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## Revision of the Subgenus *Coprochara* Mulsant & Rey of the Genus *Aleochara* Gravenhorst from Japan (Coleoptera: Staphylinidae: Aleocharinae)

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### Abstract

A taxonomic revision of the subgenus *Coprochara* Mulsant & Rey, 1874 of the genus *Aleochara* Gravenhorst, 1802 in Japan is presented. The following three species are recognized: *Aleochara* (*C.*) *verna* Say, 1833, *A. (C.) binotata* Kraatz, 1856 and *A. (C.) squalithorax* Sharp, 1888, of which *A. binotata* is new to Japan. All previous records of “*A. (C.) bipustulata* (Linnaeus, 1760)” should be regarded as misidentifications of either *A. verna* or *A. binotata*. New records are added for, *A. squalithorax*, a littoral species. All species are redescribed, figured, keyed and mapped.

**Key words:** Aleocharini, biodiversity, identification key, redescription, rove beetle, taxonomy

### Introduction

The rove beetle genus *Aleochara* Gravenhorst, 1802 is a large group in Aleocharinae, comprising more than 450 species in 19 subgenera (Park & Ahn, 2010; Yamamoto & Maruyama, 2012). *Aleochara* is distributed throughout the world, except for Antarctica (Klimaszewski, 1984; Maus *et al.*, 2001). *Aleochara* is one of the taxonomically difficult groups in Coleoptera. The genus includes many large adults and commonly found species of Aleocharinae; thus, precise and simpler identification methods are required. Close similarities in external and internal structures, and cosmopolitan distributions of several species make species identification difficult.

Larvae of *Aleochara* are known to be parasitoids of cyclorrhaphous Diptera, and some species, especially members of the subgenus *Coprochara* Mulsant & Rey, 1874, are expected to be biological control agents of notorious pest flies (e.g., Klimaszewski & Jansen, 1993, 1994; Maus *et al.*, 1998, 2001; Fournet *et al.*, 2000). Thus, most *Aleochara* species typically occur in fly-infested habitats such as animal droppings, decaying plant material, and carrion (Klimaszewski, 1984; Yamamoto & Maruyama, 2009, 2012).

*Aleochara* species in Asia are far from adequately described, and taxonomic knowledge of Japanese *Aleochara* is still incomplete; only 25 species have been recorded (Bernhauer & Scheerpeltz, 1926; Smetana, 2004; Yamamoto & Maruyama, 2009, 2012).

The species of *Coprochara* have been problematic even in Europe and North America, and to date, no one has conducted a taxonomic review of the Japanese species of the subgenus. The purpose of this study, the third series of contributions to the Japanese *Aleochara* fauna, is to clarify the taxonomic identity of Japanese *Coprochara* species and to investigate geographical variation within each species. All three species are redescribed with diagnosis and figures. Diagnostic keys and distribution maps are also provided. Figures showing collection sites for two species are included.