



**UNIVERSITY OF CALIFORNIA**  
Agriculture and Natural Resources  
UC Master Gardeners of Napa County

## Healthy Garden Tips

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### **FLOWERING BULBS: Basic Care**

By Val Fish, UCCE Master Gardener

#### **Selecting**

Choose the biggest! Generally, you'll get more blooms from the most mature bulbs. Be aware that pre-packaged bulbs, though less expensive, are usually smaller and may produce less reliable blooms. Choose healthy bulbs. Look for heavy, dense bulbs with no decay, mold, or fungus. Shop early in the season for best selection and before the bulbs suffer from mishandling and high temperature storage. Avoid wild bulbs, some of which are vanishing from their native habitat. Buy bulbs labeled "commercially propagated" or "from cultivated stock."

#### **Storing**

Store bulbs in a cool, dark, and dry place until you're ready to plant. Many gardeners tuck them in the refrigerator. If you do, keep them away from fruit, such as apples, whose chemical interaction can damage the bulbs. Don't wrap bulbs in plastic; they need to breathe. Don't put bulbs in the freezer. Bulbs can also be stored in planting flats two or three layers deep. Separate the bulbs and provide ample air circulation. Bulbs layered in vermiculite will stay dry in storage.

#### **Chilling**

Many gardeners in mild climates practice "pre-chilling" such bulbs as crocus, hyacinth and tulips in order to produce longer stems and better flowers. Tests done in Northern California by [Sunset Magazine](#), with the UC Master Gardeners, showed some surprising results. Pre-chilling these bulbs produced normal blooms and very little difference in height. Chilled tulips bloomed only two weeks earlier and had only slightly taller stems. Chilling is optional for Bay Area gardeners!

#### **Sun**

Most fall planted bulbs can take five to six hours of daily full sun when they bloom in the spring. They will even bloom well under deciduous trees, if the trees won't leaf out until the bulbs finish blooming. Some woodland bulbs, such as fritillaria, prefer light shade. All spring planted bulbs do well with morning sun and afternoon shade in the hot summer areas.

#### **Soil**

Like most plants, bulbs need well-drained soil. Most, like ranunculus tubers, will quickly rot in soggy soil. If your soil drains poorly, consider planting on a slope or in raised beds. Loosen the soil past the root depth and amend it with some compost or other organic material before planting.

#### **Fertilizer**

Healthy, mature bulbs contain all the nutrients needed for the current season's growth and bloom. The main reason to add fertilizer is to help replenish the stored nutrients, ensuring a good flower show next year. Some

bulb formulas, such as phosphorus-rich bone meal or a 5-10-10 complete fertilizer, are designed to be dug into the soil, well under the root zone, prior to planting. In established bulb gardens, Sunset Western Garden Book recommends applying potassium into the soil near the roots, watering in well.

### **Planting**

Plant all types of bulbs with the growth points 'up' and the root scars 'down.' True bulbs and corms have obvious points but tubers don't. Ranunculus tubers have fleshy fingers that go 'down.' Anemone tubers show little clues, but look for the slight depression left by last year's stem. Plant it stem scar 'up.'

Planting depths vary; but, generally, most true bulbs, corms and tubers should be planted three times as deep as the bulb is wide. In heavy clayish soils, a little more shallow. In loose soils or raised beds, a little deeper. Rhizomes, just under the soil surface. Tuberous roots, shallowly, with growth points covered by about three or four inches of soil.

### **Water**

Bulbs need water while they're actively growing. Pre-moisten the soil prior to planting for good root development. Provide irrigation to fall planted bulbs until winter rains take over. Spring planted bulbs will need summer irrigation until the foliage dies back. Water deeply, enough to penetrate the root zone.

### **Repeat Bloom**

By the end of a bulb's blooming season it has used up all of its stored nutrients. In order to build back up its reserves for next year's flowering, it must remain in the soil. Most importantly, the leaves must continue to gather as much sunlight as possible, so don't cut those leaves! Or tie them in knots, or bury them. By allowing the foliage to "ripen" naturally, you'll be insuring more blooms next year!! The following bulbs are some of the most reliable repeat bloomers in our climate: daffodils, California native iris, Muscari, scilla, and "species" tulips. Many others perform well. Look for descriptions that say "multiples" or "best for naturalizing."

### **Pests**

Bulbs have very few "bug" pests. Snails may nibble foliage and even blossoms. Trap, handpick, or try one of the new less toxic baits. Squirrels and other rodents may dig and eat bulbs (except daffodils!). If you have trouble with gophers, mice, voles, or squirrels, then plant in "cages" made from 1/4- to 1/2-inch metal mesh. Containers and mesh-lined raised beds are another solution.

### **Additional Reading:**

*Sunset Western Garden Book*, by Sunset Publishing Corporation, revised edition, 2001

*Spring Flowering Bulbs* and *Summer Flowering Bulbs*, USDA prepared leaflets, revised editions, 1971

*Sustainable Gardening, The Oregon-Washington Master Gardener Handbook*, WSU Cooperative Extension/OSU Extension Service, 1999