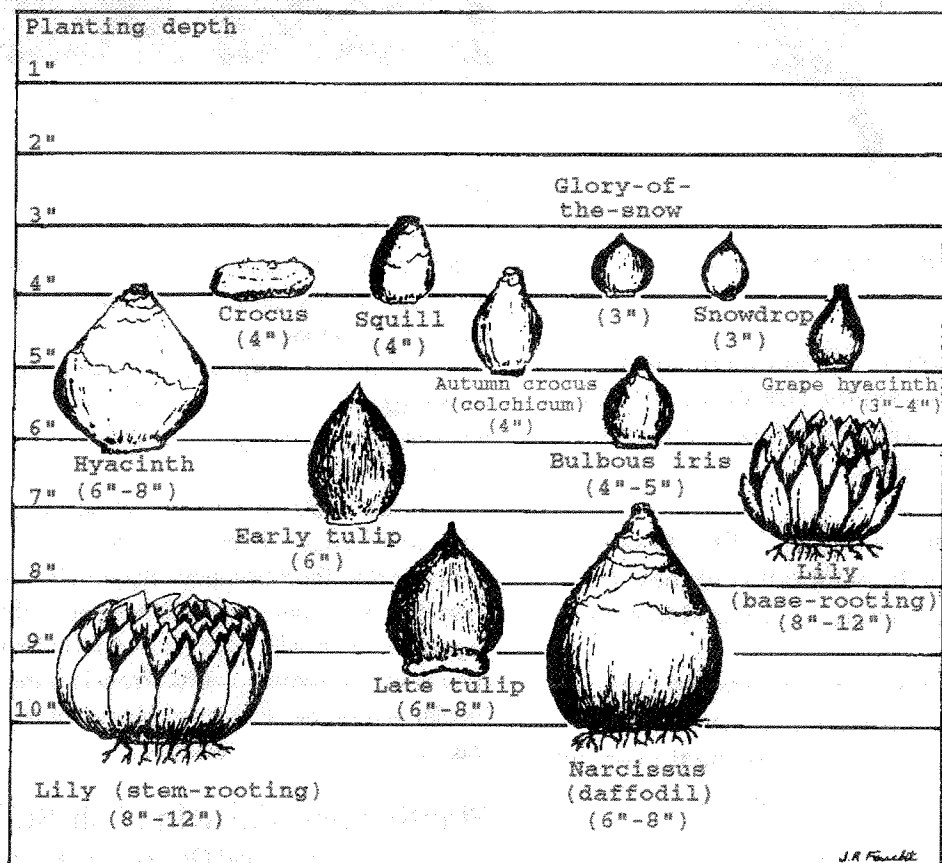


Figure 1: Bulb planting chart. (Numbers in parentheses refers to minimum spacing.) Lilies normally are planted in the spring, while autumn crocuses normally are planted in the mid-summer. All other bulbs shown are planted in the fall. Planting depths shown above are for well-drained soils. Bulbs do best in a sandy, clay loam. In heavier soils, they should be planted 1 to 2 inches more shallow. To convert to metrics: 1 inch = 2.5 centimeters.

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