



Taxonomical notes on Oriental and Pacific jewel bugs (Hemiptera: Heteroptera: Scutelleridae)

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Abstract

Taxonomical problems of various species of Oriental and Pacific jewel bugs are discussed. The identities of problematic species are clarified and their diagnostic characters are presented and illustrated. *Coleotichus borealis* Distant, 1899, erroneously synonymized with *C. excellens* Walker, 1867; and *Brachyaulax cyaneovitta* (Walker, 1867), erroneously synonymized with *B. oblonga* (Westwood, 1837) by previous authors, are recognized as distinct species. The following new synonymies are proposed: *Poecilocoris lewisi* (Distant, 1883) = *P. separabilis* Yang, 1934, syn. n.; *P. rufigenis* Dallas, 1851 = *P. capitatus* Yang, 1934, syn. n.; *P. drurarei* (Linnaeus, 1771) = *P. heissi* Ahmad & Kamaluddin, 1982, syn. n.; *Cantao ocellatus* (Thunberg, 1784) = *C. pakistanensis* Ahmad & Kamaluddin, 1996, syn. n. Lectotypes are designated for *Tectocoris* (now *Brachyaulax*) *oblonga*, *P. capitatus*, *P. separabilis*, *Poecilocoris lewisi* var. *peipingensis* Yang, 1934, and *Callidea* (now *Lamprocoris*) *obtusa* Westwood, 1837. A neotype is designated for *Scutellera* (now *Lamprocoris*) *lateralis* Guérin-Méneville, 1838. As a consequence of the neotype designation, *Lamprocoris lateralis* will become a junior objective synonym of *L. obtusus*. Reversion to the senior name *L. obtusus* is considered to be undesirable, therefore, in order to preserve stability, no nomenclatural changes are proposed in this paper, but an application has been submitted to the International Commission on Zoological Nomenclature to suppress *L. obtusus*.

Key words: Hemiptera, Heteroptera, Scutelleridae, taxonomy, Oriental Region, Pacific Region

Introduction

After Pentatomidae comprising more than 4000 species and Cydnidae s. str. (excluding Corimelaeninae, Thyreocorinae, Thaumastellinae, and Parastrachiinae) with over 700 species included, jewel bugs or Scutelleridae is currently the third most species-rich family within Pentatomoidea, containing about 80 genera and nearly 500 described species (Cassis & Vanags 2006). The Oriental Region is rich in species (about 21 genera and more than 120 species described so far), but its fauna is largely unrevised.

During the preparation of a monograph of the jewel bugs of Taiwan, several taxonomic problems emerged. The identities of three doubtful species have already been clarified (Tsai & Rédei 2009). In the current paper, further problems are discussed and solved. The identities of *Coleotichus borealis* Distant, 1899 and *Brachyaulax cyaneovitta* (Walker, 1867), both regarded as junior synonyms of other species by previous authors, are reconsidered and both of them are recognized as distinct species. The identities of several additional species are clarified and new synonymies are proposed. One neotype and several lectotypes are designated.

Material and methods

Examination of external structures was carried out using stereoscopic microscopes (Opton 47 50 52 - 991, Leica MZ125). Male and female genitalia were dissected after brief heating in hypertonic KOH solution, and