

# *Phytophthora* on Palms

## *Phytophthora* pathogen on Palm Trees

**Phytophthora** pathogenic attack on palm trees is one of the most common reasons for mortality in palm plantings. *Phytophthora* is ubiquitous in the soil environment and can be moved by transplant soil, equipment contamination, physical soil movement, water, rainfall, wind and is a motile pathogen during its life cycle.

### Symptoms

The first noticeable symptoms are discoloration and/or wilting of the spear leaf (youngest unopened leaf) subsequent leaves may also appear lighter in color and chlorotic (yellow). Spear leaves also may have distinct brown or necrotic dead areas, as the disease progresses the spear leaf and subsequent leaves are easily pulled from the bud and the leaf base develops a foul rotted odor when observed closely.



### Cultural Control

**Water management and sanitation in nursery and landscape settings is critical to maintaining phytophthora free plantings. Excessive rainfall or irrigation can move spores and initiate spore germination and infection. Splash up can move spores from one plant to another, overhead irrigation should be kept to a minimum all tools and equipment should be sanitized regularly. Disease development is favored by cooler wet weather in spring early summer.**

## Chemical Control

***Phytophthora*** in palms and many other additional tropical plant species commonly attacked by the pathogen can be chemically protected and the pathogen prevented and controlled with the use of **RELIANT® Systemic Fungicide**.

**Growing Nursery:** In the growing nursery, **RELIANT** can be used as a topical foliar spray on small to mid sized plants in a regular preventative spray program for the prevention of the disease. **RELIANT** can also be used through various irrigation systems either in ground drip tape, drip spray emitters, or through overhead irrigation. If plants are grown in pots, and specific varieties need treatment, pot drenches or soil drenches are also very effective used on a regular bases.

**Landscape Applications:** Palms in planted landscapes can be foliar sprayed, or soil drenched around the root ball. Large palms can also be drilled and injected with various commercially available applicators.

**Holding Yards:** Holding areas are a prime sites for plant pathogen infection because of compromised severed root system, plant transplant stress and continuous dry out and rewet of the root system while exposed to the environment. **RELIANT** spray applied to the root ball at 1oz. in 2 gallons of water sprayed applied to the root ball until saturation is an excellent method to prevent pathogen invasion and assure of a good transplant strike. This treatment will last for 30 days +.



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