Netherlands Plant Protection Service

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agriculture, nature
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PEST REPORT

***Corythucha ciliata* (Say, 1932) (Heteroptera: Tingidae: Tinginae)- on *Platanus* in public green in The Netherlands**

Introduction
This report concerns the first official finding of a population of *Corythucha ciliata* (sycamore lace bug) in the Netherlands in September 2008, on *Platanus* species in public green in the south (Maastricht). *C. ciliata* is not listed as a harmful organism in the EU directive 2000/29/EC and is not listed on the EPPO A1 or A2 list.

Geographical distribution
North America: USA, Canada Introduced and established in southern Europe and Asia
First introduction EU: Italy - Padova, 1964
Also reported from Austria, Bulgaria, Croatia, Czech Republic, Germany, Greece, Hungary, Serbia, Montenegro, Slovakia, Slovenia, Spain, Switzerland, Russia, Belgium, Portugal.

Pest status in the Netherlands: Present on *Platanus orientalis* in southern part of the country: Maastricht, province of Limburg.

Host plant range
Platanus spp. Such as *Platanus occidentalis, Platanus hispanica, Platanus wrighti, Platanus racemosa, Platanus orientalis, Platanus hybrida.* Feeding has been observed on plant species outside the genus *Platanus*, with occasional reproduction on *Quercus laurifolia* and *Liquidambar sytraciflua*. In the Netherlands, *C. ciliate* is only found on *Platanus orientalis*

Biology
The sycamore lace bug feeds on the underside of leaves, causing desiccation of tissue, first near the veins, and subsequently affecting the entire leaf, which may drop prematurely. Mating pairs of sycamore lace bugs initiate colonies by laying eggs on the lower leaf surface along the pubescent leaf veins, especially near the forks One to several pairs occupies a newly colonized leaf. A single female may lay between 250 and 350 eggs. Five immature instars are known. Nymphs stay close together at first, only moving to new leaves after they reach the fourth instar. Development is temperature dependent: eggs incubate within 7 to 28 days, development of all five nymphal instars takes about 3 weeks, and development from egg to adult about 5 weeks. The adults overwinter under loose, rougher parts of bark of the host tree, or may be found in cracks and crevices of fences and buildings near sycamore trees. They are extremely cold tolerant, withstanding temperatures as low as -23^0C. In spring, adults feed for about 10 days prior to oviposition. Two to five generations per year may occur in warm climatic areas. The wings of adults are very delicate, and thus, these insects rarely fly very far. Supported by wind they can cover large distances.

Detection/Identification
Morphology – Adults are flattened, about 3.2-3.7 mm in length and pale-white in colour. Veins in the forewing form numerous small cells (‘lace’). Pronotum with broader paranota, moderately elevated in the middle, composed of four or more rows of cells; its lateral margin and dorsal surface covered with numerous dark-tipped spines; pronotal hood moderately developed, noticeably produced above dorsal surface of head; medial carina of pronotum uniformly pale except for small dark spot on mid-dorsal margin. Nymphs are also flattened and measure up to 2.8 mm in length. They are primarily dark-grey to black with whitish spots and covered with large spines.
Symptoms – When leaves of *Platanus* are first attacked, feeding by *C. ciliata* results in chlorotic flecking on the upper leaf surface. This can gradually progress into chlorotic or bronzed foliage and premature senescence when the infestation is severe. Whilst feeding on the lower leaf surface, this may appear messy, having been varnished with lacebug frass and shed skins at high-density levels.

Pest significance
C. ciliata is a serious pest for *Platanus* in public green, especially after a few years of infection. *C. ciliata* can become a major nuisance, as *Platanus* is a very popular shade tree in parks and streets. In cases of severe infestation, trees may be defoliated in late summer. Several consecutive years of severe lace bug damage, combined with other stress factors, may kill the trees. Despite the spectacular appearance of severe damage, the practical impact of occasional late- season defoliation on otherwise healthy trees is principally only aesthetic in nature. Economic damage is not known to occur. Heavy infestations of *C. ciliata* are more common in urban areas than in natural settings. Damage is more severe during dry weather. During winter adults also may invade homes in large numbers and become a nuisance indoors.

Origin of the finding
The origin of the finding in The Netherlands is unknown. Natural spread from other European countries is most likely, because resident trees have been infected just recently. Introduction is also possible through infested young planting material originated in other European countries, but is not likely the source of infestation in The Netherlands.

Phytosanitary measures
No phytosanitary measures will be taken, as the source of the outbreak is most likely due to natural spread. Moreover, the economic impact of *C. ciliata* is low. Stakeholders in public green will be informed.

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