

fera Kew

International Plant Sentinel Network

EMERGING PEST AND DISEASE THREATS TO TREES IN THE UK

Plane trees Platanus sp.

London plane is a deciduous tree that can grow up to 35m high and live for hundreds of years. Leaves are palmately lobed, bark is flaky grey and cream and fruits are clustered and spikey. Despite being the most common tree in London it is not a UK native, the species is thought to be an American and oriental plane hybrid which was brought from Spain around the 17th Century.



Robert Vidéki, Doronicum Kft., Bugwood.org

Plane wilt Ceratocystis platani



Staining as seen on the trunk and after removing bark

Xylem staining; A. Vigouroux, ENSA, Bugwood.org

Dieback compared to a healthy tree

- A fungal pathogen which commonly causes infection through wounds and root contact.
- Causes severe wilting, xylem staining, cankers and ultimately death. A single infection can cause a canker 2-2.5m long within a year
- Present in the U.S., parts of Europe and Asia (Armenia) but, currently, absent from the UK.

Plane lace bug Corythucha ciliata







Feeding; Kansas Department of Agriculture, Bugwood.org

Plane lace bug; C.Malumphy, Fera

Damage both sides of the leaf; C.Malumphy, Fera

Highly invasive insect ~3mm length, 2mm width (pictured) which is an obligate feeder on plane. Adults and nymphs feed on leaf's underside. Heavy infestation can cause severe chlorosis, leaf fall and dieback.
Native to North America; present in Asia, South America, Oceania and Europe.

Polyphagous shot hole borer Euwallacea sp. (and associated Fusarium euwallaceae sp. nov.)



'Shot holes' and running sap; C. Malumphy, Fera



Javier Mercado, Colorado state University, Bugwood.org



Dark staining internally and dieback; C. Malumphy, Fera

PSHB is a very small (2.5mm) beetle, morphologically identical to tea shot hole borer, *E. fornicatus* (pictured).
Symptoms include bleeding, staining, gumming, reddish sawdust-like frass, numerous small emergence holes (around 0.85mm in diameter.), epicormic growth and dieback. Internally the fungus causes dark staining.
Infested trees can be killed rapidly, and the beetle is known to have an extremely large host range.
Present in the U.S. (California) and Israel.

REPORT ANY SUSPECTED SIGHTINGS TO

For more information about the IPSN go to: www.plantsentinel.org.

Reference source: UK Plant Health Risk Register Version: 1.1 02.2016

Useful website: <u>http://www.forestry.gov.uk/forestry/beeh-9ruekf</u>

DATE:

http://www.cabi.org/isc/datasheet/42237