

Article



The genus *Centorisoma* Becker in China, with a key to world species (Diptera, Chloropidae)

XIAOYAN LIU^{1,2} & DING YANG^{1,3}

- ¹Department of Entomology, China Agricultural University, Beijing 100193, China
- ²College of Plant Science and Technology, Huazhong Agricultural University, Wuhan 430070, China
- ³Corresponding author. E-mail: dyangcau@126.com

Abstract

A review of the species of the genus *Centorisoma* Becker from China is provided. The following 5 species are described as new to science: *C. divisum* **sp. nov.**, *C. gansuensis* **sp. nov.**, *C. helanshanensis* **sp. nov.**, *C. scutatum* **sp. nov.** and *C. shaanxiensis* **sp. nov.** A key to the world species of genus *Centorisoma* is given.

Key words: Diptera, Chloropidae, Centorisoma, new species, China

Introduction

Becker (1910) proposed the genus *Centorisoma* for a single species *C. elegantulum*. It belongs to the *Centorisoma* genus group (Andersson 1977). The genus *Centorisoma* is a typical representative of the Palaearctic Region with 11 known species. Five of them are known from central and eastern Russia (Nartshuk 1965, 2005, 2010), three species from Mongolia (Nartshuk 1965, 1968), one species from Kazakhstan (Nartshuk 1965), three species from Japan (Kanmiya 1983; Nartshuk & Yang 2011), one species from South Korea (Nartshuk 2005); two species from North Korea (Nartshuk & Yang 2011) and one, from China (Yang & Yang 1992), only one species, *C. elegantulum* is known to occur in Europe (Becker 1910; Kubik 2006; Nartshuk 1965, 1968, 2005). Nartshuk (2005) reviewed and gave a key to the *Centorisoma* world species.

The genus *Centorisoma* is characterized by the combination of the following characters: body and legs elongate, black or yellow species; head much wider than long; face slightly concave without distinct facial carina; gena rather narrow or moderately wide; vibrissal angle obtuse; parafacial linear or indistinct; ocellar triangle shiny and smooth; antenna with basal 2 segments short, postpedicel distinctly longer than broad, about 1.3–3.0 times as long as its basal breadth; arista somewhat thickened but not flattened; scutum wholly black or yellow with black or reddish brown stripes; scutellum convex on disc; surface of scutum and scutellum strongly or moderately shagreened; thoracic pleura bare; mid tibia with a distinct black subapical spur; tibial organ small; fore femur sometimes bearing roughly 2 rows of minute warts on inner ventromedian surface; subanal lobe always present; cercus rather large and well sclerotized (Andersson 1977; Kanmiya 1983; Nartshuk 2005).

In this paper, we described five new species, *C. divisum* sp. nov., *C. gansuensis* sp. nov., *C. helanshanensis* sp. nov., *C. scutatum* sp. nov. and *C. shaanxiensis* sp. nov. There are six species of the genus *Centorisoma* known to occur in China. Among them five species (*C. divisum* sp. nov., *C. gansuensis* sp. nov., *C. helanshanensis* sp. nov., *C. nigriaristatum* Yang & Yang and *C. scutatum* sp. nov.) are distributed in northwestern China, one of them, *C. scutatum* sp. nov., is also known from northern China, and only one species (*C. shaanxiensis* sp. nov.) is currently known from central China. All these regions are parts of the Palaearctic Region. A key to the world species of the genus *Centorisoma* is provided.

Material and methods

Specimens were studied and illustrated with ZEISS Stemi 2000-c. Genitalic preparations were made by macerating