

Anoplophora chinensis (Forster) in Croatia

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Abstract

Asian citrus longhorn beetle (*Anoplophora chinensis*), commonly known as CLB, has been recorded for the first time in a horticulture nursery on the Adriatic coastline in Dalmatia, South Croatia. One dead adult along with clear signs of larval presence in the potted plants caught our attention and resulted in a positive identification of the species in September 2007. The list of plants with CLB larvae clearly pointed to the consignment originating from China which entered Croatia in a closed container in February 2007. The consignment consisted of several woody species among which *Lagerstroemia* sp. and *Acer palmatum* were found to be infested. Quarantine measures have been undertaken immediately after positive identification of a CLB larvae.

Keywords: CLB, *Anoplophora chinensis*, quarantine pest, Croatia, 2007

Kurzfassung

Anoplophora chinensis (Forster) in Kroatien

Der Asiatische Citrusbockkäfer (*Anoplophora chinensis*), bekannt als CLB, wurde zum ersten Mal in einer Gärtnerei und Baumschule an der adriatischen Küste in Dalmatien, Südkroatien, gefunden. Ein toter Käfer zusammen mit deutlichen Merkmalen von Larven in den Topfpflanzen erregten Aufmerksamkeit und führten schlussendlich zur positiven Identifizierung der Art im September 2007. Die Liste der Pflanzen mit CLB-Larven wies auf eine Lieferung aus China hin, die im Februar 2007 in einem geschlossenen Container in Kroatien ankam. Die Sendung bestand aus mehreren Baumarten, von denen *Lagerstroemia* sp. und *Acer palmatum* befallen waren. Quarantäne-Maßnahmen wurden unmittelbar nach der positiven Identifizierung einer CLB-Larve ergriffen.

Schlüsselworte: CLB, *Anoplophora chinensis*, Quarantäne-Schädling, Kroatien, 2007

First detection and identification

During routine inspection (every forestry and horticultural nursery in Croatia is checked twice a year for pests and diseases) in mid-September 2007 one dead adult of *Anoplophora* candidate beetle was found in the distributional horticultural nursery in Turanj (Figure 1) near the town of Zadar, situated in mid Dalmatia. Taxonomic checkout of the well preserved beetle confirmed its taxonomic status. It was a Citrus longhorn beetle (CLB), to be exact, *Anoplophora chinensis* (Forster) species. It was



Figure 1: Location of the first and single record of CLB in Croatia

Abbildung 1: Ort des ersten und einzigen Fundes von CLB in Kroatien

clear from the beginning that the adult belonged to the *chinensis* subspecies, instead of already present *mala-siaca* in Northern Italy, Lombardy. Parallel with the identification of the dead adult (Figure 2), immediate inspection of all of the plants in the nursery was carefully undertaken and clear signs of wood frass were located in *Lagerstroemia* and *Acer palmatum* potted plants. Dissection of infested plants revealed presence of Cerambycid larvae. By means of molecular analysis (BFW laboratory in Vienna) about a month and a half later the larva was identified as *Anoplophora chinensis* species.

The origin and content of the infested consignment

The consignment that entered Croatia in February 2007 and found to be infested with CLB half a year later, consisted of 600 *Magnolia* plants, 400 *Lagerstroemia* plants and 9200 potted plants of *Acer palmatum*. They were transported into the country in a closed container and unloaded in the semi-closed glass house in the aforementioned distributional nursery. Of these, all *Lagerstroemia* plants showed symptoms of health problems (Figure 3), most of them being destroyed by CLB beetles (visible exit holes, no alive beetle/larvae in the stems).



Figure 2: First and single dead beetle of CLB detected in Croatia in September 2007
Abbildung 2: Erster und einziger, toter CLB-Käfer in Kroatien im September 2007



Figure 3: Frass (active) and exit holes symptoms on infested maples and dead Lagerstroemias at the nursery of the CLB's first record
Abbildung 3: Fraßaktivität und Ausbohrlöcher an befallenen Ahorn-Pflanzen und abgestorbene Lagerstroemia aus der Baumschule mit dem ersten CLB-Fund

Close to one third of the maple plants (2692 to be precise) developed some symptoms of health problems (Figure 3), less than one hundred of them showing clear signs of larval presence in lower stem (frass).

Interestingly, no magnolias were found infested in spite of being shipped together with the highly infested batch. As in many known cases before, Chinese export plant health certificate clearly stated that the plants were free of pests and diseases.

Measures undertaken

According to the EPPO quarantine procedures, immediately a ban on plant relocation was issued, together with tracking and isolation of the small number (less than 50) of plants that were transported to two nurseries inside Croatia (Zagreb and Split). Both suspicious, health problem developing plants and clearly infested plants are to be burned, while all other plants in the nursery of first CLB record will be closely monitored and banned from allocating in the next two years. Legislative measures are being prepared and the "first record area" will receive special attention in the forthcoming period in terms of focused inspection for CLB attack symptoms, both in nursery as well as surrounding area.

References

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