A key for the identification of larvae of Anoplophora chinensis, Anoplophora glabripennis and Psacothea hilaris (Coleoptera Cerambycidae Lamiinae) in Europe

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Abstract

Anoplophora chinensis (Förster), A. glabripennis (Motschulsky) and Psacothea hilaris (Pascoe) (Coleoptera Cerambycidae Lamiinae) are longhorned beetles native to the far-eastern regions of Asia and were recently accidentally introduced into Europe. The three exotic species are harmful insects to broadleaved plant species, and much attention is being paid to prevent further introductions and spread in the European Union. Severe phytosanitary measures are applied with the aim of eradicating outbreaks of the pests. Crucial for control is rapid identification of the larvae of these three exotic species during phytosanitary inspections, both in entry ports and in the rest of the territory of the European Union. Taxonomic keys and descriptions of the adult morphology are available in the literature, but there are significant gaps in the taxonomy of larval morphology, and thus molecular analyses are required. During monitoring activities, a practical morphological taxonomic key would be a rapid and useful tool for species identification of the larvae. In the present work, a taxonomic key provided with detailed morphological pictures is proposed for the identification of the larvae of the three exotic species A. chinensis, A. glabripennis and P. hilaris among the closely related species of the native fauna of Europe.

Keywords

exotic insect; quarantine pest; phytosanitary measures; xylophagous insect

Full Text:

H. lemniscata, S. candida, S. inornata, T. tetraophthalmus; cerambycines.