Beech Leaf Disease

Beech Leaf Disease was first identified in Ohio in 2012. It poses a substantial threat to our native forest and landscape American Beech trees as well as to European and other beech species. It is caused by a microscopic nematode that reproduces and overwinters in the leaf buds. In the spring, the leaves exhibit a characteristic dark striping as the leaves unfold, and they may become curled, leathery or withered as the season progresses. Over time, the canopy thins and the trees die. Young trees can succumb within a few years, while older larger trees may survive for 7 to 10 years if infected.

Researchers are still in the early stages of exploring potential treatments. Current interventions may help preserve individual landscape trees but probably not forest beech trees. The most effective approaches involve fungicides that can harm the surrounding environment so should be used with caution and in consultation with a certified arborist.

Gentler options that have shown some promise in mitigating symptoms are a potassium-based fertilizer called PolyPhosphite30, as well as pruning to increase light and air penetration through the canopy that helps leaves and buds dry out faster after it rains. Also, basic TLC like irrigation during dry times (beeches are shallow-rooted and prone to drought stress) and mulching may help strengthen trees. However, it is not known with certainty what helps enough to save a tree once it is infected. Avoid moving infected leaves, twigs, and branches from infected trees, and do not move soil or other organic material from infected areas.

Check the *Maine Department of Forestry link below for more specifics about treatment options. You can also contact your local tree care professional for help with fungicide or potassium applications.

If you notice this damage on your own beech tree(s), it is important to report it so the spread can be mapped. Use the online form, **https://arcg.is/1Svrz40**, to report it to the

Massachusetts DCR Forest Health Program. Any details you are able to provide about the location, symptoms and severity of the disease, or any pictures of the tree will help with the monitoring efforts of the progress of this disease in the Commonwealth.

For more information and/or fact sheets:

https://www.mass.gov/guides/beech-leaf-disease-in-massachusetts

https://www.mass.gov/doc/beech-leaf-disease-massachusetts-fact-sheet/download

https://web.uri.edu/ipm/2022/06/beech-leaf-disease-treatment/

* https://www.maine.gov/dacf/mfs/forest_health/invasive_threats/beech_leaf_disease.htm