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Article in *Oriental insects* · August 2018

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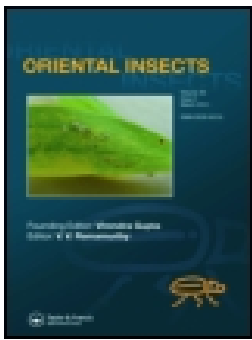
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## Review of *Clitostethus* Weise, *Parastethorus* Pang et Mao and *Stethorus* Weise (Coleoptera: Coccinellidae) from Pakistan

Zafar Iqbal, Muhammad Farooq Nasir, Imran Bodlah & Karol Szawaryn

To cite this article: Zafar Iqbal, Muhammad Farooq Nasir, Imran Bodlah & Karol Szawaryn (2018): Review of *Clitostethus* Weise, *Parastethorus* Pang et Mao and *Stethorus* Weise (Coleoptera: Coccinellidae) from Pakistan, *Oriental Insects*, DOI: [10.1080/00305316.2018.1492987](https://doi.org/10.1080/00305316.2018.1492987)

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## Review of *Clitostethus* Weise, *Parastethorus* Pang et Mao and *Stethorus* Weise (Coleoptera: Coccinellidae) from Pakistan

Zafar Iqbal <sup>a</sup>, Muhammad Farooq Nasir<sup>a</sup>, Imran Bodlah <sup>a</sup>  
and Karol Szawaryn <sup>b</sup>

<sup>a</sup>Department of Entomology, Faculty of Crop and Food Sciences, Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan; <sup>b</sup>Department of Invertebrate Zoology and Parasitology, Faculty of Biology, University of Gdańsk, Gdańsk, Poland

### ABSTRACT

The ladybird beetles form the tribe Scymnini are important group of beneficial insects, and they mostly feed on aphids, mealybugs, scale insects, whiteflies and mites. Five species from the genera *Clitostethus* Weise, *Parastethorus* Pang et Mao and *Stethorus* Weise, are reviewed from Pakistan. Two new country records are presented here, namely, *C. arcuatus* (Rossi) and *S. gangliiformis* Li et al. The identification key, diagnoses, descriptions and distributions are provided, along with prey and host plants records. All species are illustrated.

### ARTICLE HISTORY

Received 4 October 2017  
Accepted 7 June 2018

### KEYWORDS

Coccinelloidea; Coccidulini;  
Pakistan; new country  
records

## Introduction

Ladybird beetles (Coleoptera: coccinellidae) belonging to three genera, *Clitostethus* Weise (1885), *Parastethorus* Pang et Mao, (1975) and *Stethorus* Weise (1885), are mostly small-sized beetles, feeding on different groups of Hemiptera insects and mites. Based on the traditional classification, *Clitostethus*, *Parastethorus* and *Stethorus* were placed under the tribe Scymnini in subfamily Scymninae (Kamiya 1961; Sasaji 1971; Kovář 1996). However, Seago et al. (2011) based on the molecular data proposed a new classification for the family Coccinellidae and included Scymnini into a composite tribe Coccidulini under subfamily Coccinellinae.

The genus *Clitostethus* was established by Weise in 1885 with *C. arcuatus* (Rossi 1794) as a type species. In total, 17 species of this genus are described worldwide (Yu et al. 2000), with most diverse fauna known from China (Pang and Yu 1991; Peng et al. 1998; Yu et al. 2000), with several species in Nepal (Canepari 1997) and Iran (Khormizi et al. 2016). Members of this genus are known as specialist predators of whiteflies and were introduced in many countries as biological control agents (Booth and Polaszek 1996).

**CONTACT** Zafar Iqbal  iqzafarshah@gmail.com

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*Parastethorus* Pang et Mao, (1975) was originally proposed as a subgenus of *Stethorus* but recently elevated to generic level (Ślipiński 2007), based on the incomplete abdominal postcoxal lines and distinctive larval characters. Until now, *Parastethorus* consists of 17 species mainly in Oriental region (Li et al. 2015), with the most diverse fauna known from China (10 species) and one species known from India (Kapur 1950; Poorani 2002) and Pakistan (Hayat and Khan 2013).

The genus *Stethorus* was originally established as a subgenus of *Scymnus* by Weise (1885), but in 1899, Weise and Casey treated it as a separate genus. *Stethorus* is widely distributed throughout the world with 86 known species (Li et al. 2013), 28 being listed from the Palearctic region by Kovář (2007). Up to now from Asian countries (Pakistan, China and India), about 34 species have been recorded (Cao and Xiao 1984; Yu 1995; Poorani 2002; Rafi et al. 2005; Hayat and Khan 2013; Ashfaque et al. 2015).

From Pakistan, *Parastethorus yunnanensis* Pang et Mao, (1975) (Hayat and Khan 2013) and two *Stethorus* Weise (1885) species *Stethorus (Stethorus) gilvifrons* (Mulsant 1850) and *Stethorus pauperculus* (Weise 1895) (Rafi et al. 2005; Ashfaque et al. 2015) have been reported so far. However, genus *Clitostethus* Weise (1885) is recorded from Pakistan for the first time, with single species *C. arcuatus* (Rossi 1794). In this paper, three genera *Clitostethus*, *Parastethorus* and *Stethorus* from Pakistan are reviewed, with the addition of two new country records. Diagnostic characters, distribution, prey and host plant information of each species is also given.

## Materials and methods

Ladybird beetles were collected from different localities of northern part of Pakistan from 2015 to 2017. Specimens were preserved in 90% ethanol. The morphological characters were observed under the Labomed CMZ6 microscope.

Male abdomens were detached and dissected in 10% solution of KOH. Extracted male genitalia were washed with 70% and 90% ethanol and examined under a microscope. Specimens were identified using the identification keys of Kapur (1948), Li et al. (2013), Li et al. (2015) and Ashfaque et al. (2015). We follow the terminology of Ślipiński and Tomaszewska (2010). Images were made by a camera mounted on the Nikon SMZ1500 microscope, and photographs were enhanced using Adobe Photoshop CS6.

The following body measurements were made by ocular micrometer: **TL** (total length): from apical margin of clypeus to apex of elytra. **TW = EW** (total width = elytral width): across both elytra at widest part. **TH** (total height): at highest part of elytra. **HW** (head width): at widest part including eyes. **PL** (pronotal length): from the middle of anterior margin to the

base of pronotum. **PW** (pronotal width): at widest part. **EL** (elytral length): along suture from base to apex including scutellum.

Specimens were deposited at the Biosystematics Laboratory, Department of Entomology, Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan.

## Results and discussion

In the present study, five species from three genera, *Clitostethus* Weise, *Parastethorus* Pang and Mao and *Stethorus* Weise from Pakistan, are presented along with the information on their host plants, prey and geographical distribution.

### Key to *Clitostethus*, *Parastethorus* and *Stethorus* from Pakistan

1. Body brown to yellow with horse shoe pattern on elytra (Fig. 1A).....  
..... *Clitostethus arcuatus* (Rossi)
- Body uniformly black..... 2
2. Abdominal postcoxal lines incomplete (Fig. 2D); tegminal strut long, about 2.3 times as long as penis guide (Fig. 2G-H).....  
..... *Parastethorus yunnanensis* Pang et Mao
- Abdominal postcoxal lines complete (Figs. 3C, 4B, 5B); tegminal strut short, about 0.4 to 1.2 times as long as penis guide (Figs. 3E, 4E, 5E)..... *Stethorus* Weise..... 3
3. Penis slender (Fig. 3D), tegminal strut shorter than penis guide (Fig. 3E) ..... *Stethorus (Stethorus) gilvifrons* (Mulsant)
- Penis stout (Figs. 4C, 5C), tegminal strut longer than penis guide (Figs. 4E, 5E)..... 4
4. Penis with bent apex (Fig. 4C-D), parameres broad, broadened in the middle part (Fig. 4F) .... .... *Stethorus (Allostethorus) pauperculus* Weise
- Penis with apex straight (Fig. 5C-D), parameres slender, narrowing gradually towards apex (Fig. 5F)... *Stethorus (A.) gangliiformis* Li et al.

### Genus *Clitostethus* Weise, 1885

*Clitostethus* Weise, 1885: 65. Type species: *Coccinella arcuata* Rossi, 1794, subsequently designated by Korschefsky, 1931: 141.

**Diagnostic characters**

*Clitostethus* can be distinguished from other genera by the following combination of characters: very short prosternum (almost reduced in front of procoxae) (Fig. 1C), antenna consisting of 11 antennomeres (Fig. 1D), as long as head capsule, maxillary palpi terminal palpomere sub-quadrate (Fig. 1E), abdominal postcoxal lines recurved but incomplete (Fig. 1I), legs (Fig. 1F-H) tarsi with 3 tarsomeres, claws without basal angulation.

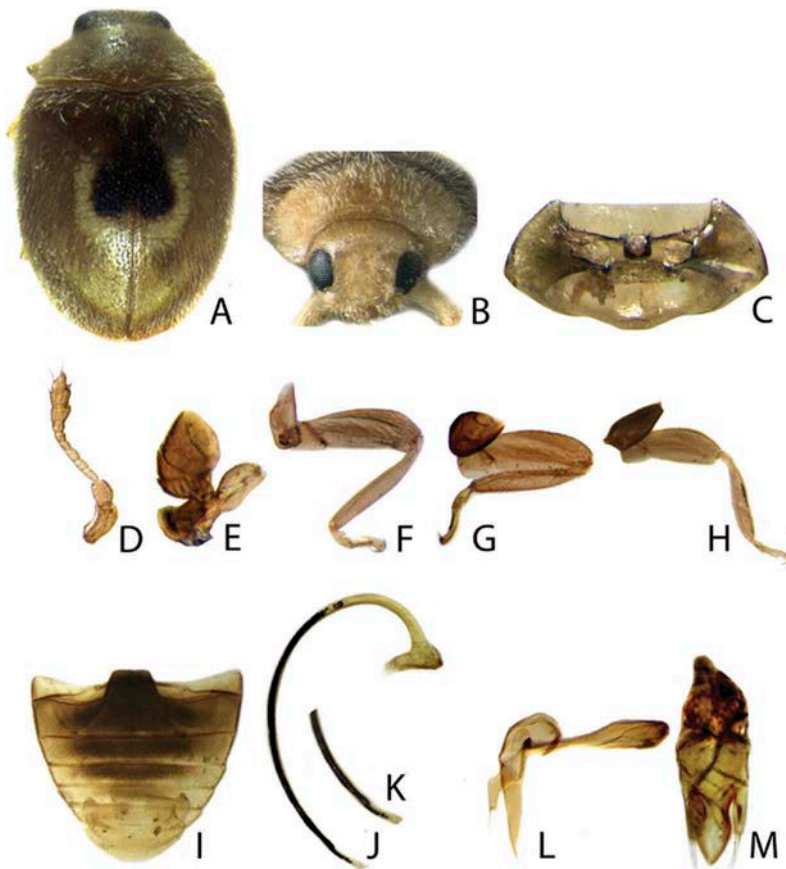
***Clitostethus arcuatus* (Rossi, 1794)**

**Figure 1A-M**

*Coccinella arcuata* Rossi, 1794: 88; Weise, 1885: 73

*Scymnus arcuatus* Mulsant, 1846: 245.

*Scymnus (Clitostethus) abeillei* Weise, 1884: 165.



**Figure 1A–M.** *Clitostethus arcuatus* (Rossi). A, dorsal view; B, head; C, prothorax; D, antenna; E, maxilla; F, pro-leg; G, meso-leg; H, meta-leg; I, abdomen; J, penis; K, penis apex; L, lateral view of tegmen; M, ventral view of tegmen.

- Clitostethus abeillei* Ganglbauer, 1899: 972.  
*Clitostethus arcuatus* Müller, 1901: 517.  
*Clitostethus arcuatus abellei* Gourreau, 1974: 31.  
*Scymnus (Clitostethus) hausmanni* Weise, 1885: 74.  
*Clitostethus heegeri* Ganglbauer, 1899: 972.  
*Clitostethus nigrocinctus* Ganglbauer, 1899: 972.

#### **Material examined**

**Pakistan: Gilgit-Baltistan:** Gilgit (Minawar), 9♂, 13♀, 12.ix.2016, Jutial (Khomeer), 5♂, 6♀, 15.ix.2016, 1♂, 2♀, 19.vii.2017, Nagar (Nilt), 1♀, 20.IX.2016, Z. Iqbal.

#### **Description**

TL: 1.18–1.42 mm, TW: 0.84–1.01 mm, TH: 0.48–0.62 mm, HW: 0.39–0.43 mm, TL/TW: 1.40–1.42, PL/PW: 0.33–0.34, EL/EW: 1.08–1.12.

Body elongate-oval (Fig. 1A), strongly convex, dorsally covered with long white pubescence. Head yellowish brown, antennae and mouth parts yellow; pronotum pale yellow with brown spots, sometimes merging into one larger dark spot; elytra brown, with white crescent-shaped spot at middle of elytron with anterior area dark brown; legs yellowish brown; abdominal postcoxal lines incomplete (Fig. 1I), reaching about 2/3 of abdominal ventrite 1. Male genitalia as on Fig. 1J–M.

#### **Distribution**

This species is recorded for the first time from Pakistan. It is widely distributed in the Palearctic region from most of Europe to Morocco, Turkey, Syria, Iran and Iraq (Pope 1973; Eizaguirre 2007; Jafari et al. 2013; Coutanceau 2015; Ceryngier et al. 2016).

#### **Preys**

*C. arcuatus* has been reported as a predator on the members of family Aleyrodidae (Sternorrhyncha) (current study).

#### **Host Plant**

This species has been collected from *Morus alba* (Rosales: Moraceae) and *Punica granatum* (Myrtales: Lythraceae) (Current Study).

### **Genus *Parastethorus* Pang et Mao 1975**

*Stethorus (Parastethorus)* Pang et Mao, 1975: 421. Type species: *Stethorus (Parastethorus) yunnanensis* Pang et Mao, 1975, by original designation.

**Diagnostic characters**

*Parastethorus* can be separated from other genera by the following combination of characters: antennae (Fig. 2C) 11-segmented, shorter than head, prosternum almost as long as procoxal cavity, prosternal process without carinae (Fig. 2B); abdominal postcoxal lines recurved but incomplete (Fig. 2D)

***Parastethorus yunnanensis* Pang et Mao, 1975**

## Figures 2A–H

*Parastethorus yunnanensis* Pang et Mao, 1975: 421

**Material examined**

**Pakistan Gilgit-Baltistan:** Gilgit (Jutial), 2♂, 4♀, 7.vii.2015, 2♂, 1♀, 30.viii.2015, 2♂, 2♀, 20.vi.2017, Ganche (Khaplu), 1♂, 1♀, 13.vii.2015, Ghizer (Bajangle), 2♂, 2♀, 23.vii.2015, Ghizer (Shamaran), 2♂, 3♀, 3.viii.2015, Ghizer (Singal), 2♂, 3♀, 11.ix.2016, Ghizer (Gahkuch-Payin), 1♂, 1♀, 18.ix.2016, Nagir (Jaffarabad), 2♂, 1♀, 20.ix.2016, Z. Iqbal; **Punjab:** Chakwal (Iqbal Library), 10♂, 8♀, 17.ix.2015, I. Bodlah, 1♂, 28.x.2015, Chakwal (Khsola), 1♂, 1♀, 28.x.2015, Chakwal (Kallar Kahr), 1♂, 2♀, 26.viii.2017, Z. Iqbal, Rawalpindi (PMAR-Arid University), 1♂, 5.xi.2015, 2♂, 2♀, 5.ix.2016, 2♂, 5♀, 1.iv.2016, M.F. Nasir, Jhelum (Margala Cantt), 1♂, 1♀, 26.xi.2016, Z. Iqbal; **Khyber Pakhtunkhwa:** Mansehra (Nisa Park), 1♂, 1♀, 22.x.2015, Z. Iqbal; **Islamabad Capital Territory:** Islamabad (Gokina Khurd), 1♂, 2♀, 9.iv.2016, Islamabad (Ankara Park), 1♂, 1♀, 26.xi.2016, I. Bodlah, Islamabad (Fatima Jinnah Park), 3♂, 3♀, 7.iii.2017, Z. Iqbal.

**Description**

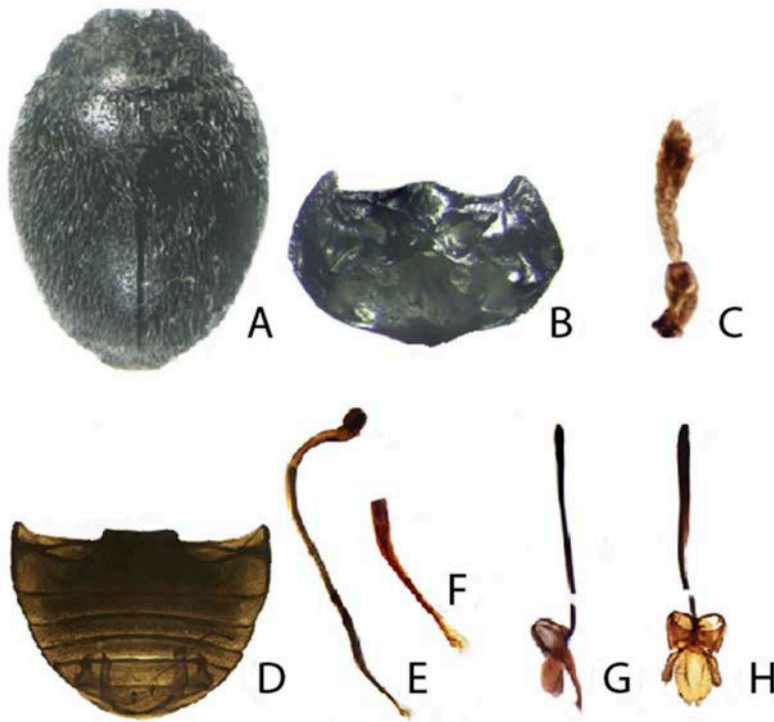
TL: 1.15–1.22 mm, TW: 0.86–0.91 mm, TH: 0.40–0.43 mm, HW: 0.36 mm, TL/TW: 1.34–1.35; PL/PW: 0.28–0.36; EL/EW: 1.06–1.13.

Body (Fig. 2A) elongate-oval, moderately convex, dorsum black and covered with long erect white pubescence; head black except antennae, clypeus and mouth-parts yellowish-brown; legs yellowish brown; abdominal (Fig. 2D) postcoxal line incomplete and 3/5 length of abdominal ventrite 1. Male genitalia as on Fig. 2E–H, with parameres shorter than penis guide, penis guide in ventral view with semicircular emargination at apex, and with two apical protuberances visible laterally.

**Distribution**

Previously recorded from the Palearctic and Oriental region of Pakistan (Azad Jammu and Kashmir) and China: Yunnan (Pang and Mao 1975; Ren et al. 2009; Hayat and Khan 2013; Li et al. 2015).





**Figure 2A–H.** *Parastethorus yunnanensis* Pang & Mao. A, dorsal view; B, prothorax; C, antenna; D, abdomen; E, penis; F, penis apex; G, lateral view of tegmen; H, ventral view of tegmen.

### **Preys**

This species predate on members of the family Tetranychidae (Acari; Trombidiformes) (Current Study).

### **Host Plants**

*P. yunnanensis* has been collected from *Juglans regia* (Fagales: Juglandaceae), *Dalbergia sissoo*, *Prosopis juliflora* (Fabales: Fabaceae), *Artemisia maritima* (Asterales: Asteraceae), *Salix alba* (Malpighiales: Salicaceae), *Berberis lycium* (Ranunculales: Berberidaceae) and *Cannabis sativa* (Rosales: Cannabaceae) (Current Study).

### **Genus *Stethorus* Weise, 1885**

*Scymnus* (*Stethorus*) Weise, 1885: 65. *Stethorus* Weise, 1899: 64. Casey, 1899: 135. Kapur, 1948: 297. Type species: *Coccinella minimus* Rossi, 1794 [= *Scymnus punctillum* (Weise, 1891)].

**Diagnostic characters**

*Stethorus* can be distinguished by the combination of the following characters: antennae composed of 11 segments (Fig. 3B); abdominal postcoxal lines complete (Figs. 3C, 4B, 5B), reaching 1/2 to 2/3 length of abdominal ventrite 1; penis short and slender; tegminal strut about 0.4 to 1.2 times as long as penis guide.

**Subgenus *Stethorus* Weise, 1885**

*Stethorus* Weise, 1885: 65. Casey, 1899: 135. Kapur, 1948: 297. Type species: *Scymnus punctillum* Weise, 1891.

**Diagnostic characters**

Subgenus *Stethorus* could be separated from *Allostethorus* by penis long and slender (Fig. 3D); penis guide slender (Fig. 3E-F); tegminal strut shorter than penis guide.

***Stethorus (Stethorus) gilvifrons* Mulsant, 1850**

Figure 3A-F

*Scymnus gilvifrons* Mulsant, 1850: 995.

*Scymnus gilvifrons* Crotch, 1874: 251.

*Scymnus (Stethorus) gilvifrons* Weise, 1885: 74.

*Stethorus gilvifrons* Korschefsky, 1931: 112.

*Stethorus gilvifrons* Kapur, 1948: 303.

**Material examined**

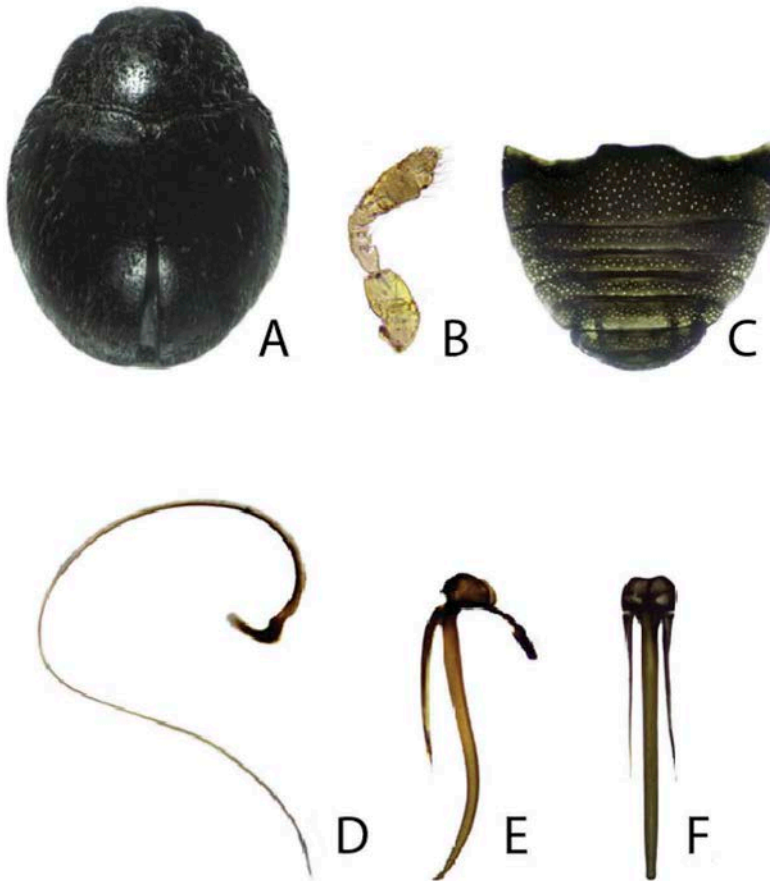
**Pakistan, Gilgit-Baltistan:** Gilgit (Jutial), 9♂, 8♀, 7.vii.2015, 3♀, 30.viii.2015, 1♂, 2♀, 20.vi.2017, Gilgit (Jutial-Nala), 6♂ 4♀, 9.vii.2015, Gilgit (Naltar), 1♀, 9.viii.2015, Ganche (Barha), 1♀, 13.vii.2015, Ghizer (Shones), 4♂, 5♀, 22.vii.2015, Ghizer (Gahkuch-Bala), 2♂, 3♀, 3.viii.2015, 1♂, 3♀, 18.ix.2016, Nagir (Jaffarabad), 2♂, 20.ix.2016, Z. Iqbal; **Punjab:** Chakwal (Chakwal city), 10♂, 8♀, 17.ix.2015, I. Bodlah, 7♂, 10♀, 28.x.2015, Chakwal (Knoot Research Fram), 4♂, 3♀, 28.x.2015, Chakwal (Iqbal Library), 2♂, 28.x.2015, Chakwal (Khasulah), 1♂, 3♀, 28.x.2015, I. Bodlah, Chakwal (Kallar Kahr), 1♂, 2♀, 26.viii.2017, Jhelum (Altaf Park), 1♂, 2♀, 24.xi.2015, Jhelum (Altaf Park), 1♂, 1♀, 24.ii.2016, Jhelum (Bakorola), 2♂, 1♀, 8.x.2016, Z. Iqbal, Rawalpindi (PMAR-Arid University), 2♂, 3♀, 10.iii.2016, 2♂, 5♀, 1.vi.2016, 3♂, 2♀, 1.iv.2016, 2♂, 05.ix.2016, M.F. Nasir, Rawalpindi (Nawaz Sharif Park), 1♂, 4♀, 15.v.2016, I. Bodlah, 3♂, 3♀, 14.vii.2016, Attock (Taxila), 1♂, 3♀, 2.ix.2016, Rawalpindi (Ayab Park), 1♂, 2♀, 10.x.2016, Z. Iqbal; **Islamabad Capital Territory:** Islamabad (Gokina Khurd), 1♀, 1♂, 9.iv.2016, Z. Iqbal,

Islamabad (Kachnar Park), 3♂, 2♀, 1.x.2016, Islamabad (Shahdra), 3♂, 2♀, 7.xi.2016, Islamabad (Ankara Park), 2♂, 2♀, 26.xi.2016, Murree (Charapani), 1♂, 2♀, 11.xi.2016, Z. Iqbal; Islamabad (Fatima Jinnah Park), 2♂, 3♀, 7.iii.2017, Z. Iqbal; **Khyber Pakhtunkhwa**: Kaghan Colony (Abbottabad), 1♂, 2♀, 21.x.2015, Z. Iqbal; Peshawar (Garhi Ata-Muhammad), 3♂, 4♀, 31.x.2015, Z. Iqbal.

### Description

TL: 1.19–1.34 mm, TW: 0.89–0.98 mm, TH: 0.50–0.53 mm, HW: 0.34–0.37mm, TL/TW: 1.34–1.37; PL/PW: 0.36–0.38; EL/EW:1.07–1.09.

Body (Fig. 3A) elongate oval, moderately convex, dorsal surface black and covered with long greyish semi-erect pubescence; head black except anterior 1/2 to 2/3 of interocular area, antennae and mouthparts yellowish brown. Legs yellow but sometimes middle of femora dark brown; abdom-



**Figure 3A–F.** *Stethorus (Stethorus) gilvifrons* (Mulsant). A, dorsal view; B, antenna; C, abdomen; D, penis; E, lateral view of tegmen; F, ventral view of tegmen.

inal (Fig. 3C) postcoxal lines complete, reaching 1/2 length of 1<sup>st</sup> abdominal ventrite, last abdominal ventrite in male distinct and strongly emarginated in middle. Male genitalia as in Fig. 3D-F, with penis long and slender; tegminal strut 0.4 times as long as penis guide; penis guide long and slender; parameres longer than half length of penis guide, apex with short setae.

### **Distribution**

It is widely distributed in the Palearctic and Oriental regions: Afghanistan, China, India, Iran, Iraq, Lebanon, Pakistan, Saudi Arabia, Syria, Turkey, Yemen and most of Europe (Poorani 2002; Rafi et al. 2005; Kovář 2007; Ren et al. 2009; Hayat and Khan 2013; Ashfaque et al. 2015).

### **Preys**

It is recorded as a predator of various members of family Tetranychidae (Acari: Trombidiformes) (current study).

### **Host Plants**

This species has been collected from *Prunus amygdalus*, *Malus pumila*, *Prunus armeniaca* (Rosales: Rosaceae), *Hippophae rhamnoides*, *Elaeagnus angustifolia* (Rosales: Elaeagnaceae), *Juglans regia* (Fagales: Juglandaceae), *Morus alba* (Rosales: Moraceae), *Artemisia maritima* (Asterales: Asteraceae), *Cannabis sativa* (Rosales: Cannabaceae) and *Salix alba* (Malpighiales: Salicaceae) (current study).

## **Subgenus *Allostethorus* Iablokoff-Khnzorian, 1972**

*Allostethorus* Iablokoff-Khnzorian, 1972: 120. Type species: *Stethorus* (*Allostethorus*) *amurensis* Iablokoff-Khnzorian, 1972, by original designation.

### **Diagnostic characters**

Subgenus *Allostethorus* can be separated from *Stethorus* by penis (Figs. 4C, 5C) short and stout, penis guide (Figs. 4E, 5E) short and broad; tegminal strut longer than penis guide.

## ***Stethorus pauperculus* Weise, 1895**

Figure 4A–F

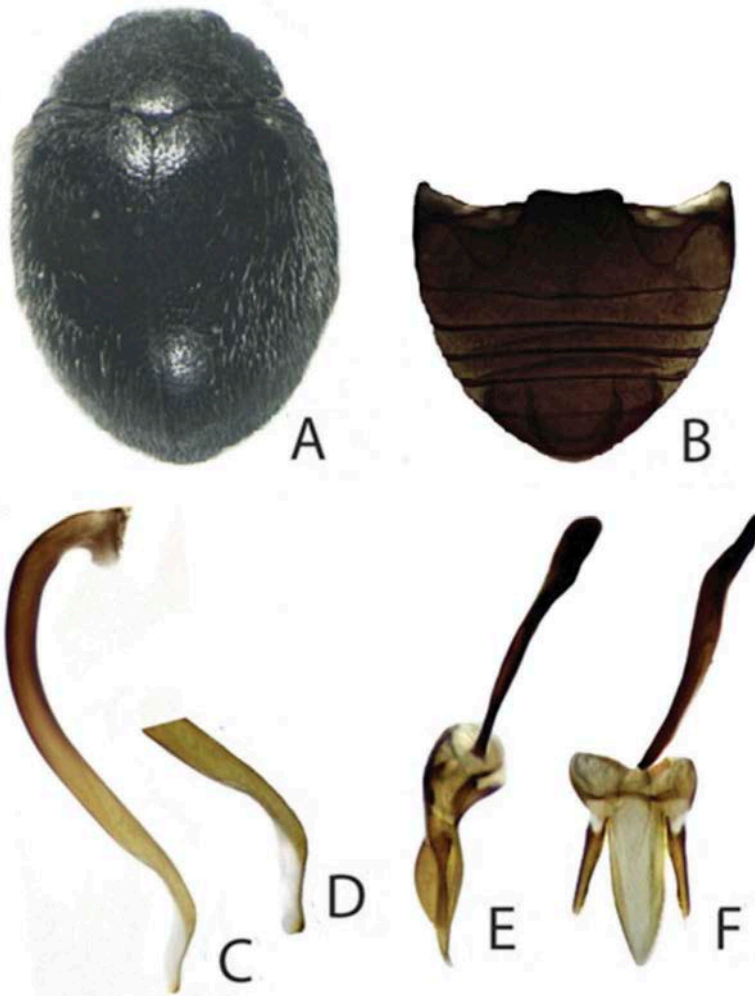
*Scymnus* (*Stethorus*) *pauperculus*: Weise, 1895: 155

*Stethorus pauperculus*: Weise, 1900: 440

*Stethorus pauperculus*: Kapur, 1948: 309

**Material examined**

**Pakistan, Gilgit-Baltistan:** Gilgit (Jutial), 2♂, 1♀, 7.vii.2015, Ghizer (Chator-Khan), 1♂, 1♀, 22.vii.2015, Singal, 1♂, 3♀, 17.ix.2016, Nagir (Juglot-Guor), 1♂, 1♀, 20.ix.2016, Z. Iqbal; **Punjab:** Chakwal (Iqbal Library), 3♂, 3♀, 17.ix.2015, 1♀, 28.x.2015, Rawalpindi (Mudhi Syeden), 1♂, 28.xi.2015, I. Bodlah, Rawalpindi (PMAR-Arid University), 1♂, 5. ix.2016, M.F Nasir; **Khyber Pakhtunkhwa:** Mansehra (Nisa Park), 2♂, 1♀, 22.x.2015, Peshawar (Garhi Ata-Muhammad), 1♂, 2♀, 31.x.2015 Z. Iqbal; **Islamabad Capital Territory:** Islamabad (Gokina Khurd), 1♂, 1♀, 9.iv.2016, Z. Iqbal.



**Figure 4A–F.** *Stethorus (Allostethorus) pauperculus* (Weise). A, dorsal view; B, abdomen; C, penis; D, penis apex; E, lateral view of tegmen; F, ventral view of tegmen.

**Description**

TL: 1.08–1.27 mm, TW: 0.84–0.91 mm, TH: 0.43–0.50 mm, HW: 0.36 mm, TL/TW: 1.29–1.40; PL/PW: 0.39–0.41; EL/EW: 1.00–1.13.

Body (Fig. 4A) small, elongate oval, dorsal and underside entirely black with white pubescence; head black, except antennae and mouth-parts yellow; abdominal postcoxal lines (Fig. 4B) complete, semi-circular, and reaching 2/3 length of abdominal ventrite 1. Male genitalia as on Fig. 4C–E, with penis short and stout, with bent apex; tegminal strut 1.2 times as long as penis guide; penis guide wide sub-triangular; parameres short, reaching 2/3 length of penis guide, apically densely setose.

**Distribution**

This species was reported from the Palearctic and Oriental region: Pakistan, China, Yemen, Saudi Arabia, Philippines, India, Malaysia and Thailand (Kapur 1948; Poorani 2002; Rafi et al. 2005; Kovář 2007; Ren et al. 2009; Hayat and Khan 2013; Ashfaque et al. 2015).

**Preys**

*S. pauperculus* is reported as preying on members of family Tetranychidae (Acari: Trombidiformes) (current study).

**Host Plants**

This species was collected from *Prunus amygdalus*, *Malus pumila*, *Ficus carica*, *Morus nigra*, *Prunus cerasus* (Rosales: Rosaceae), *Artemisia maritima* (Asterales: Asteraceae), *Dalbergia sissoo* (Fabales: Fabaceae), *Cannabis sativa* (Rosales: Cannabaceae) and *Berberis lycium* (Ranunculales: Berberidaceae) (current study).

***Stethorus gangliiformis* Li, Chen and Ren, 2013**

Figure 5A–F

**Material examined**

**Pakistan, Gilgit-Baltistan:** Gilgit (Khomer), 1♀, 1♂, 15.xi.2016, 1♂, 3.vii.2017, Z. Iqbal.

**Description**

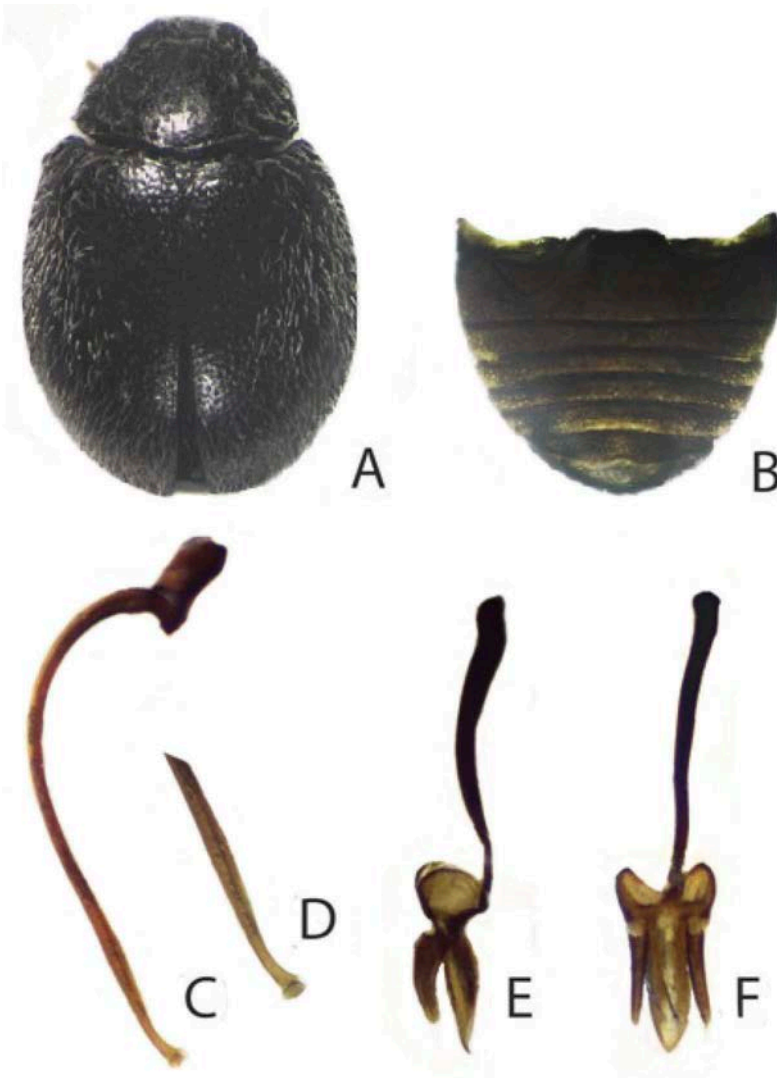
TL: 1.27–1.32 mm, TW: 0.91 mm, TH: 0.50–0.53 mm, HW: 0.36–0.40 mm, TL/TW: 1.40–1.45; PL/PW: 0.34–0.38; EL/EW: 1.11–1.13.

Body (Fig. 5A) elongate oval, moderately convex, dorsum and under surface black, covered with whitish long pubescence; head black except antennae yellow and mouth-parts reddish brown; abdominal postcoxal lines (Fig. 5B) complete, covering 2/3 length of abdominal ventrite 1.

Male genitalia as on Fig. 5C-F, with penis short and stout with apex straight, and slightly widened apically; tegminal strut 2.3 times as long as penis guide; penis guide in lateral view slightly narrowed at base, wider medially and tapered towards apex, in ventral view basal 2/3 of its length parallel, then gradually converging to apex; parameres about 3/4 of the penis guide length.

**Distribution**

This species is reported from Pakistan for the first time and collected from Gilgit. Previously recorded from China: Yunnan (Li et al., 2013).



**Figure 5A–F.** *Stethorus (Allostethorus) gangliiformis* Li, Chen & Ren. A, dorsal view; B, abdomen; C, penis; D, penis apex; E, lateral view of tegmen; F, ventral view of tegmen.

### Preys

This species is recorded as preying on the species of family Tetranychidae (Acari: Trombidiformes) (Current Study).

### Host Plants

It is collected from *Prunus cerasus* (Rosales: Rosaceae) (Current Study).

### Acknowledgments

We thank Natural Insects Museum, Islamabad (NIM) for supporting in identification of species. We would like to thank Dr Muhammad Ather Rafi for his valuable comments and correction which help us to improve this manuscript. Special thanks to Mr Michael Kerry, of Seaford, East Sussex, UK, for the proof reading and corrections for finalizing the manuscript. We are extremely grateful to three reviewers involved for providing their valuable comments and corrections.

### Disclosure statement

No potential conflict of interest was reported by the authors.

### ORCID

Zafar Iqbal  <http://orcid.org/0000-0002-3635-0016>

Imran Bodlah  <http://orcid.org/0000-0001-5977-0438>

Karol Szawaryn  <http://orcid.org/0000-0002-9329-4268>

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