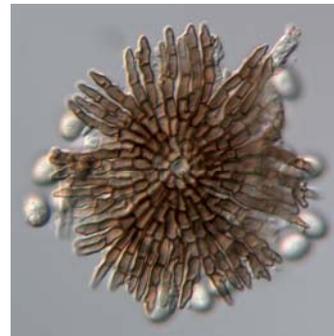


Bur Oak Blight Update

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Since the 1990s, bur oak blight (BOB) has been reported in Midwestern states including Iowa, Kansas, Minnesota, Nebraska and Wisconsin. The disease is believed to be caused by a new species of *Tubakia* fungus. *Tubakia dryina* has been known to be the causal agent of Tubakia leaf spot. However, BOB is considered a blight disease, not just a leaf spot disease. In a severe case, all the leaves on a tree will die late in the season. Upon further investigation by Dr. Harrington of Iowa State University, *T. dryina* is now considered a species complex, and one species of *Tubakia*, recently named as *Tubakia iowensis*, is associated with the disease.



Tubakia fungus.
Photo: Tom Harrington,
Iowa State University

In 2010 and 2011, leaf and twig samples were sent from Wisconsin to Iowa State University for the identification of *T. iowensis*. The samples were collected mainly from bur oak trees that were experiencing late season leaf necrosis. Based on the results of their examinations, BOB has been confirmed in the following Wisconsin counties: Dane, Eau Claire, Green, Iowa, Kenosha, Rock, Sauk, Walworth, and Waukesha ([see map below](#)). A find in Eau Claire County is the farthest north in Wisconsin. However, the fungus has been confirmed in counties in northern Minnesota, near Canada as well. Based on recent genetic analysis and apparent wide range in resistance among bur oak trees, *T. iowensis* and BOB are considered likely to be native to the region.



Leaf symptoms of necrosis (death) of the tissue along the veins

Photo: Tom Harrington, Iowa State University

Bur oak blight symptoms usually start appearing in late July into early August. Infected leaves develop purple-brown lesions along the mid-vein and major lateral veins on the underside of leaves. Later, chlorosis and necrosis expand on leaves and affected leaves wilt and die. Severely affected trees may die after many years of infection together with other pest issues. Severe symptoms of BOB have been observed only on *Quercus macrocarpa* var. *oliviformis*, a variety of bur oak that produces smaller acorns.

What can you do if a tree is infected with BOB? Dr. Tom Harrington says “Don’t panic. BOB is not as bad as it looks.” Trees may be able to sustain repeated defoliation because it starts late in the season, though secondary pests may kill

trees that are stressed by repeated infection with BOB. Practices to improve overall vigor of infected trees may help reduce the risk of attacks by secondary pests. The use of fungicides has been investigated as a management tool of high-value bur oak trees. In preliminary studies,

