

# Gardening in Orange County

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## Know Your Five Basic Bulb Types:



*True Bulb*



*Corm*



*Rhizome*



*Tuber*



*Tuberous Roots*

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People usually use "bulb" as a term for plants that grow from five distinct types of underground structures: true bulbs, corms, tubers, rhizomes, and tuberous roots. One trait is common to all five, function. They all are storage organs that allow their survival over their dormant season, which may be winter or summer.

True bulbs are made up of a bud enclosed by modified leaves or fleshy scales from which roots and shoots emerge. The shoots grow out of the pointed top and the roots from the basal plate, which holds the scales together. Many bulbs, like tulips and hyacinths, have an outer papery cover or tunic, which protects them against injury and dehydration. Some bulbs, like lilies, lack this tunic and require more care when handled. True bulbs may live for years and periodically produce offsets or new, smaller bulbs.

Corms are bulb-like solid structures rather than overlapping scales. Stems grow out of the top and roots from the base like true bulbs. Some corms have tunics,

which are formed from the dried bases of the previous season's leaves rather than from a layer of modified leaves. Each corm lasts just one year using its stored energies in the growth and bloom process. New corms form on the top and numerous offsets, cormets, may also be produced around the new corm's base.

Tubers are swollen underground parts of roots or stems. Roots grow from the tuber's base, sides, and sometimes from the top as well. A tuber has multiple growth points on the upper surface; each one is really a scale-like leaf with a growth bud in its axil.

Rhizomes may grow underground or along the soil surface. They are fleshy, thickened stems with roots growing on the underside and new growth emerging from the ends. Individual rhizomes will grow larger each year, as more and more rhizomes reach out into surrounding soil.

Tuberous roots are true roots that grow in a cluster, with the swollen tuberous portions radiating out from a central point. The growth buds lie on the roots'

"necks," on bases of old stems, or as a "crown" where all roots come together. Each tuberous root can give rise to an individual plant, as long as it's separated from the group with a growth bud attached to its neck.

### Some popular bulbs listed according to type

#### *True Bulb*

Allium  
Amaryllis  
Camassia  
Fritillaria  
Hyacinthus  
Iris (some)  
Lilium  
Narcissus  
Tulipa

#### *Rhizome*

Anemone (some)  
Canna  
Convallaria  
Iris (many)

#### *Tuberous Root*

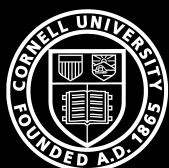
Alstroemeria  
Clivia  
Dahlia  
Hemerocallis  
Ranunculus

#### *Corm*

Crocasmia  
Crocus  
Freesia  
Gladiolus

#### *Tuber*

Anemone (most)  
Begonia  
Cyclamen



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