

How to identify the symptoms of *Geosmithia morbida*?

1st symptoms

- **Yellowing** and **wilting** of the foliage followed by branch dieback
- **Exit holes** of the walnut branch beetle, *Pityophthorus juglandis*, in the thicker twigs and in the trunk. These are only visible after the bark has been removed.
- **Dark cankers** around the exit holes
- Infected trees can die within **3-4 years** of the first symptoms



Can you help us?

Geosmithia morbida causes thousand cankers disease on walnut trees. The fungus is on the **EPPO A2 list**. This list includes plant harmful organisms that are already locally present in the EU and causing a lot of damage there. Therefore, it is important to report if you have seen symptoms of this fungus. **Early detection** allows a quick and efficient implementation of control measures against *Geosmithia morbida*, so that this invasive exotic cannot **establish itself**.

If you spot the symptoms of *Geosmithia morbida*:

- If possible, take a picture of the damage and note the precise location.
- Report via waarnemingen.be/species/Q-organismen

More info?

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and <https://www.forestresearch.gov.uk>

STOP *Geosmithia morbida*!

Thousand cankers disease on walnut

Spread by the beetle
Pityophthorus juglandis!



In collaboration with EUPHRESKO and EPPO www.oppo.int

Distribution



This fungus is native to North America and appears naturally in Mexico and the southwestern U.S. From the US, it was introduced in Italy, in particular in the Veneto (2013), Piedmont (2013) and Lombardy (2019) regions. The fungus does not occur in other parts of Europe.

The fungus is spread by transporting bark-containing trunks. Limited distribution occurs by humans through the trade of contaminated plants and wood. *Geosmithia morbida* is transmitted by its vector *Pityophthorus juglandis*.

Adult beetles are 1.5-1.9 mm long and reddish brown in color. The adults and larvae carry the fungus and contaminate the wood during digging of the corridors.



Management

Phytosanitary measures

- Restrictions on trade of plants and wood from contaminated regions
- Destruction of infected trees

Furthermore, no control methods are available against the fungus.



Control of *Pityophthorus juglandis*

Traps are available to detect the presence of the walnut branch beetle, but control is difficult.



S. Valley, bugwood.org

Host plants



The fungus causes cankers on *Juglans* and *Pterocarya*, two genera in the walnut family. The black walnut tree (*Juglans nigra*) is the most sensitive; the common walnut tree (*Juglans regia*) is slightly less susceptible.

