

# **Hurricane-Damaged Palms in the Landscape: Care after the Storm**

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The growing point of a palm is the apical meristem, often referred to as the palm bud or palm heart. It is located at the top of the trunk, surrounded by the leaf bases. All leaves come from this bud. If the bud is damaged, new leaves fail to develop and the palm will die.

Unless the palm trunk has broken or it is otherwise obvious that the bud has been damaged, there is no way to predict which palms will survive wind damage and which ones will not. The bud is not visible or accessible, even on the royal palms which have been stripped of their older leaves.

The following are some suggestions on care for palms after a hurricane. Keep in mind it will be at least six months (and probably longer) before it is obvious that a palm will recover. Recovery will consist of new leaves emerging from the bud. In some cases, the new leaves will not look normal – they may be abnormally shaped and shorter than normal. However, over time, each successive new leaf should appear a little more normal until eventually normal leaves appear. Again, this takes time, so patience is required. Recovery from a storm is not a quick process, for people or plants. It is recommended to monitor damaged palms carefully during the next 1 to 2 years.

## **Uprooted Palms**

Palms should be stood upright as soon as possible and replanted at the same depth at which they were planted previously. Bracing will be necessary and should be kept in place for at least six months. If the broken leaves are still green, leave them attached as they will provide photosynthetic capability for the palm as it recovers. Yes, it looks ugly, but it may help with palm recovery. Palms should be treated as if they were being installed for the first time. Thus, the most important component of a management program in the first six months is water management. The root zone should be irrigated as necessary during the re-establishment period.

## **Broken Palms**

If the trunk of a single-stemmed palm is broken, it should be cut at the base and removed. It will not recover. A clustering palm has a lateral meristem at the soil line.

Thus, new stems will emerge and the palm will recover in most cases. Cut the broken stems as close to the base as possible.

### **Fertilization**

No fertilizer should be applied to the root zone until the palm exhibits new growth (i.e., new leaves). Again, this will take a month or longer in many cases. There is no known benefit to applying a micronutrient spray to the canopy, and it may be harmful if applied incorrectly.

### **Fungicides**

There is no research to document the benefits of using fungicides after a hurricane. The theory behind the common recommendation is as follows. If the bud has been damaged, then it is possible that fungal pathogens (primarily *Phytophthora* or *Thielaviopsis*) or secondary bacterial pathogens may establish in the bud and cause the bud to rot and kill the palm. The only fungicides that may have an effect on all three groups of pathogens would be the copper-based fungicides. However, these copper-based fungicides must not be repeatedly applied due to the possibility of copper phytotoxicity. The normal recommendation is not to use them more than twice. The fungicides would be applied as a drench to the bud, not to the soil. The goal is to protect the bud.

If you are specifically worried about *Phytophthora* bud rot, then a bud drench (not a soil drench) using a fungicide with active ingredients of either mefenoxam (ex: Subdue MAXX) or fosetyl-Al (ex: Aliette) may be useful.

All fungicides must be used in accordance with the label. Do **not** mix fungicides together or with a micronutrient spray unless the label indicates it is safe to do so. There is no research to indicate fungicides will help the wind-damaged palm, but the fungicides probably will not hurt the palm if used according to the label.

### **Royal Palms**

Royal palms are crown-shaft palms, where the leaf bases are tightly wrapped around the stem. In strong winds, these leaves are “removed” from the stem, often leaving only the youngest leaf in place. This leaf appears yellow because it is the spear leaf, and it had not fully developed and expanded before the storm. It is firmly attached to the bud of the palm. So, it is normal for this leaf to look yellow and stand upright. As stated previously, as long as the bud (from which all subsequent new leaves will emerge) is not damaged, the royal palm will produce a new canopy to replace the one that was lost in the hurricane. It will take at least a year (and probably longer) for this canopy to be replaced.