New species of *Chlorops* Meigen from Oriental China, with a key to species from China
(Diptera: Chloropidae)

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**ABSTRACT**

The following 8 species of the genus *Chlorops* Meigen from Oriental China are described as new to science: *Chlorops bisetulifer* sp. nov., *C. brevis* sp. nov., *C. flavicorneus* sp. nov., *C. flavimaculatus* sp. nov., *C. internus* sp. nov., *C. medialis* sp. nov., *C. meihuashanensis* sp. nov., *C. wuyishanus* sp. nov. A key to the species of the genus *Chlorops* from China is presented.

Key words: Diptera, Chloropidae, *Chlorops*, new species, Oriental China.

**INTRODUCTION**

The genus *Chlorops* Meigen is characterized by the following features: ocellar triangle triangular, polished or rarely pollinose; scutum yellow in ground color with 3-5 black, brown, or reddish yellow stripes, and surface almost smooth. It is the largest genus of the subfamily Chloropinae with a worldwide distribution. *Chlorops* can be found in a variety of habitats such as grasslands, forests, and wetlands, and typically are present in large numbers. Most of the new species which are presented here were collected from the representative subtropical forests in Oriental China, a biodiverse ecosystem. Until this research 34 species have been recorded from China. Wiedemann (1830) described 1 new species, and Becker (1911, 1916, 1924) described 6 new species from Taiwan. After that, descriptions of 2 new species from Neimenggu province were given by Smirnov & Fedoseeva (1976, 1978), while Kanmiya (1978) described 1 new species and give a key of the genus from Taiwan. The recent studies conducted by Cui & Yang (2011a, b) added 17 new species to the fauna of China.

In this paper, 8 species of the genus *Chlorops* collected from Oriental China are described as new to science. A key to the species of the genus *Chlorops* from China is presented.

**MATERIALS AND METHODS**

The specimens were studied and illustrated with ZEISS Stemi 2000–c. 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.
### TAXONOMY

Key to species of *Chlorops* from China

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Chlorops bisetulifer sp. nov.
Figs. 1–5
urn:lsid:zoobank.org:act:1D2219B3-6C0C-4F4A-94E7-A46BCDC64FAC

Diagnosis — Ocellar triangle yellow, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed yellow projection continuing to anterior margin of frons, and also with a black spot in front of ocellar tubercle; ocellar tubercle black. 1st and 2nd antennal segments yellow; 3rd antennal segment nearly rounded, brown distally and dorsally, yellow basally and ventrally, covered with pale setulae; arista black, with long setulae. Pregonite 0.5 times as long as postgonite, connected with postgonite posteriorly and hypandrium anteriorly; postgonite rounded posteriorly, and with 2 setulae on anterior region.

Description — Male. Body length 2.7-2.8 mm. Wing length 2.4-2.6 mm.

Head yellow, about 1.2 times as high as long; face concave in lateral view; anterior margin of frons reddish, 0.8 times as long as wide, projecting only slightly in front of eye; occiput dark brown; gena narrowed, about 0.2 times as high as 3rd antennal segment; vibrissal angle obtuse. Ocellar triangle yellow, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed yellow projection continuing to anterior margin of frons, and also with a black spot in front of ocellar tubercle; ocellar tubercle black. Setae on head black, setulae yellow. Ocellar seta procline and divergent; outer vertical seta and inner vertical seta long and developed. Eyes bare. 1st and 2nd antennal segments yellow, 3rd antennal segment nearly rounded, brown distally and dorsally, yellow basally and ventrally, covered with pale setulae; arista black, with long setulae. Proboscis yellow, with yellow setulae; palpus yellow, with pale setulae.

Thorax slightly broader than head, yellow. Thoracic pleuron shiny yellow except for anepisternum with a black spot on anterior margin; katepisternum with black lower portion;
katepimeron with a black spot on lower margin, covered with tiny pale setulae; postnotum black; scutum nearly as long as wide, covered with short setulae, with 5 black stripes; scutellum yellow, about 0.6 times as long as wide. Setae and setulae on thorax black. Legs long and thin, yellow except for tarsomeres 4-5 dark brown. Wing hyaline, veins brown. Relative lengths of costal sections 2nd : 3rd : 4th = 17 : 20 : 18. Squama yellow, with brown setulae. Haltere bright yellow.

Abdomen brown dorsally, yellow laterally and ventrally. Setulae on abdomen black.

Male genitalia (Figs. 3–5): epandrium black, with black setulae; surstylus short, shorter than half of height of epandrium, with posterior region short hook-like and curved forward, dark; mesosolus small and oval, with a pair of setulae; hypandrium relatively narrow in lateral view; pregonite 0.5 times as long as postgonite, connected with postgonite posteriorly and hypandrium anteriorly; postgonite rounded posteriorly, and with 2 setulae on anterior region; distiphallus columniform and orbicular anteriorly.

Female. Unknown.


Distribution — China (Guangxi).

Remarks — The new species is somewhat similar to *C. rhombatus* Kanmiya, 1978 from Japan in the hypandrium relatively narrow in lateral view; the pregonite 0.5 times as long as postgonite, connected with the postgonite posteriorly and hypandrium anteriorly; and the postgonite rounded posteriorly. It can be separated from the latter by the 3rd antennal segment brown distally and dorsally, yellow basally and ventrally; the clypeus yellow; and the postgonite with 2 setulae on the anterior region of each one. In *C. rhombatus* Kanmiya, the 3rd antennal segment is black entire; the clypeus is black; and the postgonite has 1 setula anteriorly and 1 setula medially (Kanmiya, 1978).

Etymology — The species is named for the postgonite with 2 setulae on the anterior region.

**Chlorops brevis** sp. nov.  
Figs. 6–10  
urn:lsid:zoobank.org:act:DBA9BCDB-8FC4-4595-8E3F-BC954228C027

**Diagnosis** — Ocellar triangle yellow, smooth, main portion of triangle only two-thirds as long as frons, with a leaf-shaped brown spot medially, and with a dark brown sulcus from ocellar tubercle to anterior margin of frons; ocellar tubercle black. 1st and 2nd antennal segments yellow; 3rd antennal segment nearly rounded, black, covered with short pale setulae; arista black, with yellow basal segment and short setulae.

**Description** — Male. Body length 3.2 mm. Wing length 3.0 mm.

Head yellow, about 1.2 times as long as high; face concave in lateral view; frons nearly as wide as long, projecting greatly in front of eye; occiput dark brown; gena narrowed, about 0.8 times as high as 3rd antennal segment; vibrissal angle obtuse. Ocellar triangle yellow, smooth, main portion of triangle only two-thirds as long as frons, with a leaf-shaped brown spot medially, and with a dark brown sulcus from ocellar tubercle to anterior margin of frons; ocellar tubercle black. Setae on head black, setulae yellow. Ocellar seta proclinate and divergent; outer vertical seta and inner vertical seta long and weak. Eyes covered with mini setulae sparsely. 1st and 2nd antennal segments yellow; 3rd antennal segment nearly rounded, black, covered with short pale setulae; arista black, with yellow basal segment and short setulae. Proboscis yellow, with yellow setulae; palpus yellow, with black and pale setulae.

Thorax slightly broader than head, yellow. Thoracic pleuron shiny yellow except for anteroventral region of anepisternum with a brownish yellow spot; katepisternum with brownish yellow lower portion; katepimeron covered with pale tiny setulae; postnotum black; scutum about 1.1 times as long as wide, yellow, covered with long setulae, with 3 black stripes, from 1/2 to 5/6 of median stripe narrowed and...
Chlorops flavicorneus sp. nov.
Figs. 11–15
urn:lsid:zoobank.org:pub:73DB8D5B-E44E-45CE-849F-DE51486D5CBE

**Diagnosis** — Ocellar triangle brownish, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed brownish projection continuing to anterior margin of frons, with a median black sulcus and a sulcus on each lateral margin of triangle, and also with yellow posterior corners; ocellar tubercle black. 1st and 2nd antennal segments brown; 3rd antennal segment 1.3 times as long as high, brown distally and dorsally, yellow basally and ventrally, covered with pale setulae; arista white and strong, with long setulae. Katepisternum with yellow lower portion.

**Description** — Female. Body length 2.5 mm. Wing length 2.2 mm.

Head yellow, about 1.1 times as long as high; face concave in lateral view; frons nearly as wide as long, projecting only slightly in front of eye, and with an obvious demidiate process on anterior margin of frons, bright yellow; occiput black; gena narrowed, about 0.5 times as high as 3rd antennal segment; vibrissal angle obtuse.

Ocellar triangle brownish, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed brownish projection continuing to anterior margin of frons, with a median black sulcus and a sulcus on each lateral margin of triangle, and also with yellow posterior corners; ocellar tubercle black. Setae on head black, setulae yellow. Ocellar seta proclinate and divergent; outer vertical seta developed; and inner vertical seta weak. Eyes covered with mini setulae sparsely. 1st and 2nd antennal segments brown; 3rd antennal segment 1.3 times as long as high, brown distally and dorsally, yellow basally and ventrally, covered with pale setulae; arista white and strong, with long setulae. Proboscis yellow with yellow setulae; palpus yellow with black setulae.

Thorax nearly as wide as head, yellow.
Thoracic pleuron shiny yellow except for region...
below prothoracic spiracle with a black spot; anterior margin of anepisternum with a reddish brown spot; katepisternum with yellow lower portion; postnotum black; scutum about 1.1 times as long as wide, covered with thin setulae and pale pollen, with 5 black stripes; scutellum yellow, about 1.5 times as wide as long. Setae and setulae on thorax black. Legs long and thin, yellow except fore-tarsomeres brownish and mid- and hind-tarsomeres 4–5 brownish. Wing hyaline, veins yellow. Relative lengths of costal sections 2nd : 3rd : 4th = 10 : 13 : 15. Squama yellow with yellow setulae. Haltere bright yellow.

Abdomen brownish; each tergum with brown obscure anterior margin. Setulae on abdomen thin and black.

Female genitalia (Figs. 13–15): yellow, tergum 9 with projected posterior margin and one pair of long black setulae; sternum 9 with projected posterior margin; cercus brownish, broad and short, with rounded tip, and with 3-4 long black setulae.

Male. Unknown.

Material examined — Holotype female, Fujian, Wuyishan, 2006. VII. 21, Hui Dong (CAU). Distribution — China (Fujian).

Remarks — The new species is somewhat similar to *C. canaliculatus* Becker, 1911 from China (Taiwan), Japan and Philippines in the ocellar triangle entirely brownish, smooth, with a sulcus on each lateral margin of triangle; the 3rd antennal segment slightly longer than high, brown distally and dorsally, yellow basally and ventrally; and the arista white. It can be separated from the latter by the ocellar triangle with a black median sulcus from the ocellar tubercle to the anterior margin of the frons, and with the yellow posterior corners. In *C. canaliculatus* Becker, the ocellar triangle has no distinct median sulcus in front of the ocellar tubercle, and also without the yellow posterior corners (Kanmiya, 1978).

Etymology — The species is named for the ocellar triangle with the yellow posterior corners.

**Chlorops flavimaculatus** sp. nov.

Figs. 16–20


*Chlorops flavimaculatus* sp. nov.

**Diagnosis** — Ocellar triangle brown, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed black projection continuing to anterior margin of frons, a yellow spot on each lateral margin of ocellar tubercle, and a black median sulcus from anterior ocellus to anterior margin of frons; ocellar tubercle black. 1st and 2nd antennal segments yellow; 3rd antennal segment nearly rounded, black, covered with short setulae; arista white, with brown basal segment and long setulae. Scutum nearly as long as wide, yellow, covered with short setulae sparsely and pale pollen, with 3 stripes, each stripe black centrally and reddish brown peripherally.

**Description** — Male. Body length 4.0 mm. Wing length 3.8 mm.

Head yellow, about 1.3 times as long as high; face concave in lateral view; frons nearly 1.75 times as wide as long, projecting only slightly in front of eye, and with a yellow process on anterior margin of frons, which is covered with tiny yellow setulae; occiput yellow mostly; gena narrowed, about 0.3 times as high as 3rd antennal segment; vibrissal angle obtuse. Ocellar triangle brown, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed black projection continuing to anterior margin of frons, a yellow spot on each lateral margin of ocellar tubercle, and a black median sulcus from anterior ocellus to anterior margin of frons; ocellar tubercle black. Setae on head long and black, setulae yellow. Ocellar seta proclinate and divergent; outer vertical seta and inner vertical seta long and developed. Eyes bare. 1st and 2nd antennal segments yellow, 3rd segment nearly rounded, black, covered with short setulae; arista white, with brown basal segment and long setulae. Proboscis yellow, with yellow setulae; palpus orange yellow, with black setulae.

Thorax narrower than head, yellow. Thoracic...
CUI AND YANG

pleuron shiny yellow except for anterior margin of anepisternum with a small black spot; katepimeron covered with tiny pale setulae; postnotum reddish brown; scutum nearly as long as wide, yellow, covered with short setulae sparsely and pale pollen, with 3 stripes, each stripe black centrally and reddish brown peripherally; scutellum yellow, about 1.25 times as wide as long. Setae and setulae on thorax black. Legs long and thin, yellow entirely. Wing hyaline, veins brown yellow. Relative lengths of costal sections 2nd : 3rd : 4th = 18 : 20 : 18. Squama yellow, with yellow setulae. Haltere bright yellow.

Abdomen brown dorsally, yellow laterally and ventrally. Setulae on abdomen long and black.

Male genitalia (Figs. 18–20): epandrium blackish brown, with black setulae; surstylus short, shorter than half of height of epandrium, with posterior region short hook-like and curved backward, dark, with tiny triangular process irregularly; mesolobus rounded, with two pairs of setulae; hypandrium relatively narrow in lateral view; pregonite longer than postgonite, anterior region broad, posterior region long and thin; postgonite broad medially; distiphallus less than 0.5 times as long as postgonite.

Female. Unknown.

Material examined — Holotype male, Fujian, Meihuashan, 2006. VIII. 30, Qifei Liu (CAU).

Distribution — China (Fujian).

Remarks — The new species is somewhat similar to C. stigmatella Becker, 1911 from Australia, China (Taiwan) and Japan in the ocellar triangle brown, smooth, with a yellow spot on each lateral margin of the ocellar tubercle, and a black median sulcus from the anterior ocellus to the anterior margin of the frons. It can be separated from the latter by the palpus orange yellow, in normal shape; the pregonite longer than postgonite; and the postgonite broad medially. In C. stigmatella Becker, the palpus are yellow and long, projecting beyond the peristoma, about 0.6 times as long as height of eye, with a longitudinal concavity on the outer dorsolateral surface; the pregonite is shorter than postgonite; and the postgonite is broad anteriorly (Kanmiya, 1978).

Etymology — The species is named for the lateral side of the ocellar tubercle with a yellow spot.

Chlorops internus sp. nov.


Diagnosis — Ocellar triangle dark brown, smooth, main portion of triangle nearly as long as frons, narrowed evenly to anterior margin of frons, with yellow anterolateral margins and posterior corners, and with a black median sulcus from anterior ocellus to anterior margin of frons; ocellar tubercle black. 1st and 2nd antennal segments yellow; 3rd segment slightly longer than high, dark brown distally and dorsally, yellow basally and ventrally, covered with short pale setulae; arista yellow, with short setulae. Katepisternum with brownish yellow lower portion except upper margin brown.

Description — Male. Body length 2.9-3.0 mm. Wing length 2.6-2.7 mm.

Head yellow, about 1.2 times as long as high; face concave in lateral view; frons nearly as wide as long, projecting only slightly in front of eye; occiput black; gena narrowed, about 0.6 times as high as 3rd antennal segment; vibrissal angle obtuse. Ocellar triangle dark brown, smooth, main portion of triangle nearly as long as frons, narrowed evenly to anterior margin of frons, with yellow anterolateral margins and posterior corners, and with a black median sulcus from anterior ocellus to anterior margin of frons; ocellar tubercle black. Setae on head black, setulae yellow. Ocellar seta proclinate and divergent; outer vertical seta and inner vertical seta developed. Eyes bare. 1st and 2nd antennal segments yellow; 3rd segment slightly longer than high, dark brown distally and dorsally, yellow basally and ventrally, covered with short pale setulae; arista yellow, with short setulae.
NEW SPECIES OF CHLOROPS FROM CHINA

Proboscis yellow, with yellow setulae; palpus yellow, with black setulae.

Thorax slightly broader than head, yellow. Thoracic pleuron shiny yellow except for postpronotum with a black spot; anepisternum with two black spots on anterior and lower margins; katepisternum with brownish yellow lower portion except brown upper margin; katepimeron with a black spot on lower margin, covered with tiny pale setulae; postnotum black; scutum about 1.25 times as wide as long, covered with short setae, and with 5 black stripes; scutellum yellow, about 1.5 times as wide as long. Setae and setulae on thorax black. Legs long and thin, yellow except for tarsomeres 4-5 black. Wing hyaline, veins dark brown. Relative lengths of costal sections 2nd : 3rd : 4th = 25 : 45 : 35. Squama brown, with black setulae. Haltere bright yellow.

Abdomen shorter than most of species, blackish brown dorsally, yellow laterally and ventrally. Setulae on abdomen black.

Male genitalia (Figs. 23–25): epandrium yellow, with black setulae; surstylus short, shorter than half of height of epandrium, with posterior region rounded and curved backward, dark, with a small process inwardly; mesolobus small; hypandrium relatively narrow in lateral view; pregonite long and thin, nearly as long as postgonite; postgonite broad medially; distiphallus oviform, 0.5 times as long as pregonite.

Female. Unknown.

Material examined — Holotype male, Sichuan, Luding, 2006. VII. 25, Xiaoshuan Bai (CAU). Paratypes 2 males, same data as holotype (CAU).

Distribution — China (Sichuan).

Remarks — The new species is somewhat similar to C. corrugatus Kanmiya, 1978 from Japan in the ocellar triangle dark brown with the yellow posterior corners, and with a black median sulcus from the anterior ocellus to the anterior margin of the frons. It can be separated from the latter by the ocellar triangle without sulcus on the lateral margin and the distiphallus oviform. In C. corrugatus Kanmiya, the ocellar triangle has 2 sulci on the lateral margin; and the distiphallus is oviform but with a small indentation anteriorly.

Etymology — The species is named for the posterior region of the surstylus with a small process inwardly.

Chlorops medialis sp. nov.
Figs. 26–30
urn:lsid:zoobank.org:act:0A637B1A-E0CC-4906-B1C2-743865DF1BF

Diagnosis — Ocellar triangle long and narrow, smooth, yellow, brown centrally and with a brown shuttle-like spot anteriorly, with a median sulcus and two sulci on each side of triangle; ocellar tubercle black. 1st and 2nd antennal segments yellow, 3rd segment slightly longer than high, brown distally and dorsally, yellow basally and ventrally, covered with short pale setae; arista yellow, with short setae. Katepisternum with reddish yellow lower portion.

Description — Female. Body length 5.0 mm. Wing length 4.3 mm.

Head yellow, about 0.85 times as long as high; face concave in lateral view; frons about 1.2 times as wide as long, projecting only slightly in front of eye; occiput dark brown, except for the region connected with ocellar triangle yellow; gena broad, slightly higher than 3rd antennal segment; vibrissal angle obtuse. Ocellar triangle long and narrow, smooth, yellow, brown centrally and with a brown shuttle-like spot anteriorly, with a median sulcus and two sulci on each side of triangle; ocellar tubercle black. Setae on head black, setulae yellow. Ocellar seta proclinate and parallel; outer vertical seta and inner vertical seta develop. Eyes covered with mini setulae sparsely. 1st and 2nd antennal segments yellow, 3rd segment slightly longer than high, brown distally and dorsally, yellow basally and ventrally, covered with short pale setae; arista yellow, with short setae. Proboscis yellow, with yellow setulae; palpus yellow, with pale setulae.

Thorax nearly as wide as head, yellow. Thoracic pleuron shiny yellow except for
postpronotum with an obscure brown spot; region below prothoracic spiracle with a dark brown spot; anteroventral region of anepisternum with a brown spot; katepisternum with reddish yellow lower portion; katepimeron with a reddish yellow spot on lower margin, covered with tiny pale setulae; postnotum black; scutum about 1.35 times as long as wide, covered with short setulae and pale pollen, with 5 black stripes; scutellum yellow, about 2.0 times as wide as long. Setae and setulae on thorax black. Legs long and thin, yellow except for tarsomere 5 brown. Wing hyaline, veins brown. Relative lengths of costal sections 2nd : 3rd : 4th = 18 : 28 : 19. Squama brownish, with black setulae. Haltere bright yellow.

Abdomen yellow; each tergum with brown obscure anterior margin. Setulae on abdomen long and thin, black.

Female genitalia (Figs. 28–30): yellow, tergum 9 without projected posterior margin, with one pair of long black setulae; sternum 9 small; cercus brownish yellow, with rounded tip, covered with long black setulae densely.

Male. Unknown.

Material examined — Holotype female, Sichuan, Erlangshan, 2006. VII. 28, Xiaoshuan Bai (CAU).

Distribution — China (Sichuan).

Remarks — The new species is somewhat similar to C. canaliculatus Becker, 1911 from China (Taiwan), Japan and Philippines in the gena broad, slightly higher than 3rd antennal segment; the 3rd antennal segment slightly longer than high, weakly angulate on the dorsodistal apex, brown distally and dorsally, yellow basally and ventrally; and the scutum with 5 black stripes. It can be separated from the latter by the ocellar triangle yellow, brown centrally and with a brown shuttle-like spot anteriorly, with a median sulcus in front of occular tubercle and two sulci on each side of triangle. In C. canaliculatus Becker, the ocellar triangle is blackish brown entirely, with one or more well-defined sulci on each side of triangle, without distinct median sulcus in front of the ocellar tubercle (Kanmiya, 1978).

Etymology — The species is named for the ocellar triangle with a median sulcus.

Chlorops meihuashanensis sp. nov. 
Figs. 31–35
urn:lsid:zoobank.org:act:567B4E40-BA3C-4CD6-A122-86179FC36943

Diagnosis — Ocellar triangle dark brown, with yellow lateral margins, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed brown projection continuing to anterior margin of frons, and a black sulcus medially from ocellar tubercle to anterior margin of frons; ocellar tubercle black. 1st and 2nd antennal segments brown; 3rd antennal segment nearly rounded, black, covered with short pale setulae; arista black, with short setulae. Scutum nearly as long as wide, yellow anteriorly and brownish posteriorly, covered with short setulae and pale pollen, with 3 black stripes, connected with each other anteriorly.

Description — Female. Body length 2.0-2.1 mm. Wing length 1.8-2.0 mm.

Head yellow, about 0.9 times as long as high; face concave in lateral view; frons nearly as wide as long, projecting only slightly in front of eye; occiput dark brown; gena narrowed, about 0.2 times as high as 3rd antennal segment; vibrissal angle obtuse. Ocellar triangle dark brown, with yellow lateral margins, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed brown projection continuing to anterior margin of frons, and a black sulcus medially from ocellar tubercle to anterior margin of frons; ocellar tubercle black. Setae on head black, and setulae yellow. Ocellar seta procline and divergent; outer vertical seta and inner vertical seta weak. Eyes bare. 1st and 2nd antennal segments brown; 3rd antennal segment nearly rounded, black, covered with short pale setulae; arista black, with short setulae. Proboscis brownish, with yellow setulae; palpus yellow, with pale setulae.

Thorax nearly as wide as head, yellow.
Thoracic pleuron shiny yellow except for postpronotum with a brown spot; anteroventral region of anepisternum with a black spot; anepimeron with a blackish brown spot on anteroventral region; katepisternum with black lower portions; katepimeron with a black spot on lower margin, covered with pale tiny setulae; postnotum black; scutum nearly as long as wide, yellow anteriorly and brownish posteriorly, covered with short setae and pale pollen, with 3 black stripes, connected with each other anteriorly; scutellum yellow, about 1.75 times as wide as long. Setae on thorax black, setulae pale. Legs long and thin, yellow except for hind-tibia with a brown spot medially and tarsomeres 1-5 brown to dark brown. Wing hyaline, veins dark brown. Relative lengths of costal sections 2nd : 3rd : 4th = 32 : 30 : 30. Squama yellow, with yellow setulae. Haltere bright yellow.

Abdomen dark brown dorsally, brownish yellow laterally and ventrally. Setulae on abdomen long and black.

Female genitalia (Figs. 33–35): brownish yellow, tergum 9 with projected posterior margin; sternum 9 broad, with one pair of long pale setulae; cercus brown, with rounded tip, covered with long black setulae densely.

Male. Unknown.


Distribution — China (Fujian).

Remarks — The new species is slightly similar to C. lenis Becker, 1924 from China (Taiwan) and Japan in the gena very narrow, narrower than half of height of the 3rd antennal segment; and the scutum with 3 black stripes. It can be separated from the latter by the katepisternum with the black lower portion; the 3rd antennal segment black; and the arista with the distal segment black. In C. lenis Becker, the katepisternum has the brownish yellow lower portion; the 3rd antennal segment is yellow, weakly infuscated on the dorsal or dorsodistal margin; and the distal segment of the arista is white (Kanmiya, 1983).

Etymology — The species is named after the type locality Meihuashan.

Chlorops wuyishanus sp. nov.
Figs. 36–40
urn:lsid:zoobank.org:act:FAA942E8-9C09-4096-B9DB-C9F0904FE0CA

Diagnosis — Ocellar triangle brown, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed projection continuing to anterior margin of frons and yellow posterior corners, with a median black sulcus from ocellar tubercle to anterior margin of frons, and also with a deep sulcus on each side of ocellar triangle; ocellar tubercle black. 1st antennal segment yellow, 2nd antennal segment brown dorsally, yellow ventrally, 3rd antennal segment nearly rounded, dark brown, covered with short pale setulae; arista yellow, with brown basal segment and short setulae. Katepisternum with brownish yellow lower portion except brown upper margin.

Description — Male. Body length 2.9 mm. Wing length 2.8 mm.

Head yellow, nearly as long as high; face concave in lateral view; frons about 1.25 times as long as wide, projecting only slightly in front of eye, and with a leaf-shaped bright yellow process on anterior margin of frons; occiput brown; gena narrowed, about 0.6 times as high as 3rd antennal segment, with a brown spot below eye; vibrissal angle obtuse. Ocellar triangle brown, smooth, main portion of triangle only two-thirds as long as frons, with a narrowed projection continuing to anterior margin of frons and yellow posterior corners, with a median black sulcus from ocellar tubercle to anterior margin of frons, and also with a deep sulcus on lateral margin of ocellar triangle; ocellar tubercle black. Setae on head black, setulae yellow. Ocellar seta proclinate and divergent; outer vertical seta and inner vertical seta developed. Eyes covered with mini setulae sparsely. 1st antennal segment yellow, 2nd antennal segment brown dorsally, yellow...
ventrally; 3rd antennal segment nearly rounded, dark brown, covered with short pale setulae; arista yellow, with brown basal segment and short setulae. Proboscis yellow, with yellow setulae; palpus yellow, with brown tips and black setulae.

Thorax slightly broader than head, yellow. Thoracic pleuron shiny yellow except for region below prothoracic spiracle with a dark brown spot; anepisternum with two brown spots on anterior and lower margins; katepisternum with brownish yellow lower portion except brown upper margin; katepimeron covered with tiny pale setulae; postnotum black; scutum about 1.4 times as long as wide, yellow anteriorly and brownish posteriorly, covered with short setulae and pale pollen, with 5 black stripes; scutellum yellow, about 1.8 times as wide as long. Setae and setulae on thorax black. Legs long and thin, yellow except fore-tarsomeres brownish and mid- and hind-tarsomeres 4-5 brown. Wing hyaline, veins brownish. Relative lengths of costal sections 2nd : 3rd : 4th = 14 : 20 : 16. Squama yellow, with brownish setulae. Haltere bright yellow.

Abdomen yellow; each tergum with obscure brown anterior margin and narrow blackish posterior margin. Setulae on abdomen long and thin, black.

Male genitalia (Figs. 38–40): epandrium yellow, with black setulae; surstylus short, shorter than half of height of epandrium, plate-like, with posterior region short finger-like and curved forward, dark; mesolobus small; hypandrium relatively narrow in lateral view; pregonite shorter than postgonite; distiphallus as long as pregonite, with tapered anterior region.

Female. Unknown.


Distribution — China (Fujian).

Remarks — The new species is somewhat similar to C. zernyi Duda, 1932 from Europe, Japan and west & central Siberia in the gena slightly narrower than the height of 3rd antennal segment; and the palpus yellow with the brown tips. It can be separated from the latter by the pregonite shorter than postgonite, and only the anterior tip of the pregonite attached to hypandrium. In C. zernyi Duda, the pregonite is nearly as long as postgonite, and broadly attached to the hypandrium anteriorly (Kanmiya, 1978).

Etymology — The species is named after the type locality Wuyishan.

ACKNOWLEDGEMENTS

We are grateful to Dr. Xingyue Liu, Dr. Hui Dong, Dr. Xiaoshuan Bai, Dr. Li Shi, Dr. Qifei Liu, Ms. Yinxia Liao and Ms. Xian Zhou (Beijing) for collecting the specimens. Author Yusi Cui expresses her sincere thanks to Dr. Junhua Zhang, Dr. Yajun Zhu, Dr. Kuiyan Zhang, Dr. Gang Yao, Dr. Shan Huo, Dr. Jinjing Wang, Dr. Meng Mao and Dr. Tingting Zhang (Beijing) for their kind help during the study. The research was supported by the National "Twelfth Five-Year" Plan for Science & Technology Support (2012BAD19B00) and the National Natural Science Foundation of China (Nos. 3141101151, 4151101023).

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Figures. 1–5. *Chlorops bisetulifer* sp. nov. (male) 1. Head, dorsal view; 2. antenna, lateral view; 3. epandrium, posterior view; 4. epandrium, lateral view; 5. hypandrium and phallic complex, ventral view. Scale bar 0.25 mm.
Figures 6–10. *Chlorops brevis* sp. nov. (male) 6. Head, dorsal view; 7. antenna, lateral view; 8. epandrium, posterior view; 9. epandrium, lateral view; 10. hypandrium and phallic complex, ventral view. Scale bar 0.25 mm.
Figures. 11–15. *Chlorops flavicorneus* sp. nov. (female) 11. Head, dorsal view; 12. antenna, lateral view; 13. terminalia, dorsal view; 14. terminalia, lateral view; 15. terminalia, ventral view. Scale bar 0.25 mm.
Figures 16–20. Chlorops flavimaculatus sp. nov. (male) 16. Head, dorsal view; 17. antenna, lateral view; 18. epandrium, posterior view; 19. epandrium, lateral view; 20. hypandrium and phallic complex, ventral view. Scale bar 0.25 mm.
Figures 21–25. *Chlorops internus* sp. nov. (male) 21. Head, dorsal view; 22. antenna, lateral view; 23. epandrium, posterior view; 24. epandrium, lateral view; 25. hypandrium and phallic complex, ventral view. Scale bar 0.25 mm.
Figures. 26–30. *Chlorops medialis* sp. nov. (female) 26. Head, dorsal view; 27. antenna, lateral view; 28. terminalia, dorsal view; 29. terminalia, lateral view; 30. terminalia, ventral view. Scale bar 0.25 mm.
Figures. 31–35. Chlorops meihuashanensis sp. nov. (female) 31. Head, dorsal view; 32. antenna, lateral view; 33. terminalia, dorsal view; 34. terminalia, lateral view; 35. terminalia, ventral view. Scale bar 0.25 mm.
Figures 36–40. *Chlorops wuyishanus* sp. nov. (male) 36. Head, dorsal view; 37. antenna, lateral view; 38. epandrium, posterior view; 39. epandrium, lateral view; 40. hypandrium and phallic complex, ventral view. Scale bar 0.25 mm.