



Horticulture Notes: Underground Orbs and Knobs

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Definitions

Generally, complete underground plant structures are all referred to as bulbs. This category contains a vast number of species but technically, only some are real bulbs and the rest are corms, rhizomes, and tubers.

- Bulbs are defined as the fleshy, underground plant structure that packages next year's plants, scale and immature leaves, stems, and blooms in brown papery tunics. Think amaryllis, narcissus, clivia, and onion.
- Corms are underground stems modified into storage tissue that are surrounded with dry leaf bases. Think gladiolas, crocus, and freesia.
- Tubers are solid masses of fleshy stems with storage tissue. Think potato, ranunculus, and cyclamen.
- Rhizomes are horizontal, thickened, branching storage stems that grow slightly underground or at the soil's surface. Think lily-of-the-valley, canna, and iris.

leaves turn black and gelatinous. Give tubers a couple weeks after that first frost to rest and to continue making eyes for the spring's growth before they are lifted. That is unless a freeze is predicted; then, lift ASAP!



To lift tender bulbs, cut off the plant stalks about 6" above ground. Use a pitchfork or garden fork. Spades and shovels work but can cause additional, unwelcomed bulb and root damage. Insert the fork gently, working your way a few times all around the plant about 10" from the stem. This technique spares severing the roots. Root damage facilitates infection and rot.

After the clump is freed, label the stem with its name, variety, and flower color. At this point, the bulb needs to dry or "cure".

Curing tender bulbs

The bulb needs a week to cure. Allow it to dry in a 60-70 degree, well ventilated space away from wind and direct sunlight. A few types of bulb need up to three weeks to dry; these include glads, tigrida, oxalis.

Turn the bulb upside down to dry for a few days; this also allows hollow stems to drain.

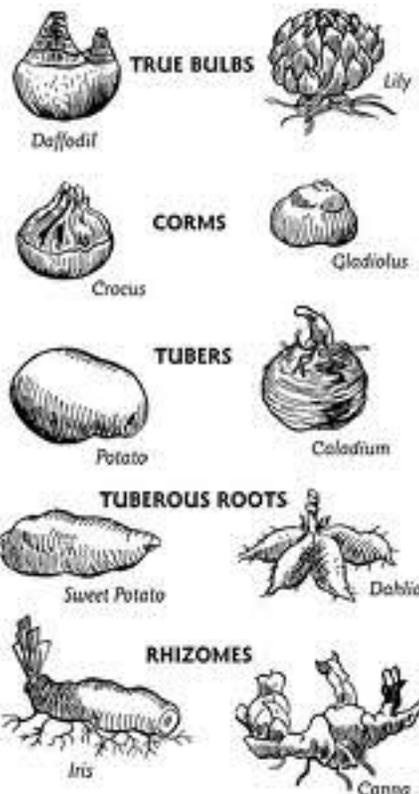
When dry, gently brush soil from the bulb being careful not to damage any of its parts. [For Dahlias: place a mesh screen over a bucket or trash can, put the rhizome on top; turning as needed, gently hose the soil off the tuber. Then return the dirty water to the garden.]

Check every bulb for any damage: cuts, bruising, rot. Remove and dispose of damaged parts. In a plastic bag, add a wee bit of soil, sulphur dust [a fungicide], and the injured bulb. Seal the bag, gently mix all of it together.

To prevent rot and other diseases during storage, dust all bulbs with a fungicide. Periodically check the bulbs throughout the winter. If one bulb begins to rot, you want to catch it as soon as possible so come spring, your bulbs are healthy and ready for planting.

Storage of tender orbs and knobs

Store your bulbs in peat moss, perlite, vermiculite, or sand in a porous bag or shallow tray. This prevents dehydration yet allows the bulbs to breathe. Or simply, wrap them in layers of dry newspaper and place in cardboard boxes stuffed with more dry newspaper. Place this collection in an area 35-50 degrees in temperature; a place unheated, dark, and dry.



Hardiness dictates planting time

Hearty bulbs survive winter in the ground. When planted late summer to early fall, they have time to develop a significant root system that results in better flowering in the spring.

Think of Iris x hybrid [bearded iris], Muscari [grape hyacinths], and Tulipia [tulips].

Tender bulbs must be lifted in the fall or treated like annuals, left in the ground to die. They include Dahlias, Gladiolas, and Begonias.

Lifting tender bulbs

Tender bulbs are lifted once their foliage dies on its own and turns brown or after the first frost when stems and