

CORMS, RHIZOMES & TUBERS, OH MY



Linda Estep
Master Gardener

Question: I am getting ready to plant fall bulbs. When I went to purchase them, I had a wide variety from which to choose. However, I noticed that the labels included terms like corms, rhizomes and tubers. What is the difference?

Answer: I would say that most people mistakenly refer to all plants with a roundish, knobby plant root as a bulb. As you have noticed, there are a wide variety of bulb types.

Some are labeled bulbs, corms, rhizomes and tubers. This entire group is more accurately described as geophytes rather than bulbs.

Geophyte is made up of the Greek words for earth and plant. The one characteristic that all geophytes share is that they are storing carbohydrates in underground food storage organs that feed plants during dormant periods as well as during the flowering season.

True bulbs (amaryllis, daffodils, hyacinths, lilies, tulips) produce stems from the base of the bulb and survive from year to year. As the plant grows, baby bulbs (offsets)



COURTESY OF FARMINGTONGARDENS.COM

Tubers (anemone, cyclamen, dahlias) are thickened terminal portions of the stem. They are usually fat, round and knobby and do not grow horizontally.

form on the original bulb to produce new plants.

The above-ground plants and flowers will emerge when weather and temperature conditions are right. True bulbs are divided into layers (think of an onion), including a papery outer layer. True bulbs have residual roots, small stems and many closely packed leaves in spherical shape.

When the above-ground plant dies back, the bulb enters a period of dormancy. The proper time to divide your bulbs is after this period of dieback.

It is important not to remove the leaves until they have withered because they are busy photosynthesizing and building up resources in the bulb, which will fuel the growth cycle.

Follow the directions on the package when you plant your true bulbs. The depth of planting is really important. If you plant too deep, it may become weaker each year due to inadequate carbohydrate build-up. If you plant too shallow, it may be vulnerable to temperature extremes or

animal digging.

Corms (crocus, crocosmia, gladiolus) look like short, flattened stems, which are filled with food storage tissue. Unlike bulbs, corms are solid and do not have scales or fleshy leaves.

Since they are solid, the bud, or growing tip, is on the top of the corm, instead of in the center of the bulb's scales. Some corms produce small plants (cormlets) and can be separated from the parent to grow new plants.

As a general rule of thumb, plant corms with the pointed side up approximately four times as deep as the diameter of the corm.

Every type of plant is different so it is important to consult the directions on the package to determine what time of year to plant and how deep to plant. When plants are mature, it is a good idea to dig up the clump and separate the corms.

Select only plump, healthy corms and replant them for next season.

Rhizomes (bearded Iris, canna lilies, lily of the valley) are fleshy, swollen stems that grow horizontally along the soil surface. They are often called creeping rootstalks.

Some rhizomes do grow vertically depending on the species. Growth buds form on a rhizome for next year's leaves and flowers. Buds form at different parts along the rhizome, not just the tip.

The original rhizome will not re-flower and eventually will need to be dug out. Rhizomes may be

propagated by cutting the parent plant into sections, but each segment must contain a bud.

Tubers (anemone, cyclamen, dahlias) are thickened terminal portions of the stem. They are usually fat, round and knobby and do not grow horizontally. They store nutrients that allow the plant to grow the following season.

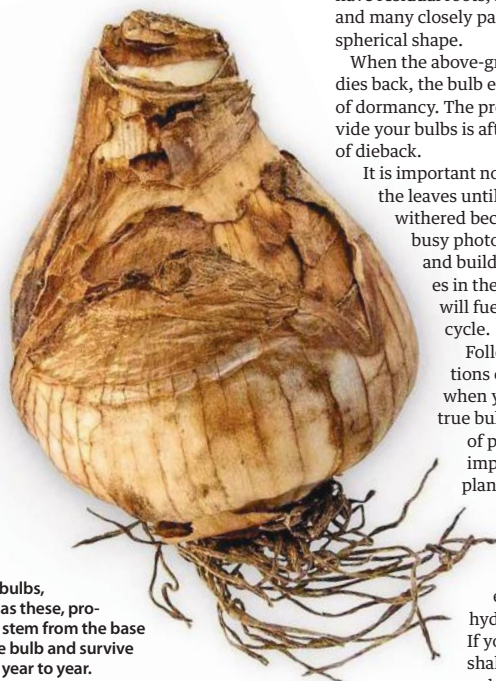
Tubers have nodes that appear anywhere on the flesh and sprout both new shoots and new roots. You can cut off individual chunks that have buds and plant them to get new plants, which is something you can't do with corms and bulbs.

All of the above can be purchased at local garden centers or through mail order. Generally, supplies are available during the appropriate planting season.

Hardy bulbs, such as daffodils and tulips, are best planted in the autumn. Tender bulbs, such as begonias and dahlias, should be planted a few weeks before the last frost date in spring.

Read the directions on the packages for specific directions.

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service serve the people of Douglas County.



True bulbs, such as these, produce stem from the base of the bulb and survive from year to year.

COURTESY OF MYATTLANDSCAPING.COM