

## NEW DISEASE REPORT

**First report of canker stain disease of plane trees, caused by *Ceratocystis fimbriata* f. sp. *platani* in Greece**

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In September 2003, dead and dying plane trees (*Platanus orientalis*) were observed in seven different localities of the Messinia prefecture of the south-western Peloponnese, Greece. Cankers were found on both trunks and branches. The inner bark and the cambial region of the cankered area were discoloured bluish-black and the underlying wood stained dark reddish-brown to bluish-black. Stained streaks extended longitudinally in the wood beyond the dead bark. In cross-section, the stained wood formed characteristic radial patterns.

The fungus *Ceratocystis fimbriata* f. sp. *platani* was consistently isolated from stained wood near the canker margins. Cultures on malt extract agar (MEA) were hyaline to light olive brown, with a radial growth rate of 12–15 mm week<sup>-1</sup> at 24°C and had a pronounced smell of banana. Black, globose perithecia (150–300 µm in diameter) with a long neck (500–800 µm in length) were observed on 1-week-old cultures. The ascospores were 4–6 × 3–5 µm, having a characteristic bowler hat shape. All three types of asexual spores were also observed: hyaline, truncated, cylindrical endoconidia; light doliform endoconidia; and dark, thick-walled conidia (chlamydospores) (Webster & Butler, 1967).

Pathogenicity tests were performed in a glasshouse, on 2-year-old potted plants of *P. orientalis*, using one of the isolates deposited in the culture collection of University of Athens (ATHUM 5046). The stems of trees were wound-inoculated with mycelial agar plugs. Necrotic lesions 3–4 cm in length were observed on the stems 5 weeks after

inoculation. *Ceratocystis fimbriata* f. sp. *platani* was consistently re-isolated from stained wood 2–2.5 cm from the inoculation point. No symptoms developed on control plants inoculated with sterile MEA.

*Ceratocystis fimbriata* f. sp. *platani* is considered to be indigenous to the USA. In Europe the pathogen has caused severe attacks in Italy and France. It has also been reported in Switzerland and Spain (Panconesi, 1999). This is the first report of *C. fimbriata* f. sp. *platani* in Greece. It is an EPPO A2 quarantine organism (EPPO/CABI, 1997) and sanitation measures have been suggested to control the disease in Greece.

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**References**

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