Part 2: A Series on Plant Pathogens – Different Palm Diseases with Similar Symptoms

Landscapers and homeowners alike...beware of two different palm diseases: Fusarium wilt and Rachis/petiole blight, which have similar visual symptoms.

**Fusarium wilt** generally affects Queen, Mexican Fan, Canary Island Date, and Date palms. Of these, the Queen and the Mexican Fan are the most susceptible, followed by the Canary Island Date, and the Date palm which is rarely affected.

Fusarium wilt is known as the “one sided-wilt” disease. Initial symptoms include the lower canopy’s fronds yellowing and wilting on approximately one side of the palm leaf. The fronds also display a reddish/brown streak on the rachis on the same side as the yellow wilt. As the disease progresses the entire frond turns yellow, browns out, and dies. The disease moves up the canopy eventually reaching and killing the bud at a rapid rate (usually a few months from first symptoms until death). Pruning with infected shears from palm to palm seems to be the most likely way to spread the disease. At this time, fungicidal treatments are not reported to have saved an infected palm, but they may suppress spores. More information on this disease can be found at http://edis.ifas.ufl.edu/pp278.

**Rachis/petiole blight** symptoms are similar to Fusarium wilt, with a few very important exceptions. First and foremost, rachis/petiole blight does not progress from the frond internally to the bud, and will not kill the palm. An otherwise healthy palm should recover and should not require removal. Second, although the disease will move up the canopy, it doesn’t proceed quite as rapidly as fusarium wilt, and generally will not reach the top of the canopy. According to UF research, the range of susceptible host palms for rachis/petiole blight is unknown, although it has been found on similar palms that are affected by Fusarium wilt. As with Fusarium wilt, no fungicidal treatments at this time are reported to cure the disease, but may suppress spores. More information on this disease can be found at http://edis.ifas.ufl.edu/pp145.

It is difficult if not impossible to diagnose Fusarium wilt from rachis/petiole blight’s initial symptoms...so, when in doubt, submit a disease sample to the University of Florida Plant Disease Diagnostics laboratory in Gainesville for confirmation. More information on this subject and how to correctly take disease samples can be found by contacting your local UF/IFAS Extension office or by visiting: http://plantpath.ifas.ufl.edu/clinic/.
Figure 1. Queen palm showing Fusarium wilt symptoms. Initial symptoms of Rachis/petiole blight look similar. Credit Monica L. Elliott.
Figure 2. Mexican fan palm showing Fusarium wilt symptoms. Initial symptoms of Rachis/petiole blight look similar. Credit Monica L. Elliott.

References:

EDIS research and pictures credit: Monica L. Elliott, professor, Plant Pathology Department, Fort Lauderdale Research and Education Center, University of Florida - IFAS, Fort Lauderdale, FL; Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.