



Article

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A review of the genus *Chrysomphalus* Ashmead (Hemiptera: Coccoidea: Diaspididae) with descriptions of a new species and a new, related genus

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Abstract

The taxonomy of the genus *Chrysomphalus* Ashmead (Diaspididae: Aspidiotinae) is reviewed. A new monotypic genus of armored scale, *Pentalaminaspis* Smith-Pardo, Evans and Dooley, is described and illustrated with *Chrysomphalus minutus* Kotinsky, 1908 as the type species. A new species, *Chrysomphalus nepenthivorus* Smith-Pardo, Evans & Dooley, is described and illustrated. This species was intercepted at a U.S. port of entry on hybrids of pitcher plants (*Nepenthes*) originating from Thailand. *Chrysomphalus greeni* Leonardi, 1914 is transferred to the genus *Melanaspis* and *Chrysomphalus degeneratus* Leonardi, 1896 is transferred to the genus *Diaspidiotus*. A discussion and key to species of the genus *Chrysomphalus* are provided as well as a key to aspidiotine genera similar to *Chrysomphalus*.

Key words: Sternorrhyncha, diaspidid, armored scales, *Nepenthes*, Thailand, carnivorous plants, diversity

Resumen

Se reviso la taxonomía del *Chrysomphalus* Ashmead, un género de escamas armadas (Diaspididae: Aspidiotinae). Se describe e ilustra un género nuevo y monotípico de escamas *Pentalaminaspis* Smith-Pardo, Evans y Dooley, con *Chrysomphalus minutus* Kotinsky, 1908 como la especie tipo. Se describe e ilustra una especie nueva de escama, *Chrysomphalus nepenthivorus* Smith-Pardo, Evans y Dooley que fue hallada en híbridos de plantas carnívoras del género *Nepenthes* procedentes de Tailandia. Se transfiere *Chrysomphalus greeni* Leonardi 1914 al género *Melanaspis* y la especie *Chrysomphalus degeneratus* Leonardi 1896 al género *Diaspidiotus*. Se presentan una lista y claves taxonómicas para las especies del género *Chrysomphalus* y los géneros de la subfamilia Aspidiotinae cercanos a *Chrysomphalus*.

Palabras clave: Sternorrhyncha, diaspidido, escamas armadas, *Nepenthes*, Tailandia, planta carnívora, diversidad

Introduction

Scale insects (Hemiptera: Coccoidea) comprise many of the world pests of a wide variety of plants. The family Diaspididae, commonly known as armored scales or hard scales for their hard waxy scale cover, is the largest family in the group with over 2500 species, which represents about one third of the total number of scale insect species (Ben-Dov *et al.* 2012). They are primarily pests of perennial plants in managed systems and cause damage by sucking plant juices from the host plant, causing yellowing or chlorotic areas on the leaves, sometimes leading to leaf drop. Fruit of infested trees is often smaller than usual and may drop prematurely from the tree. Trees that have been infested for several years often become weakened and less productive. Diaspididae are not known to be disease vectors, but nonetheless often cause major economic damage to plants when heavy infestations occur, sometimes leading to the death of the plant or rendering it unmarketable. Many species are major pests of ornamental plants on which they cause damage by directly feeding on the plant or by causing the plants to become esthetically undesirable to the consumer.