

Give Ian-Stressed Trees a Bit of Relief With Frequent Irrigation and a Kaolin Particle Film

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Hurricane Ian caused damage to orange trees, knocking fruit on the ground, twisting and breaking limbs, stripping leaves off trees and, in many sites, flooding the soil. Although lots of damage was visible immediately, the after-effects will continue to rear their ugly heads in the months to come, especially as the temperatures warm.

The bad news first

Unfortunately, the wind and flooding effects of the hurricane both impair the trees' ability to move water to the leaves. The trees live between the soil and the atmosphere and have to keep up with the demand for water that warm temperatures and sunlight impose on them. The leaves can only photosynthesize when they can keep up with the demand for water, so water management is necessary to strengthening your trees' recovery. If groves were flooded, the trees' root systems will be less capable of supplying water and nutrients to the canopy. To make matters worse, twisted branches will also have internal damage and will be less able to move water and the fertilizer it brings from the trunk to the leaves.

What can you do?

Spoon-feed the irrigation: The trees can only take up small amounts of water and nutrients at a time, your goal should be to maintain a constant supply of water to the rootzone. To do this, focus on irrigation frequency. Because sandy soils drain quickly, small quantities once or even twice a day are better than fully saturating the soil every few days.

Take the pressure off with a particle film

Because most of the environment's "pull" on the leaves for water comes from sunlight, you can change the environment by applying a particle film to the existing canopy. This will shade and cool the leaves giving them their best shot of staying on the tree and contributing to recovery. I recommend a relatively high dose of particle film, equivalent to 50 lbs Surround per acre, using only the white clay, or 35 lbs of kaolin per acre if mixing in a red colorant.

Are you willing to help us in our tree recovery assessment? Please e-mail Christopher Vincent (civince@ufl.edu) with your contact information.

