

# What is a bulb?

... a bulb is a bulb, but not always

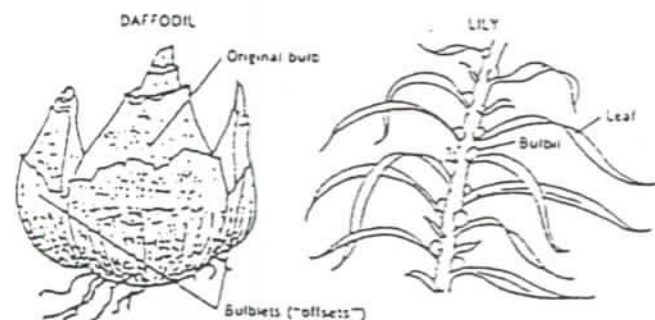
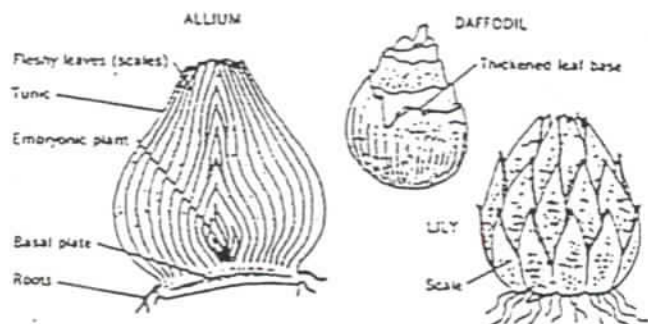


If you were to cut a true bulb in half, you would find a neatly packed next year's plant surrounded by the scale leaves—immature foliage, flower stems, possibly even flower buds in some.

The term "bulb" is one that we loosely apply to any plant with a swollen or thickened storage organ from which the stalk grows up and roots grow down. The sketches show the difference between a true bulb and a corm, a tuber, a rhizome, or a tuberous root. Actually the first four are all modified stems (not roots), whereas tuberous roots are true roots

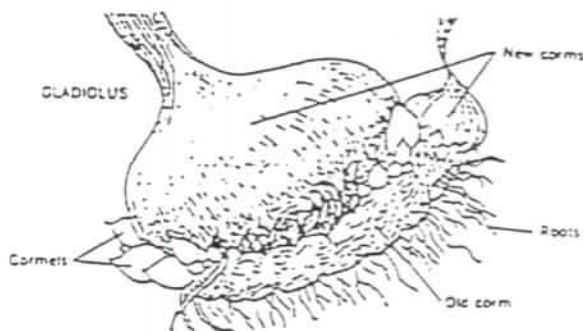
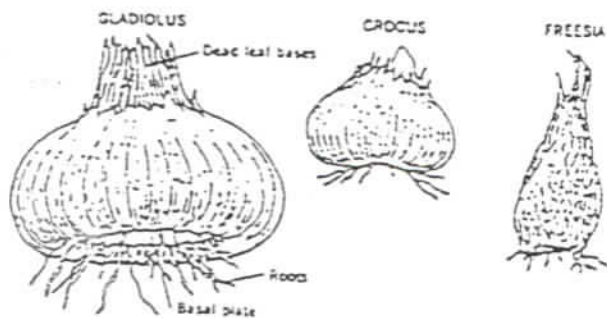
(not stems) with thickened sections somewhere along their length.

Nevertheless, all of these bulbs and bulblike structures have one characteristic in common: they are the food storage bins that the plant can draw on to start active growth after its season of dormancy. They are the reason that you let the foliage stay on the plant until it has ripened and dried naturally. Food for these reserves in the bulbs is manufactured in the leaves: the longer the leaves work the bigger the bulb, and consequently, next year's plant.



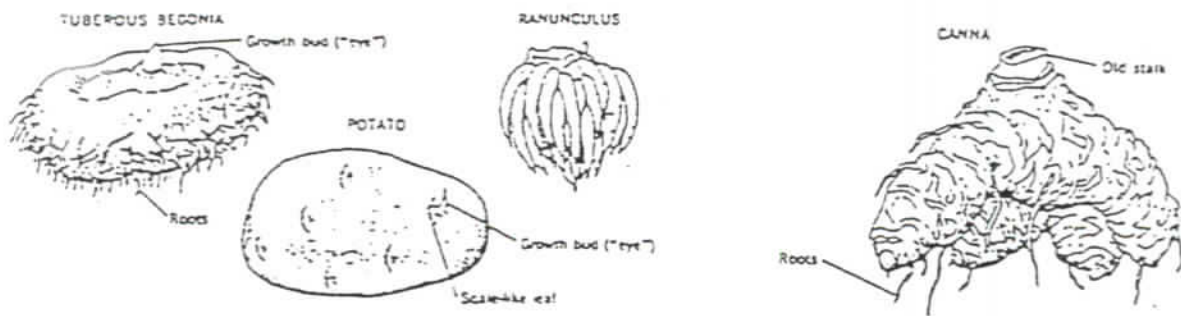
**TRUE BULB.** Short underground stem (on solid basal plate) surrounded by fleshy leaves (scales) that protect, store food for use by embryonic plant. Outer scales dry, form papery covering (tunic). Daffodil scales are thickened bases of foliage leaves.

**Bulblet (often called "offset").** The new bulb is formed from a lateral bud on the basal plate. The old bulb may die or, like daffodils, keep coming each year; it can be divided and replanted. Bulblets are small bulbs produced in axils of leaves, flower, stems.



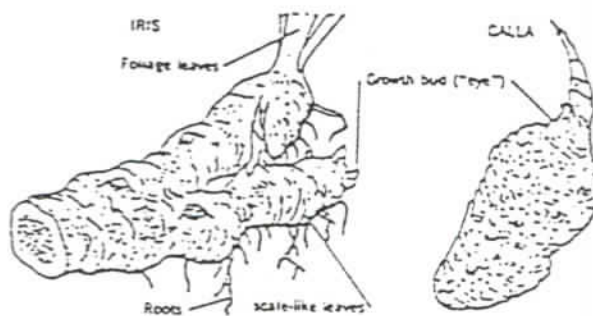
**CORM.** Swollen underground portions of stem—usually broader than high—covered with one or more dead leaf bases; has basal plate. Food storage is in the solid tissue. New corms formed from axillary buds on top of old corm during growing season.

**Cormel.** While one to several big new corms are forming, smaller ones (cormels) are also being produced from the axillary buds on top of the old corm. The cormels will take two to three years to bloom, while the larger corms will blossom the following year.



**TUBER.** Short, fat, underground stem is for food storage; it is either flattened, rounded, or irregular. Does not creep like a rhizome. Usually knobby with growth buds (*eyes*)—each a scale-like leaf with bud in its axil. Divide large tubers like rhizomes for new plants.

**TUBEROUS ROOTS.** Actually roots (not stems), with thickened food storage structures. They do not bear growth buds in "tubers" but can be divided in the same way as rhizomes and tubers—cut sections with part of old stem base attached. Growth buds are in old stem.



**RHIZOME.** A thickened stem for food storage that grows horizontally along or under the surface of the soil. Foliage, roots, and flower stalks grow from buds on the rhizome. Cut sections of the rhizome with growth buds for new plants. Terms rootstock and rhizome are interchangeable.

#### PLANTS LISTED ACCORDING TO TYPE OF "BULB"

True bulbs	<i>Iris</i>	<i>Sternbergia</i>	<i>Freesia</i>	<i>Begonia</i>
<i>Allium</i>	<i>Ipheion uniflorum</i>	<i>Tigridia</i>	<i>Gladiolus</i>	<i>Caladium</i>
<i>Amaryllis belladonna</i>	<i>Lachenalia</i>	<i>Tulip</i>	<i>Ixia</i>	<i>Cyclamen</i>
<i>Camassia</i>	<i>Leucocoryne</i>	<i>Vallota</i>	<i>Sparaxis</i>	<i>Dahlia</i>
<i>Chionochoxa</i>	<i>Leucojum</i>	<i>Veltheimia</i>	<i>Tritonia</i>	<i>Eranthis</i>
<i>Crinum</i>	<i>Lilium</i>	<i>Zephyranthes</i>	<i>Tulbaghia</i>	<i>Gloriosa</i>
<i>Eucomis</i>	<i>Lycoris</i>	<i>Corn</i>	<i>Watsonia</i>	<i>Polianthes</i>
<i>Fritillaria</i>	<i>Milla</i>	<i>Acidanthera</i>	<i>Rhizome</i>	<i>Ranunculus</i>
<i>Galanthus</i>	<i>Muscari</i>	<i>Babiana</i>	<i>Achimenes</i>	<i>Sinningia</i>
<i>Galtonia</i>	<i>Narcissus</i>	<i>Brodiaea</i>	<i>Iris</i>	<i>Tuberous roots</i>
<i>Habenarius</i>	<i>Nerine</i>	<i>Calochortus</i>	<i>Oxalis</i>	<i>Agapanthus</i>
<i>Haemanthus</i>	<i>Ornithogalum</i>	<i>Colchicum</i>	<i>Schizostylis</i>	<i>Bietilla</i>
<i>Hippeastrum</i>	<i>Oxalis</i>	<i>Crocus</i>	<i>Zantedeschia</i>	<i>Bulbinella</i>
<i>Hyacinth</i>	<i>Scilla</i>	<i>Dierama</i>	<i>Tuber</i>	<i>Canna</i>
<i>Hymenocallis</i>	<i>Sprekelia</i>	<i>Erythronium</i>	<i>Anemone</i>	<i>Clivia</i>