

## *Flooded Landscapes*

Many Palm Beach County areas were flooded by tropical storm Issac. Flooding effects on trees and shrubs can include root suffocation, deposits of sand that smother roots, changes in pH or soil acidity or alkalinity, noxious methane soil gases produced from oxygen deprived decomposing organic matter. Symptoms of flooding progress from leaf wilting and browning to fruit and leaf drop, next to stem and limb dieback then finally tree death.

Tropical fruit trees not tolerant of flooding include avocado, papaya, mamey sapote, sugar apple, atemoya, passion fruit and jakfruit.

The University of Florida recommends these steps for flood stress recovery:

1. Allow the flood-water to subside.
2. Remove a portion of the tree canopy. This will reduce the leaf water loss (transpirational load) from the root system so the remaining leaves do not desiccate and die.
3. Remove fruit from the tree which may decrease the effect of the flooding stress.  
Note: Damage may be more severe on young trees than on large mature trees. Trees with fruit tend to have a more severe negative reaction to flooding than trees without a fruit load.
4. Wait several weeks to months to evaluate the extent of tree damage or tree death. This is because it takes time for trees to recover from flooding stress, and for trees to decline from flooding. As an example, sometimes trees may lose leaves or have scorched (brown) leaves, but the tree is still alive and eventually recovers.

Call the Master Gardener Volunteer Hotline with your plant questions at 233-1750 M-F 9-4.



Figure 1 Flooded area in the Mounts Botanical Garden by Tropical Storm Issac August 27, 2012