

Cold Injury on Palms

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12/14/10

The Extension Office continues to receive calls concerning Camden's cooling trend. Last winter we had approximately 14 days of hard freezes. Palms are extremely varied in regards to their ability to withstand freezing temperatures. Historically, the native range of palms includes the Piedmont area of Georgia. Many people don't realize that several species of palms will thrive in Atlanta, Georgia just as they do in the southeastern part of our state. Cold-hardy native palms that thrive in cold temperatures are as follows: Needle palm (*Rhapidophyllum hystrix*), Dwarf palmetto (*Sabal minor*), Cabbage palm (*Sabal palmetto*). Exotic cold-hardy palms are as follows: Pendo palm or Jelly palm (*Butia capitata*) which is hardy down to about 15 degrees, Windmill palm (*Trachycarpus fortunei*) is a nonnative selection that may prove temperamental in our area, but will need very little protection, if any, in winter.

On the other hand there those palms that will occasionally suffer significant cold-injury if planted in Camden County. A few candidates for cold-injury that come to my mind are the Queen palms, Canary Island Date Palm, and the Mexican Fan Palm (*Washingtonia robusta*). Just because a particular plant is sold in a given area/location does not mean that it should be planted there or that it is hardy to that particular zone. Palms are often sold in hardiness zones that will mean certain death for the newly installed plant, if planted. For example, Canary Island Date Palms are zoned for 9a and Camden is zone 8b. Almost without question, somebody out there is saying, "I have had a Canary Island Date Palm for years and nothing has ever happened to it." I believe whoever changed the catchphrase from 'global warming' to 'climate change' obviously lived on the coast. It should be noted that micro-climates exist in Camden County as in many other areas along the coast. The western side of the county (Browntown) will almost always have more severe cold damage than St. Marys or even Woodbine. It is for this reason that some within Camden County get by with minimum damage while others see devastating effects. Make sure to ask plant wholesalers for the botanical name and cultivar names of the plant being sold. The takeaway point is simply to research plants before you purchase them and only use plant material that is zoned for your area.

The best time to take cold injury precaution with palms is before a homeowner performs the initial install. Palms should be planted on the south and east sides of the home. If the palm is located near the home it will help prevent the roots from freezing. Palm roots are fibrous and usually do not cause damage like lateral tree roots. Palms have the unique ability to obtain nutrients from browning fronds. Therefore, fronds with any hint of green should be left as long as possible. This is particularly true during the winter. The last thing a person wants to do is hurricane cut palm fronds just before a cold-snap. In addition, vulnerable palms, with long exposed central stems, should be protected from harsh winter winds, particularly the north/ western winds. In addition, exposing moist bare ground soil to the daylight has been known to raise the root system temperature an additional 2 degrees in the night

hours. This is especially important when we see extended freeze events that have the ability to lower soil temperatures. The bottom line is that the plant kingdom still adheres to the 'survival of the fittest'. A healthy palm tree will withstand colder temperatures better than a nutrient deficient palm. Hardy Palms for the Southeast is an excellent resource for someone making cold-hardy palm selections. This book may be obtained through the Southeastern Palms Society website at <http://www.sepalms.org/>.