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Scale insect species names combined with the genus name *Chermes* Linnaeus (Hemiptera: Sternorrhyncha: Coccoomorpha)

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Abstract

Species names in the scale insects that have been combined with the genus name *Chermes* Linnaeus, 1758, are listed. This list supplements a list published already for the Sternorrhyncha but that was restricted to names of species that had been described originally in the genus. The present list includes, in addition, all species names in the scale insects that have been combined with the name *Chermes*.

Key words: Coccoidea, species names, *Chermes*, present status

Introduction

This list of scale insect species names combined with the genus name *Chermes* Linnaeus supplements the list published already (Favret *et al.*, 2014) that included all species names combined with *Chermes* in the Sternorrhyncha (Aphidoidea, Coccoidea and Psylloidea) but was restricted to names of species that had been described originally within *Chermes*. Apparently, no species in the superfamily Aleyrodoidea were described in *Chermes* except *Chermes aceris ovatus* Geoffroy, an unavailable name. However, there are many more species in the Coccoidea (recently raised to the infraorder Coccoomorpha (Williams & Hodgson, 2014) that were described originally in other genera whose names were combined later with *Chermes*, mainly during the 18th and 19th centuries, and these are now listed below.

Linnaeus (1758: 453) included 14 species in *Chermes*. Many of them are now in the genus *Psylla* Geoffroy (Psylloidea) since the name *Chermes* was placed on the Official Index of Rejected and Invalid Generic Names in Zoology (International Commission on Zoological Nomenclature (1965). In his description of the genus *Chermes*, Linnaeus (1758: 453) was quite precise and clear that the two most important characters were wings numbering four and jumping legs. This definition was different from that of *Coccus* Linnaeus (1758: 455), for the scale insects, described as males with two wings, and females apterous, a definition still valid today except that Linnaeus was probably unaware that some adult males are apterous. It is difficult to understand why many of the early authors on scale insects described or listed species in *Chermes* rather than *Coccus*, or why some authors (*e.g.* Kaltenbach, 1874: 841) listed them in both genera without any explanation. The work by Kaltenbach (1874) includes discussions on scale insects in their genera used at the time but the names are scattered. However, for reasons unknown, most of the names are listed at the end under *Chermes*.

In the following list, the word valid refers to the name only when there is a description, however short, even if the name has been treated as a synonym later. The names of scale insects listed in Favret *et al.* (2014) are also included for completeness. The present status of the name and the present family are also provided. Many of the names listed here are taken from the card index of species names held at the Systematic Entomology Laboratory, U.S.D.A., Beltsville, Maryland, U.S.A., a copy of which (up to 1965) is in the Department of Life Sciences, The Natural History Museum, London.

- Chermes vaccinii* (Bouché), Kaltenbach, 1874: 841. Apparently an error for *Lecanium vaccinii* Bouché on page 420. Present status: treated as a junior synonym of *Chionaspis salicis* (Linnaeus) by Lindinger (1934: 165). Diaspididae.
- Chermes variegatus* (Gmelin), Olivier 1792: 440. Valid. Present status: treated as a junior synonym of *Kermes roboris* (Fourcroy) by Bodenheimer (1931: 243). Kermesidae.
- Chermes ventrale* (Ehrhorn). Valid. Listed in error for *Lecanium ventrale* Ehrhorn, 1898: 245. Present status: treated as a junior synonym of *Coccus hesperidum* Linnaeus by Sanders (1909: 436). Coccidae.
- Chermes vermilio* Planchon, 1864: 19. Valid. Present status *Kermes vermilio* (Planchon). Kermesidae (Favret *et al.*, 2014).
- Chermes vini* (Bouché), Kaltenbach, 1874: 841. Valid. Apparently an error for *Lecanium vini* Bouché on page 95. Present status *Parthenolecanium corni* (Bouché). Synonymy by Lindinger (1912: 371). Coccidae.
- Chermes vitis* (Linnaeus), Fourcroy, 1785: 228. Valid. Present status *Pulvinaria vitis* (Linnaeus). Coccidae.
- Chermes vulgare* Kaltenbach, 1874: 841. Apparently a scale insect listed in error for *Lecanium vulgare* Foerster on page 213. This species is not recognisable in the Coccomorpha (Fernald, 1903: 329).

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