

The Texas Department of Agriculture (the Department) adopts on an emergency basis new Chapter 19, Subchapter Y, titled Fusarium Wilt Quarantine of Queen Palm and Mexican Fan Palm, §§19.650 through 19.653, which establishes a quarantine to prevent the spread of a lethal disease of palms known as “Fusarium wilt of queen palm and Mexican fan palm,” caused by a fungus *Fusarium oxysporium* f. sp. *palmarum* that was documented in Florida in 2010. The new sections are adopted on an emergency basis to prevent the introduction and spread of this disease into Texas. The disease is host-specific to queen palm, *Syagrus romazoffiana*, and Mexican fan palm, *Washingtonia robusta*. Mule palm, a cross between *S. romazoffiana* and *Butia capitata*, and desert fan palm, *W. filifera*, are also known to be susceptible to the disease under experimental conditions.

The fungus produces short-lived spores (micro- and macro-conidia) and long-lived chlamydospores that apparently can live in the soil or in infected plant tissue for years. The disease typically causes yellowing or browning on one side of the rachis of the lower leaves of palm, resulting in one-sided wilt while the other side may stay green. Reddish-brown or dark-brown streaks develop on the petiole and rachis on the affected side of desiccated or dead leaflets. Eventually, the entire leaf dies and hangs around the palm trunk. The disease progresses towards the top, wilting the younger leaves. The fungus causes a vascular wilt, obstructing water conducting xylem tissue, which results in leaf wilt, decline and death of the infected palms. Laboratory diagnosis using molecular techniques is required to confirm the fusarium wilt fungus.

The disease generally occurs in mature landscape palms, but has also been observed in juvenile palms in a few nurseries in Florida. Diseased palms decline, die quickly and become unmarketable. Once the central spear leaf has died due to the disease, scientists recommend removal of the tree as soon as possible. Treatment options to control the disease are limited to preventive management, consisting of the removal and incineration of infected palms, disinfection of pruning tools and avoidance of planting host palms at locations where the disease has been found. The disease has been present in Florida since 2010 or earlier and is currently widespread throughout most of the state. In 2013, it was identified in a Mexican fan palm sample received from a dying landscape palm in Harris County, Texas, by Texas A&M AgriLife Extension Service. However, there have been no confirmed cases in Texas since then. During November-December 2015, a total of 31 samples were collected by the Department at nurseries and in landscapes in Cameron, San Patricio, Harris, Hidalgo and Cameron counties; all of the samples tested negative for *F. oxysporum* f. sp. *palmarum*. All the samples were taken from established symptomatic palms. The mode of spread of this disease to mature landscape palms remains unknown, but is suspected to be via airborne spores.

The Department believes that immediate action is necessary to prevent the introduction and spread of this fusarium wilt from infested palms to commercial palm nurseries, production areas and landscape palms of Texas through the importation of queen and Mexican fan palms from infected areas. Adoption of this quarantine on an emergency basis is both necessary and appropriate.

New §19.650 defines the quarantined pest. New §19.651 designates the infested areas subjected to the quarantine. New §19.652 lists the articles subject to the quarantine. New §19.653 prescribes requirements for movement of the quarantined articles from the quarantined area to

Texas. The Department may propose adoption of this emergency rule on a permanent basis in a separate submission.

The new sections are adopted on an emergency basis under the Texas Agriculture Code, §§71.001 and 71.002, that authorize the Department to establish quarantines against in-state and out-of-state diseases and pests; §71.004, that authorizes the Department to establish emergency quarantines; §71.007, that authorizes the Department to adopt rules as necessary to protect agricultural and horticultural interests, including rules to provide for specific treatment of quarantined articles; and the Texas Government Code, §2001.034, which provides for the adoption of administrative rules on an emergency basis without notice and comment.

<rule>

Chapter 19, Subchapter Y, FUSARIUM WILT QUARANTINE OF QUEEN PALM AND MEXICAN FAN PALM

§19.650. Quarantined Pest.

The quarantined pest is *Fusarium* wilt of queen palm and Mexican fan palm, caused by a fungus *Fusarium oxysporium* f. sp. *palmarum*.

§19.651. Quarantined areas.

The quarantined area is the entire State of Florida and any other infested areas.

§19.652. Quarantined Articles.

- (a) The quarantined pest is a quarantined article.
- (b) The following articles are quarantined: queen palm (*Syagrus romanzoffiana*), Mexican fan palm (*Washingtonia robusta*), *Washingtonia filifera* and mule palm (a cross between *S. romanzoffiana* and *Butia capitata*), and any of their parts except seed.

§19.653. Restrictions.

Quarantined articles are prohibited entry into Texas.