

## Species of *Chlorops* Meigen from Palaearctic China (Diptera, Chloropidae)

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### Abstract

The genus *Chlorops* Meigen is recorded from Palaearctic China. The following five species are described as new to science: *Chlorops flavipalpus* sp. nov., *C. gansuensis* sp. nov., *C. liupanshanus* sp. nov., *C. trisetifer* sp. nov., and *C. xinjiangensis* sp. nov. One species, *C. rufinus* Zetterstedt, is newly recorded from China. A key to the species of the genus from Palaearctic China is presented.

**Key words:** Diptera, Chloropidae, *Chlorops*, new species, Palaearctic China

### Introduction

The genus *Chlorops* was erected by Meigen (1830) and belongs to the subfamily Chloropinae. The genus *Chlorops* Meigen is characterized by the combination of the following characters: ocellar triangle triangular, polished or rarely pollinose, and without setulae and punctures; antenna with basal 2 segments usually short, 3rd segment nearly rounded, and as long as broad or very slightly longer than broad; arista slender; mouthparts not elongate; scutum yellow in ground color with 3–5 black, brown, or reddish-yellow stripes, and surface almost smooth; scutellum rounded marginally; legs slender and without tibial organ; wing of usual venation (Kanmiya, 1983). It has a large number of species and shows great variation in many characters. It is worldwide in distribution with about 270 known species and predominantly rich in 116 species in the Palearctic region. But in Palaearctic China, only 2 species are known: *Chlorops extraneus* Wiedemann, 1830 and *C. oralis* (Duda, 1933).

Most research on biology of the genus has been restricted to the economically important species. Most species are responsible for considerable damage to cereal and grain crops. Their larval stages have been described in great detail (Goodliffe, 1942; Lilly, 1948; Nye, 1958; Rogers, 1991).

The genus *Chlorops* is recorded from Palaearctic China where is located in the north of China. The deciduous forests, northern coniferous forests, and grasslands are common in this region. Most of species were collected by sweeping grass and bush in forests, grasslands, or the place where forest and grassland meet, especially in wet habitats. The following five species are described as new to science: *Chlorops flavipalpus* sp. nov., *C. gansuensis* sp. nov., *C. liupanshanus* sp. nov., *C. trisetifer* sp. nov., and *C. xinjiangensis* sp. nov. One species, *C. rufinus* Zetterstedt, is newly recorded from Palaearctic China. A key to the species of the genus from Palaearctic China is given.

### Material and methods

Genitalic preparations were made by macerating the apical portion of the abdomen in warm 10% NaOH for 17–20 min, after examination it was transferred to fresh glycerine and stored in a microvial pinned below the specimen. The specimens examined were deposited in the Entomological Museum of China Agricultural University (CAU), Beijing. The following abbreviations are used: *oc*—ocellar seta, *vte*—outer vertical seta, *vti*—inner vertical seta.