A new Asian subgenus and species of Ischalia (Coleoptera: Ischaliidae) with an assessment of subgeneric concepts, revised world checklist, and keys to the subgenera and “blue elytra” species

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Abstract

A new subgenus of Ischalia, Nitidischalia, and new species, Ischalia (Nitidischalia) barclayi, is described and illustrated from Sabah, Malaysia. Subgeneric concepts are discussed and an updated world checklist of subgenera and species is presented. A revised key to the Southeast Asian Ischalia species exhibiting blue elytra is also presented, as is a key to the subgenera of Ischalia.

Key words: Ischaliidae, subgenus Nitidischalia, Ischalia barclayi, subgenera, Sabah, Malaysia, world checklist, subgeneric and species keys

Introduction

Due in part to a number of autapomorphies expressed by both larvae and adults, Nikitsky (1992) proposed elevating members of Ischalia to familial status. Until a more thorough phylogenetic analysis of heteromerous Coleoptera is completed, the question of familial placement for Ischalia will remain open. However, the position of Nikitsky has been followed in recent publications, including this paper.

The taxonomic history of Ischalia was summarized by Young (2008), including an overview of the instability of its familial footing. A chronology of species accumulation from Pascoe’s (1860) original generic description for Ischalia indigacea of Borneo, to 2007 was also included. Gusakov and Telnov (2007) added Ischalia (Eupleurida) aptera from Sichuan Province, China; Telnov (in Gusakov and Telnov 2007) added Ischalia (Ischalia) caerulea from Thailand. Most recently, Kazantsev and Young (2011) described Ischalia (Ischalia) anhuluiensis from Anhui Province, China, and Ischalia (Ischalia) lama from Sichuan Province, China.

Originally described at the generic level, Eupleurida (LeConte 1862) was first synonymized with Ischalia (LeConte 1873) and then elevated back to generic status (Blair 1920). Van Dyke (1938) acknowledged Blair’s character assessment for the two taxa, but expressed the opinion that subgeneric recognition was the better conceptualization. This hierarchy was followed by Young (1975, 2008). Gusakov and Telnov (2007) proposed assigning all species previously attributed to the unavailable subgeneric name, Pseudohomalisus (Paulus 1971), to Eupleurida, along with I. (E.) aptera, Ischalia (Eupleurida) californica Van Dyke, Ischalia (Eupleurida) costata (LeConte), Ischalia (Eupleurida) sichuanensis Young, and Ischalia (Eupleurida) vancouverensis Harrington. However, the “Pseudohomalisus” species do not share the salient features of Eupleurida as defined by Van Dyke (1938) and followed by Young (1975). By that well established subgeneric concept, Eupleurida is defined by the following putative synapomorphies: (1) complete lack of humeral elytral carinae and (2) complete lack of metathoracic wings. Since none of the Ischalia associated with “Pseudohomalisus” by Paulus or subsequent authors possesses either of these defining attributes, and the character hypothesized (Paulus 1971) to be diagnostic for supporting subgeneric recognition is too variable, Young (2008) proposed complete abandonment of the “Pseudo-