

## Protect your Plants from Cold Weather

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While the rest of the country is experiencing cold temperatures (even in California), here in central Florida, we are still enjoying the warm weather. However, don't let this weather fool you. Central Florida can still get cold. The threat of cold weather and freezing temperatures is a probability the next few months. Now is the time to make sure you are ready to protect your plants and landscapes when the cold arrive.

Tropical and subtropical plants, which include houseplants located outside, must be protected during freezing temperatures. This can easily be done by moving potted plants in the house or in the garage and by covering tender landscape plants with protective coverings. Old bed sheets, pieces of material or fabric, and cardboard boxes can be used for coverings. For the coverings to be effective, make sure that it completely covers the plant and touches the ground below. It needs to touch the ground in order to capture the warm air underneath it and prevent any cold air from sneaking up through it from the ground.

The temperatures under the covering will remain warmer than the air, protecting your plants from damage. However, be careful not to let the protective covering touch the plants. The surface of the covering will become as cold as the air temperatures and may damage any tender leaves it comes in contact with. Also, don't forget to remove the covering the next day when temperatures rise. This is important so the plants do not "bake" in the warmer temperatures.

The ability of plants to withstand cold temperatures depends on how great the temperature fluctuations are that occur. If the temperature gradually decreases over a period of time, the plants are more likely to withstand the cold. This is because the plants are able to acclimate to the cold weather over time. Plants, however, can be greatly damaged if the temperature drops suddenly, which happened one night in November. The plants had no time to acclimate to the cold temperatures and some plants, such as hibiscus, exhibited signs of cold damage.

The severity of cold damage to plants also depends on the type of plant, its age, health and location. For example older, healthier plants are less susceptible to cold damage and plants placed near the house, lights, or other structures, which shelter them from wind, will be more protected than those fully exposed to the cold air.

If you fail to protect your plants from the freezing temperatures, injury to them may occur. Injury caused by cold temperatures can affect the entire plant or parts of the plant. The plants are damaged when ice crystals form within the plant cells. The crystals expand, rupturing the cell walls and preventing the plants from maintaining any shape. If severe, this can kill tender plants. On hardier plants, damaged foliage will appear wilted and curl downwards. Within a few hours or days, the foliage will then turn black. Flowers may also die, blacken, and drop to the ground if exposed to cold temperatures. Young branches and new growth on plants are especially sensitive to cold temperatures and may also blacken and die.

After freezing temperatures occur, remove damaged leaves and flowers as soon as they turn brown or black. This will help prevent diseases from attacking the plant. Pruning should be postponed until cold temperatures are no longer expected and new growth begins to appear on the plant. This is to make sure that live wood, which appears dead from losing its leaves, is not removed from the plant. Cold damaged wood can be detected by examining the cambium layer (under the bark) of the plant. If it has black or brown discoloration, it is damaged and should be pruned back behind these points. Plants should be fertilized in the spring, to encourage new growth.

Tropical and subtropical plants can be used in the landscapes in Central Florida, but they must be protected during freezes or replaced after cold weather has ceased. A combination of tender and cold hardy plants should be used in order to prevent total destruction of the landscape by cold temperatures. For more information on protecting your plants from cold or for answers to other plant questions, contact the Osceola County Master Gardeners. They are available to take your calls on Monday thru Friday from 9am to 3pm at (321) 697-3000. You may also email me your questions at [jwel2@osceola.org](mailto:jwel2@osceola.org).