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Taxonomic Review of the Subtribe Athouina Candèze, 1859 (Coleoptera, Elateridae, Dendrometrinae, Dendrometrini) in Korea

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Abstract

In this revision of the subtribe Athouina of Dendrometrini, we recognized three species including *Cidnopus nigrinitidus* **sp. nov.**, *Limonius scutellaris* (Dolin, 2003) **comb. nov.**, all new to Korea, and *Limoniscus kraatzii* (Candèze, 1879) is recognized as the most abundant species in the Korean Peninsula. Previous records of *Athousius humeralis* (Miwa, 1927) and *Limoniscus rufipennis* (Lewis, 1894) have been confirmed to be misidentifications of *Ampedus basalis* (Mannerheim, 1852) and *Corymbitodes* sp., respectively and the records of *Limonius eximius* (Lewis, 1874) and *Limoniscus vittatus* (Candèze, 1873) are also questionable because no specimens are known from the Korean Peninsula.

Key words: Taxonomy, Coleoptera, Elateridae, Dendrometrini, Athouina, *Cidnopus nigrinitidus* **sp. nov.**, *Limonius scutellaris* **comb. nov.**, Korea

Introduction

The subtribe Athouina Candèze, 1859 is a large group belonging to Dendrometrini of Dendrometrinae. A recent catalogue of the Palearctic click beetles listed 17 genera and 353 species in Athouina (Cate 2007). However, the arrangement of genera and application of taxonomic status from subtribal to tribal as well as subfamily levels are still not congruent in traditional taxonomy (Kishii 1987, 1999; Ôhira 1999; Sánchez-Ruiz 1996; Laibner 2000; Cate 2007). In a recent molecular approach, Oba et al. (2007) implied the probability of a polyphyletic relationship among genera belonging to Dendrometrinae. An extensive phylogenetic study between subtribes and tribes in the subfamily Dendrometrinae is needed.

We have used the classification system as presented by Cate (2007) for the Korean species of Athouina in this study. The Athouina comprises five species previously recorded from the Korean Peninsula by Miwa (1928, 1933, 1934); Cho (1957, 1969); Kim and Kim (1972); Lee et al. (1985); Hirashima (1989); Park and Han (1992); Paik et al. (1993); Park et al. (1993); Shin and Yoon (1994); Kishii (1966, 1987, 1999); Kishii and Paik (2002); and Cate (2007), but these records lack any taxonomic revisions. Therefore, we carried out a taxonomic study on the Korean species of Athouina. As a result, we propose the following: two species, *Athousius humeralis* and *Limoniscus rufipennis*, have been excluded from the Korean fauna by misidentified records; the distribution of two other species, *Limonius eximius* and *Limoniscus vittatus*, in the Korean fauna is doubtful based on unavailable Korean specimens; and *Limoniscus kraatzii kraatzii* is a common species among the Korean Athouina. In addition, a new species, *Cidnopus nigrinitidus* sp. nov. is described and a new record, *Limonius scutellaris* comb. nov. is proposed.