A new species of Paropsisterna Motschulsky, 1860, a significant pest of plantation eucalypts in Tasmania and Ireland (Coleoptera: Chrysomelidae: Chrysomelinae)

CHRIS A. M. REID¹ & DAVID W. DE LITTLE²

¹Department of Entomology, Australian Museum, 6 College Street, Sydney, NSW 2010. E-mail: chris.reid@austmus.gov.au
²Tasmanian Museum and Art Gallery, Rosny Research Facility, Winkleigh Place, Rosny, Tasmania 7018. E-mail: dcdelittle@bigpond.com

Abstract

A new species of chrysomeline leaf beetle, Paropsisterna selmani Reid & de Little, is described, including all larval instars. This species, native to Australia, is now a significant pest of Eucalyptus plantations in Australia and Ireland, and has been recorded in southern England. Its occurrence in the British Isles represents the first record of establishment of a eucalypt feeding chrysomelid in Europe.

Key words: leaf beetle, larva, adult, taxonomy, morphology, forestry, Eire, British Isles, Australia

Introduction

In 2007 the authors were notified by colleagues of the occurrence of a species of the subfamily Chrysomelinae attacks cultivated Eucalyptus species in County Kerry, Ireland. In 2012 it was photographed in a garden in England. This species clearly belonged to the genus Paropsisterna Motschulsky, 1860 (Reid 2006), which is native to Australia and New Guinea (Reid 2006). Examination of live and preserved material showed the species to be identical to a pest species on Eucalyptus nitens plantations in Tasmania, which had been tentatively identified as Chrysophtharta gloriosa (Blackburn, 1899) by the late Brian Selman (pers. comm., to DWdL 1980; de Little 2011). The name Paropsisterna gloriosa was then supplied to our Irish colleagues and has been used in several publications or web sites (Anonymous 2008, 2012; Fanning et al. 2009; Withers 2011). The purpose of this paper is to rectify that misidentification.

The P. nobilitata species group is difficult to work with taxonomically, as almost all of the approximately 55 species fade to dull straw-brown at death and most have been described without knowledge of the living colours (Blackburn 1899). The living beetles are brilliantly coloured, with diagnostic patterns, although these vary with maturity of the insect (Figs 1–4). Besides colour, the best attributes for separating the species are surface sculpture and male genitalia. Blackburn (1899) provided the only key to species of the P. nobilitata group, which was based on colour patterns recovered by soaking specimens in benzene. From this key, the Irish and Tasmanian species is