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Cold Damage of Coconut Palms: A Pictorial



Burnt fronds, fallen nuts and inflorescence, Fort Myers, 17 January



Burnt fronds and a single drooping frond, Fort Myers



Close-up of fallen nuts and inflorescence, Fort Myers, 17 January



Drooping fronds, fallen nuts and inflorescence, South Fort Myers, 23 March



Loss of nuts, inflorescence, and hanging fronds, Jamaica Bay, 6 April



Drooping frond, fallen nuts and inflorescence, Fort Myers Beach, 25 March



Drooping dead fronds, Sanibel, late January



Drooping fronds, fallen florets and no coconuts, Sanibel, 1 April



Broken fronds, Sanibel Causeway, 1 April



Broken frond, Fort Myers, 5 April



Fallen nuts, Sanibel, 1 April





Fallen Crown, Fort Myers Beach, 25 March

Fallen Crown, Sanibel, 1 April

The winter of 2009 through 2010 was the coldest recorded in Southwest Florida in 30 years. Practically no coconut palms escaped damaged caused by the prolonged low temperatures. Symptoms of cold weather damaged to coconut palms included broken and accelerated drooping fronds; dead and fallen fronds; blackened and fallen inflorescence and nuts; and the loss of the entire crown.

Patience is essential with cold-damaged palms! Avoid the temptation of immediately trim damaged fronds. In most cases, the petiole and rachis will still be green. As long as any green tissue remains, the fronds should not be removed. Copper fungicides are recommended as an attempt (not a guarantee) to protect the apical meristem and developing fronds from secondary microorganisms that may attack damaged spear leaf tissue. There is no research to confirm if this is effective or not. The recommendation is based on what has been observed regarding cold damage to palms and our knowledge of fungicides. Inmost situations, it is the base of the spear leaf not yet emerged from the whorl of leaf bases that is damaged first, leading to a spear rot, which may then lead to bud rot. Thus, the goal of a copper fungicide is to prevent this spear rot from developing into a bud rot that kills the apical meristem, and thus the palm.

Additional comments regarding cold damage to palms can be found at http://lee.ifas.ufl.edu/Hort/GardenPubsAZ/Cold_Damage_to_Palms_Jan2010.pdf

Reference

Elliott, M.L. and T.K. Broschat. January 31, 2010. Additional Comments Regarding Cold Damage to Palms. UF/IFAS, Fort Lauderdale Research and Education Center, Fort Lauderdale, Florida.

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