



Scout for Beech Leaf Disease in Early August

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The dog days of summer are creeping by and, for me at least, are a little hotter and drier than I'd prefer. Many plants feel the same way, judging from the wilted leaves and beige lawns I pass on my way to work each day. While it's not surprising for most plants to be a little stressed by this mid-summer heat, this time of year is an ideal time to scout for an emerging issue here in Connecticut – beech leaf disease.

What is beech leaf disease?

Beech leaf disease, often shortened to BLD, is a destructive disease of beech trees caused by the foliar nematode, *Litylenchus crenatae* subspecies *mccannii*. Foliar nematodes are microscopic worm-like creatures that live in – and feed on – plant leaf tissue.

Why is early August the best time to scout for this disease?

This is due to the life cycle of the nematode and associated symptoms on the host plant. Eggs and juvenile nematodes are in leaf buds of affected trees at the beginning of the season, but they don't typically cause noticeable symptoms in leaves until summer when the juvenile nematodes become adults. With a good microscope, symptomatic leaves collected between mid-July and mid-August can be dissected and the adult nematodes observed, though usually symptoms seen this time of year are obvious enough to provide a diagnosis.

You keep mentioning symptoms. What should I be looking for?

Symptoms of BLD include leaf distortion and cupping between veins. If you hold a symptomatic leaf up to the sun or a good light (such as in the photo accompanying this article), you will see characteristic dark bands where the nematodes have wreaked havoc. Young beech trees are most severely affected and die within a few years.

Is there anything I can do to protect my beech trees?

Unfortunately, this disease is new to the U.S. and researchers are still trying to understand how the nematodes move between trees and how to best treat affected trees. For now, the best approach is to scout your trees now (and every August) for symptoms of BLD. If you have several beech trees on your property, be sure to look at them each carefully, particularly young trees. Prune away branches with symptomatic leaves, being sure to sanitize your pruners between cuts by spraying them with 70% rubbing alcohol. If the whole tree seems to be affected, it is best to remove it. Clean up and burn, bury, or throw away leaves as well as the nematodes are believed to be able to survive the winter in leaf litter.



Beech leaf disease. Photo by Gail Reynolds, UConn

Not sure if your trees have beech leaf disease or something else? Submit a sample to the UConn Plant Diagnostic Laboratory for disease identification and management recommendations. Remember, symptoms are most noticeable in July and August. Find our submission forms and submission info at <https://plant.lab.uconn.edu/forms/>.

If you have questions about submitting a sample to check for disease, maintaining plant health, or any other horticultural topics, contact the UConn Home & Garden Education Center by emailing ladybug@uconn.edu or calling (877) 486-6271. You can also visit our office in Storrs or the professionals at your local Cooperative Extension Center.