



New genera and species of leaf beetles (Coleoptera: Chrysomelidae) from China and South Korea

I. K. LOPATIN¹ & A. S. KONSTANTINOV²

¹Zoology Department, Byelorussian State University, Minsk, Belarus. E-mail: lopatinik@gmail.com

²Systematic Entomology Laboratory, PSI, Agricultural Research Service, U.S. Department of Agriculture, c/o Smithsonian Institution, P.O. Box 37012, National Museum of Natural History, MRC 168 Washington, DC 20013-7012, USA.

E-mail: alex.konstantinov@ars.usda.gov

Abstract

Two new genera from China (*Taumaceroides* Lopatin and *Yunnaniata* Lopatin) and 11 new species (*Smaragdina quadrimaculata* Lopatin, *S. oblongum* Lopatin, *Hyphaenia volkovitshi* Lopatin, *Arthrotus daliensis* Lopatin, *Taumaceroides sinicus* Lopatin, *Yunnaniata konstantinovi* Lopatin, *Calomicrus yunnanus* Lopatin, *C. minutissimus* Lopatin, *Hermaeophaga belkadavi* Konstantinov, *H. dali* Konstantinov from China, and *H. korotyaevi* Konstantinov from South Korea) are described and illustrated. A key to *Hermaeophaga* species of Eurasia is presented. Since *Hermaeophaga dali* was collected feeding on *Paederia foetida* L. (Rubiaceae), which is an invasive noxious weed in the United States, this species has potential as a biological control agent of this weed.

Key words: Leaf beetles, Chrysomelidae, new species, new genera, skunk vine, China, South Korea

Introduction

The Chinese leaf beetle fauna remains one of the least known in the Palearctic Region despite monumental keys published in the early 1960s (Gressitt and Kimoto 1961, 1963). Collecting during the past two decades in the mountains of southwestern China documented a number of previously unknown taxa (Lopatin 2002a, b, 2004, 2005a, b, 2006, 2007). New leaf beetle taxa collected recently in Yunnan and in South Korea are described in this paper. One of them, *Hermaeophaga dali* Konstantinov, new species, was collected feeding on *Paederia foetida* L. (Rubiaceae), which is an invasive noxious weed of Asian origin causing significant damage to natural and agricultural environments in the United States (Pemberton and Pratt 2008). Although one of the largest plant families with about 500 genera and 7000 species (Heywood 1993), Rubiaceae have relatively few species that serve as hosts for Chrysomelidae (Jolivet and Hawkeswood 1995), especially in Asia. So far, only two species of the genus *Trachyaphthona* Heikertinger [*T. sordida* (Baly) and *T. nigrita* Ohno] are known to feed on *Paederia foetida* (Okamoto et al. 2008), making efforts to find biological control agents for Rubiaceae weeds particularly difficult. The discovery of *Hermaeophaga dali* provides an additional potential biological control agent for *Paederia foetida*.

The descriptive terminology for flea beetles follows Konstantinov (1998). Specimens are deposited in the following collections: National Museum of Natural History, Smithsonian Institution, Washington, DC, USA (USNM); Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZMAS); and Institute of Zoology, Academia Sinica, Beijing, China (IZAS).