

Reducing the risks of cold damage to plants



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Education Resource**

As we enter winter, it is important to know how to protect your landscape from hard freezes. If you suffered losses from the intense cold and snow we had last winter and want to find ways to prevent it from happening again, here are some ways homeowners can increase the likelihood that their plants will survive the low temperatures this winter.

First, are the trees, shrubs, and other plants in your landscape cold hardy? Gwinnett County is located in USDA hardiness zone 7b. This means that our winter temperatures have the potential to drop to 5° F to 10° F. Most outdoor plants, with the exception of annuals, some vegetables, and tropical foliage plants, sold at local garden centers and nurseries should be hardy here. On the other hand, purchasing and installing plant material that is better adapted to warmer climates that lack cold hardiness are at a greater risk of suffering from hard freezes.

Second, have your plants been properly located and planted in the yard? Some shrubs like azaleas and camellias can suffer from cold injury when planted in sites with open exposures and full sun. Always place these plants where they will receive adequate protection from winter sun and wind.

Lastly, have the plants in your yard been properly cared for throughout the growing season? Have they been watered, mulched, fertilized, pruned, and treated for pests as needed to maintain optimum vigor and growth? Weak, unhealthy, or poorly-maintained plants are more susceptible to cold weather extremes.

Cold injury can occur on fruit, stems, leaves, trunk, and roots. Water inside these plant parts freezes and expands, tearing cell walls and causing them to leak. After a hard freeze, examine the plant material for damage; however, it is sometimes difficult to ascertain cold damage a day or even a week after a severe freeze. The damage may go unnoticed until the plant fails to come out of dormancy in the spring.

A bronze coloration of the foliage, particularly on certain azaleas and boxwoods, may be observed just a few days after a hard freeze. On privets, ligustrum, and camellias, the foliage often turns purple. The discoloration is simply the plant's response to a sudden chill and is perfectly normal.

Azaleas, camellias, hydrangeas, and other plants often experience some bark splitting as a result of a hard freeze. Injury from split bark appears later in the year as dead twigs and branches. The damage is most observable on the lower stems closer to the soil surface.

A simple way to determine if the plant material is actually dead or alive is to scratch the bark with your fingernail. If the stem tissue is green or white where you scratch, then that wood is still alive. It should put out new growth in the spring. If, however, the stem tissue is brown or brittle, then that branch is dead. The deadwood should be removed in the early spring after freezing weather has passed.

What to do now? If your shrubs and trees have been properly cared for then they should come through the winter with little or no problems. In order to lessen or prevent cold damage, follow these simple tips:

- Maintain 2 or 3 inches of mulch around plants at all times. It helps to insulate root systems and protect the soil from rapid temperature fluctuations
- Avoid pruning now. The best time to shape most evergreens and summer-blooming plants is in February or early March before spring growth begins. Prune spring-blooming plants, such as azaleas and forsythias within six weeks after flowering
- Provide adequate water to newly-planted shrubs and trees to keep them hydrated and prevent the plants from drying due to cold air

As homeowners we have an investment in our landscape plantings. By taking certain precautions, we will reduce the chances that our plants will succumb to any hard freezes that may occur this winter.