PLANT LIFE COLUMN

RECOGNIZING COLD DAMAGE

With the below freezing temperatures we had this past week, your plants may have experienced some cold damage. Tropical, subtropical, and even some temperate plants are sensitive to cold weather. This is especially true for tropical plants and summer annuals that can be injured by temperatures just below 50°F.

Injury caused by cold temperatures can affect the entire plant or parts of the plant, such as the fruits, flowers, buds, leaves, trunks, stems, or roots. 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 that time. Plants, however, can be greatly damaged if the temperature drops suddenly. They had no time to acclimate to the freezing temperatures.

The plants are damaged when ice crystals form within the plant cells and in the spaces between the 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 down. In a few hours or days, it will darken and turn black. Flowers and buds may die, blacken, and drop to the ground if exposed to cold temperatures. Damaged flowers will not develop into fruit. Young branches and new growth on plants 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.

If you failed to protect your plants from the cold temperatures this past week, it’s not too late to protect them from the more severe freezes that may occur later this winter. Protect them by moving potted plants indoors and covering tender landscape plants with a protective covering, such as sheets or cardboard. Be careful not to let the protective cover touch the plant or the cold will generate through and damage it. It is also important to remove the cover the next day when temperatures rise. 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.

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 a list of cold tolerant plants or for answers to other plant questions, contact the Osceola County Master Gardeners. They are available to take your calls, Monday to Friday from 10am to 2pm. Please call (321) 697-3000.

A home citrus workshop will be held at the Ag Center on January 9th at 1:30pm. Please call for more information. No charge.

What's bugging you? The Integrated Pest Management class will teach you how to recognize, prevent, and eliminate pests from your home and landscape. The class will be held on January 14th at 6:30 at the Ag
Interested in reducing time and money in your landscape? The "Florida Landscape" class teaches you to use efficient and effective practices that will create a beautiful landscape with minimal effort and minimal costs. The next class will be held at the Lakeside Community Center on January 15th. Please call for more information and to register. No charge.

Want to learn more about gardening and become a garden volunteer for your community? Learn about citrus, turf, insects, vegetables, landscaping, and many other topics. Master Gardener classes begin January 29th. Application deadline is January 14th. Please call for more details and to receive a "Sprouting Kit".

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