

How to recognise Beech Leaf Disease?

Symptoms of Beech Leaf Disease

In spring and summer:

- **Dark green bands** between the parallel veins on the leaves (best visible when observed from below)
- **Thick, crinkled** and **leathery** leaves with **curled margins**
- Interveinal leaf **cupping** and **smaller leaves**



Photo: R. E. Marra, CAES



Photo: R. E. Marra, CAES



Photo: D. McCann



Photo: C. Metroparks

In autumn and winter:

- **Yellowish brown bands** on attached and fallen leaves
- **Bud abortion** and **branch dieback**
- **Canopy thinning** and **tree decline** within 3-7 years



Photo: R. O'Flaherty



Photo: F.T. Campbell

Can you help us?

A **leaf nematode**, *Litylenchus crenatae* subsp. *mccannii* is found in diseased beech leaves and buds.

Beech Leaf Disease and *L. crenatae* **have not been reported in Europe** so far.

Beech Leaf Disease is included in the **EPPO Alert List**. This list contains plant-harmful organisms that may present a phytosanitary risk for the region. Therefore, it is important to report symptoms of Beech Leaf Disease. **Early detection** allows for fast implementation of control measures so that Beech Leaf Disease **cannot become established**.

If you spot symptoms of Beech Leaf Disease:

Report via waarnemingen.be/species/Q-organismen

Add a photo of the damage and note the precise location.

More info?

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Beware of Beech Leaf Disease!

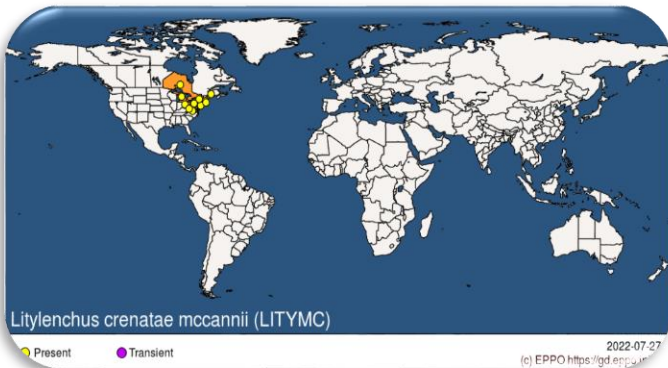


Photo: H. Coste, BCA NY USA



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Distribution



Beech Leaf Disease was first detected in Ohio, **USA** in 2012. It is now present in more than 10 **north-eastern states** and in **Canada (Ontario)**. The nematode found in leaves with Beech Leaf Disease symptoms was also found in beech trees (*Fagus crenatae*) in **Japan**, but does not cause tree decline there.

Beech Leaf Disease affects beech trees (*Fagus* spp.) in forests, open landscapes, parks, arboreta and gardens.

How Beech Leaf Disease spreads is still unknown. It could be via windborne water, mites, insects, birds, beech nuts or imported plants.

Female *L. crenatae* subsp. *mccannii*
Length 0.6 – 1.1 mm



Photo: Carta et al. 2020

Management



Photo: H. Coste, BCA NY USA

Phytosanitary measures

- Avoid moving **beech tree material** (branches, twigs, leaves and seedlings and nursery stock), **soil** or **organic matter** from affected areas.
- **Inspect beech nursery stock** for symptoms of Beech Leaf Disease before purchase.
- Do not **import** beech planting materials **illegally**.



Photo: R. E. Marra, CAES

Host plants



Photo: H. Coste, BCA NY USA

Until now, only **beech trees** (*Fagus* spp.) are reported to be affected.

Beech Leaf Disease affects *Fagus grandifolia* (**American beech**), different cultivars of our common *F. sylvatica* (**European beech**) and *F. orientalis* (**Oriental beech**).

Other beech species (*F. engleriana*, *F. crenatae*,...) are probably also hosts plants.



Photo: H. Coste, BCA NY USA