

Ball Moss and Oak Wilt

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Ball moss and oak wilt are afflictions that are part of live oak tree culture. One is a harmless air plant and one is a devastating fungal disease.

Ball moss is an epiphyte that collects its moisture and nutrients from the air. Its misfortune is that its favorite growing site is shaded, dying branches within the crown of live oaks. It is easy, but incorrect to relate the live oak branch decline to activity by the ball moss. The branches will continue to decline and die even if there is no ball moss. The live oak only maintains branches of leaves by supplying water and nutrients from the roots when those leaves produce enough sugars and starches to provide a net balance to the tree. If there is too much shade for the leaves to photosynthesize sugars and starches, the branches are gradually culled by the tree.

It just so happens that these dying branches in the interior of the tree exist in a micro-climate of relatively high humidity and limited wind that is perfect for ball moss. The seeds of the ball moss land on the branch, germinate, and conduct their harmless life on the branch. They don't even penetrate the branch, instead they produce a structure that grasps the branch for support. For more evidence that the ball moss is not a parasite, it will sometimes grow on utility lines and fences. This ball moss on the wires is especially prevalent in neighborhoods or towns that are in a valley where winds may be deflected and humidity lingers. Pleasanton Texas is an example.

Ball moss is a unique Central Texas plant that does not parasitize its host plants but if you don't like its looks and insist on having it removed, there are 2 usual tactics. Ball moss can be pulled off of the tree with a cane pole and wire loop from the ground or ladder and it can be sprayed with a copper hydroxide product such as Kocide. The usual time to spray is in the spring when a professional with the right insurance and equipment can be hired.

Ball moss is harmless but oak wilt is a disease that kills live and red oaks by clogging up the vascular system. During mild weather an infected red oak (Texas red oak, shumard oak) produces a fungal mat under its bark. Sap beetles are attracted to the mat and carry the spores to fresh wounds on other oaks. The spores penetrate the vascular system in the tree with the wound and develop there to eventually kill the tree. Red oaks are infected as single trees but the disease can spread through the interconnected root system of live oak trees.

The key to preventing oak wilt is to paint any wounds discovered or caused by pruning immediately after they occur. Five days after the wound occurs, the painting won't help. . Another way to reduce the chance of infection is to limit pruning to the hottest part of summer or the coldest part of winter. Some communities in our area, including San Antonio have ordinances requiring practices to prevent oak wilt.

Recognize oak wilt on red oaks when all the leaves suddenly die and brown. On live oaks large parts of the tree die over a year. The pattern is called flagging. On individual live oak leaves the usual symptom is for the leaves to have colorful dead areas along the veins.

In an area with numerous live oaks the disease can expand about 100 ft. every year. The progress is stopped when the root connections are broken by trenching or there is a barrier such as a sewer line or large field.

Certified Arborists with trained staff can apply propiconazole (Alamo) to uninfected trees in the path of the disease. It saves the treated tree but does not stop the spread of the disease.

If you want more information about oak wilt confer with your County AgriLife Extension Agent and visit the Texas Forest Service Oak Wilt Website.