# Platanus lace bug (*Corythucha ciliata*): A newly reported pest in Central London

Anna Platoni, Sarah Facey (FR), Chris Malumphy (Fera)

#### Background

- Platanus lace bug, Corythucha ciliata (Say) (Hemiptera: Tingidae) (PLB), is a highly invasive pest of trees in the genus Platanus.
- Native to North America, the pest has now spread across many areas of the globe.
- The pest arrived first in Italy in 1964. It has since spread across much of continental Europe.
- PLB was first described in the UK in 2006. Following treatment of this early establishment with pesticide however, <u>no evidence of its continuing presence</u> in the UK has been found in the years since.

### Lifecycle and Symptoms

- In spring, females lay eggs which hatch before going through five nymphal instars.
- In Europe PLB can have 2-3 generations a year.
- Adults, and the black, spiny nymphs both feed on the underside of leaves, producing characteristic black dried droplets of frass.
- This feeding produces a loss of leaf colour (chlorotic stippling) on the upper leaf surface (Fig 3).
- As populations increase this stippling develops into a <u>bronzing effect</u> that can cover whole leaves (Fig 2).
- This damage can cause premature leaf fall and associated loss of shade and amenity value.
- Adults and nymphs can be found sheltering under bark platelets, where they will overwinter.



Fig 1: Adult Platanus lace bug © C. Malumphy



Fig 2: Trees infested with Platanus lace bug showing signs of bronzing leaves in the lower canopy.

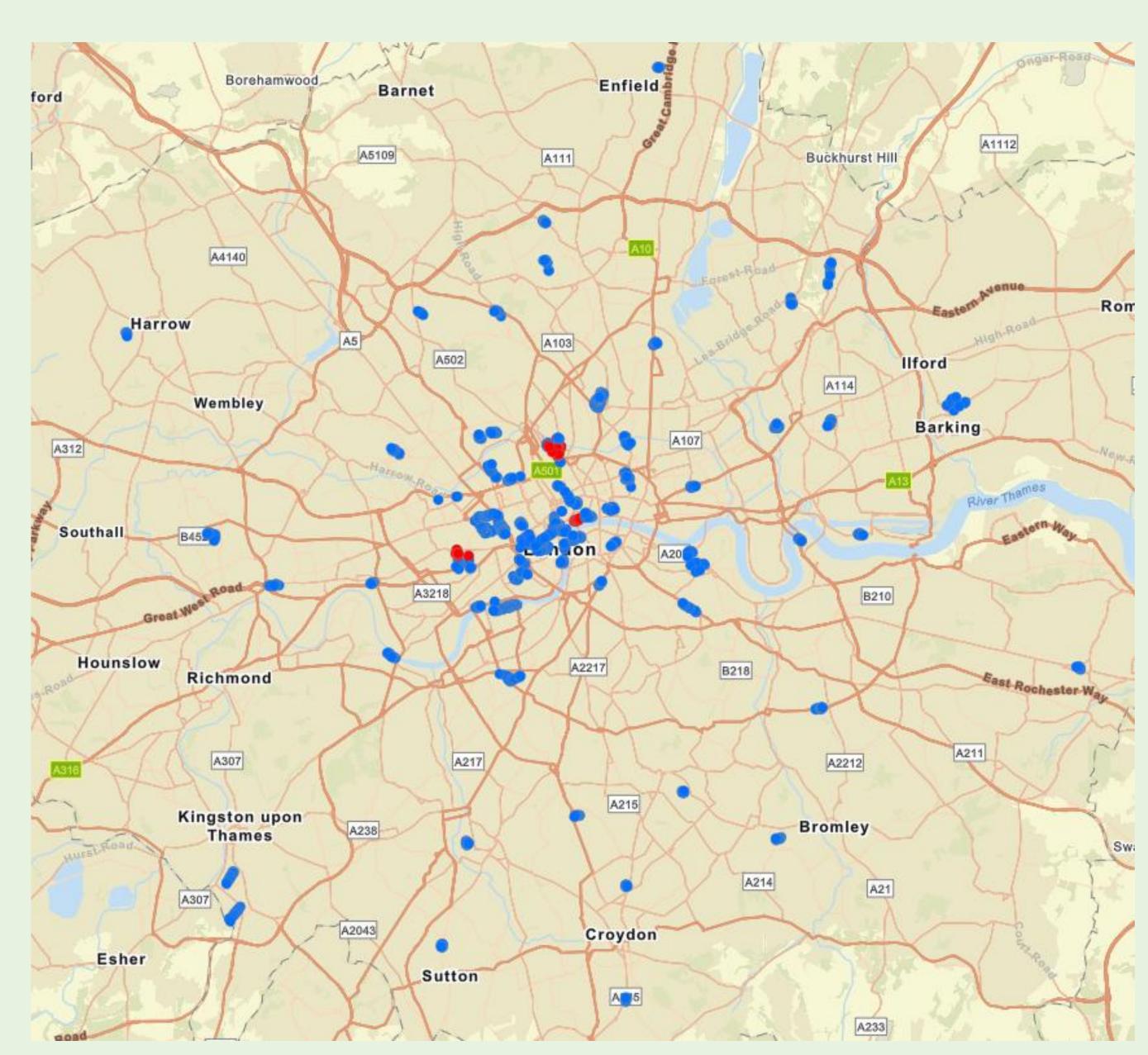
**Fig 3**: Chlorosis occurring on the top surface of the leaf, with Platanus lace bug adults and nymphs feeding on the underside. Symptoms begin around the veins of the leaf.

## Findings in London 2024

- In July 2024, a picture of a suspected PLB adult crawling over a rucksack on a bus was submitted to the iNaturalist web reporting platform by a member of the public.
- Subsequent surveys of street trees in the <u>Kensington & Chelsea</u> area of London found PLB adults, nymphs and associated feeding damage on <u>more than 40 street and parkland trees</u>.
- Further surveys across the greater London area found outbreaks of a similar size in the <u>Kings Cross and South Bank areas</u> of London (Fig 4).
- These three areas are known to be tourist and transport hubs.
- Given the propensity of PLB to move as a <u>hitchhiker</u>, this could suggest a potential route of entry by human associated movement from Europe



We thank Giuliana Sinclair for lodging the original iNaturalist report; colleagues in The Royal Parks, Forestry Commission Plant Health, Forest Research and Acres Wild Woodlands for their involvement with surveillance, as well as the Observatree volunteers. This work was facilitated by a cross-organisational team, consisting of the Forestry Commission, Forest Research, Fera, Defra & APHA. This work was supported and funded by Defra Plant Health.



**Fig 4**: The locations of the >1600 trees surveyed as part of the surveillance work to delimit the extent of Platanus lace bug spread in London. Blue circles are not known to be infested, with red circles showing the three positive locations