

# Questions abound on effects of cold on plants

*Texas A&M AgriLife Extension Service — Galveston County Office*



PHOTO BY Dr. William M. Johnson



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The onset of cold weather conditions toward the end of last week has been tough on many landscape plants.

Heck, it was tough on people, too, especially if they ventured out to travel the highways.

From a landscape plant perspective, at least it was good temperatures had been cool for a while beforehand and thus plants still were in a dormant state.

I've seen peach trees in full bloom at this time of year and much more sensitive to cold weather damage.

Weather conditions were severe enough to have to postpone the Master Gardener Fruit Tree Seminar and Sale. It has been rescheduled from 8 a.m. to 1 p.m. March 5 at

the Wayne Johnson Community Center located in Carbide Park, 4102 FM 519, in La Marque.

The following is a sampling of questions asked by area gardeners on the effects of cold weather conditions on landscape and garden plants.

Q: I have several hibiscus plants growing in containers. How susceptible are their roots to cold injury?

A: Hibiscus are tropical plants and do not tolerate extended periods of very cold weather.

While the above ground portion of hibiscus might suffer cold injury, most types are root-hardy and new growth can be expected to develop from roots and lower stems as the spring season approaches.

However, plant roots in small containers can certainly sustain cold weather injury whereas, under the same temperature conditions, roots of same plants in the ground will escape cold injury.

Roots of plants in exposed containers can be injured by low temperatures and show no apparent damage until the plants are stressed at higher temperatures.

Q: After last winter's cold snap, you recommended people delay pruning. Since the spring growing season is approaching, should I prune plants that sustain cold injury from this winter's cold snap?

A: My recommendation remains the same. Severe pruning should be delayed until new growth appears to ensure live wood is not removed.

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Dead, unsightly leaves may be removed as soon as they turn brown after a freeze if a high level of maintenance is desired or if the neighborhood association's landscape maintenance patrol are an unsympathetic lot.

Cold injury may appear as a lack of spring bud break on a portion or all of the plant, or as an overall weak appearance.

Branch tips may be damaged while older wood is free of injury. Freeze-injured wood can be identified by examining the cambium layer (food conducting tissue) under the bark for black or brown coloration. Prune these branches below the point of discoloration.

Some of the more tender landscape plants such as poinsettia, banana and bird of paradise might be killed back to the ground.

But these plants may surprise you by sending up new shoots from the roots in the spring. So, don't give up on them until consistently warm weather arrives.

Q: What is the difference between cold-tolerant vegetables and those that are susceptible to frost injury?

Could you list these and temperature lows they can tolerate?

A: This is very difficult to do since cold tolerance depends on preconditioning factors.

For instance, if broccoli has been growing in warm weather conditions, and temperatures rapidly drop below 22 degrees Fahrenheit, it will probably be killed.

If these same broccoli plants had experienced cool weather well before a freeze, they probably would survive the sudden cold.

In general, a frost (31-33 degrees Fahrenheit) will kill beans, cantaloupe, corn, cucumbers, eggplant, okra, peas, pepper, potatoes, sweet potatoes, squash, tomatoes and watermelon.

Colder temperatures (26-31 degrees Fahrenheit) may burn foliage but will not kill broccoli, cabbage, cauliflower, chard, lettuce, mustard, onion, radish and turnip.

The real cold weather champs are beets, Brussels sprouts, carrots, collards, kale, parsley and spinach.

Q: Will the icy weather conditions eliminate fire ants?

A: I believe in keeping hope alive, but when it comes to fire ants, the short answer is no.

Fire ants are well-established in Texas and even have invaded the lower tier of counties in Oklahoma where relatively cold winters are common.

While the unusually cold weather conditions for this time of year can reduce colony survival of very young or very small colonies of fire ants, most fire ant colonies will survive the cold weather conditions.

