



The alien fungus attacking ash trees

Ash dieback is an invasive fungus that threatens to decimate stocks of European ash.

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The first symptoms of ash dieback in European ash trees were seen in Poland in 1992, although it took until 2006 to identify a fungus as the cause. By 2012, 23 countries in Europe had reported cases of the disease, which causes leaf loss and usually kills the tree.

Some scientists believe the new strain is native to Japan, where they say it causes no harm to local trees. It is also related to a native species that has been known in Europe since 1851 and grows on ash tree leaves without harming the tree.

With no effective strategies for managing ash dieback, or controlling its spread, researchers are working to breed disease-resistant varieties of ash in an effort to restore tree stocks.

Close up symptoms of the ash dieback. © Fera-Crown

Close up symptoms of the ash dieback. © Fera-Crown

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At the same time, they are developing new tools to rapidly detect the pathogen. At the beginning of 2013, the EU supported 'Q-Detect' multi-disciplinary research network reported some interesting advances in this field. Q-Detect has developed a range of new tools to help plant health inspectors protect Europe's agriculture and forestry sectors from invasive pests and pathogens.

By adapting a military technology for detecting battlefield biological agents, researchers in the network produced a quick identification tool to diagnose the fungus at the origin of the illness in less than 30 minutes. Previously, the detection procedure could have taken several days.

More info

[Q-Detect](#)