

# MESSENGER-INQUIRER



**September 30, 2023**

## **Protect Tender Bulbs By Digging and Storing Them for the Winter**

Plants from tender bulbs are beautiful in the landscape. Dahlias, caladiums, tuberous begonias, gladiolus, cannas, and elephant ears are considered tender bulbs. These bulbs need to be dug and stored for the winter to prevent them from freezing. It is certainly worth the effort.

Tender bulb plants have different storage structures, which are referred to, in general, as “bulbs”. The purpose of the storage structures such as corms, rhizomes, and tuberous roots is to store food for the plant.

Dahlia tuberous roots are ready to remove from the garden when the plant is darkened by frost. A tuberous root is an enlarged, underground root with buds near the stem's base. Cut the top back to 4 to 6 inches and lift gently with a fork or spade. Remove as much soil as possible without damaging roots. Save tuberous roots from healthy plants. Allow them to air dry for several hours. Divide the tuberous roots because buds are easier to see in the fall. Each tuberous root must have at least one bud because the bud produces the plant. Then store in a dry, cool, frost-proof area.

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When the tops of caladiums and tuberous begonias are injured by the first frost, gently lift the plants and cut the stem back to the soil line. Leave the ball of tubers, roots, and soil intact. Place the soil and root masses in a dry, cool area and allow the tubers to cure for two to three weeks. Then remove soil, stalks, and roots. Store tubers at 50 degrees F in low humidity.

Gladiolus corms should be dug after the first frost. Some gardeners dig corms of early flowering cultivars six to eight weeks after flowering, well before frost; this is not necessary. However, it is critical to allow all corms to mature as fully as possible before digging.

A corm is a swollen, solid stem that stores food. The food is used during the growing season, and the old corm shrivels away. A new gladiolus corm forms immediately above the old one. The new corm will produce flowers next year. Small corms, called cormels, form around the base of the new corm. Cormels will require two to three years to reach blooming size.

Dig corms of healthy plants with a fork or spade to remove the entire plant easily by grasping the top and pulling it from the soil. Avoid injuring corms while handling. Shake off loose soil and discard damaged, discolored, or diseased corms. Cut the top off 1 to 2 inches above the corm. Save the small cormels. Allow corms to dry in the sun for one or two days.

For best storage results, cure the corms at a temperature of 80 to 85 degrees F for two to three weeks. Avoid fluctuating temperatures that cause moisture condensation on the corms, creating a favorable condition for disease development. When thoroughly cured, the old corm should be broken from the base of the new one and discarded. Two to three additional days at 80 degrees F will hasten the formation of a corky layer at the scar.

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For winter storage, place the corms in paper boxes, open paper bags, cloth bags, wooden trays with screen bottoms, or old onion sacks. Stack or hang the containers so air can move around them. Store the corms at 35 to 40 degrees F in low humidity. A cool basement is good. Be sure to check them periodically throughout the winter; discard those that show signs of rotting.

To dig and store cannas, wait to dig them until the tops of the plants have been killed by frost. Allow them to dry for several days. Then cut the tops back, leaving 3 to 4 inches of stem. Next, carefully lift the rhizomes and roots with a fork or spade. A rhizome is an enlarged underground horizontal stem growing at or just below soil level. Roots are produced at the bottom of the rhizome. Shake the soil loose and allow them to dry for a day or two.

Store the canna rhizomes in a cool, moderately dry area where the temperature will not exceed 50 degrees F. Do not allow rhizomes to freeze. Place rhizomes on racks or hang them in mesh bags so air can circulate freely around the clumps.

In the spring, each clump can be planted in full or divided. Because new growth buds are located in the old stem base, be sure a portion of old stem base is included with each division.

Elephant ears are ready to dig after a light frost. The tubers are dug and stored like the canna rhizomes. A tuber is an enlarged underground stem with buds where the plant will emerge when it begins growing again.

For more information about storing tender bulbs, contact the Daviess County Cooperative Extension Service at 270-685-8480 or [annette.heisdorffer@uky.edu](mailto:annette.heisdorffer@uky.edu).

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## Annette's Tips:

If you have problems with cannas, dahlias, caladiums, and tuberous begonias drying out in storage, place them in dry peat, sand, sawdust, or vermiculite.

Fall is the best time to fertilize the lawn. Excess or improperly applied fertilizer is carried by storm water runoff to creeks, streams, lakes, and rivers and contributes to nutrient pollution. Excess phosphorus promotes rapid and over-abundant algae growth in freshwater. Too much algae disrupts ecosystems, harms wildlife, negatively impacts water recreation, and may contain toxins that sicken people and pets. Test the soil to know what it needs. Without a soil test, apply only nitrogen. Most Kentucky soils have plenty of phosphorus and potassium.

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