

Article



Species of the genus Cestrotus Loew from China (Diptera: Lauxaniidae)

SHI LI^{1,2}, DING YANG¹ & STEPHEN D. GAIMARI³

¹Department of Entomology, China Agricultural University, Beijing 100094, China. E-mail: dyangcau@yahoo.com.cn ²College of Agronomy, Inner Mongolia Agricultural University, Hohhot 010019, China. E-mail: shililauxaniid@yahoo.com.cn ³Plant Pest Diagnostics Lab, California Department of Food and Agriculture, 3294 Meadowview Road, Sacramento, CA 95832-1448, USA. E-mail: sgaimari@cdfa.ca.gov

Abstract

The Chinese fauna of the genus Cestrotus Loew (Diptera: Lauxaniidae) is revised, including the five new species Cestrotus acuticurvus sp. nov., Cestrotus heteropterus sp. nov., Cestrotus liui sp. nov., Cestrotus longinudus sp. nov. and Cestrotus obtusus sp.nov., and the two previously described species Cestrotus apicalis (Hendel) and Cestrotus flavoscutellatus de Meijere. Extralimital records are also given for Cestrotus flavoscutellatus and Cestrotus heteropterus, including paratypes of the latter species from Thailand. A key to the species of Cestrotus from China is presented, and a list of all described species of Cestrotus is provided, with information on type locality, primary type specimen(s) and depository, synonymy, and distribution.

Key words: Diptera, Lauxaniidae, Cestrotus, new species, China, Thailand

Introduction

The genus *Cestrotus* Loew (Diptera: Lauxaniidae: Homoneurinae) is distributed in the Oriental and Afrotropical Regions, with 6 of the 19 known species being from the Oriental Region (Hendel 1920; Kertész 1904; de Meijere 1910; Frey 1927; Stuckenberg 1971; Shewell 1977; Sasakawa & Pong 1990; Sasakawa 2003) (see Appendix for list of species). The genus is easily recognized by the following characters (see Fig. 1): body mostly grayish or brownish; head elongate in vertical axis; frons slightly or strongly humped with ornamental spots and pollinosity (sometimes absent), the spots wider than long; anterior *or* reclinate; face and gena ventrally extended, with face prominently convex and with 1 strong genal bristle below eye; arista plumose or pubescent; mesoscutum with distinct brown or black spots; 0+3 *dc*; legs yellow, with brown rings; wing with irregular grayish or brownish spots, and with setulae on some veins (absent in Oriental species) (Stuckenberg 1971; Sasakawa & Pong 1990; Yarom 1995). Stuckenberg (1971) notes that species of *Cestrotus* tend to frequent shady forests, crawling about on rocks or on tree trunks, and it has been more anecdotally noted among collectors that they frequent rocks along creeks and rivers or other moist, shady areas in forests.

Loew (1862) erected the genus *Cestrotus* for his South African species *Cestrotus turritus* Loew, *C. variegatus* Loew, and *C. megacephalus* Loew, but did not designate a type species. The first (and valid) type species designation was *C. turritus* by Becker (1895), although this was overlooked by Hendel, who incorrectly cited first *C. frontalis* (Kertész) (Hendel 1908) and then *C. megacephalus* (Hendel 1920, 1925–1926) as the type species. Kertész (1904) described the genus *Turriger* Kertész for the single species *Turriger frontalis* Kertész from India. Hendel (1925–1926) differentiated these genera in a key based on the position of the ocellar triangle and the orientation of the parafacial bristles. Stuckenberg (1971) considered *Turriger* as a junior synonym of *Cestrotus*, and gave a detailed explanation of the reasoning, pointing out that even if the current circumscription of *Cestrotus* really represented two genera, *Turriger* would still be a junior