

A New Species of *Subancistrocerus* de Saussure, 1855 (Hymenoptera: Vespidae, Eumeninae) from Pakistan

Muhammad QASIM^{1*}
Muhammad Ather RAFI⁴

James M. CARPENTER²
Muhammad Asghar HASSAN⁵
Muhammad HAFEEZ⁷

Muhammad Rafique KHAN³
Junaid Ali SIDDIQUI⁶

¹Department of Zoology, Kohsar University Murree, 47150, Punjab, PAKISTAN.

²Division of Invertebrate Zoology, American Museum of Natural History, Central Park West at
79th Street, New York, NY 10024, USA

³Department of Zoology, Faculty of Agriculture, University of the Poonch, Rawalakot, Azad
Jammu and Kashmir, PAKISTAN

⁴National Insect Museum, National Agricultural Research Center, Islamabad, PAKISTAN

⁵Institute of Entomology, Guizhou University; The Provincial Special Key Laboratory for
Development and Utilization of Insect Resources, Guizhou University; Guiyang, 550025 P.R.
CHINA

⁶College of Agriculture, College of Tobacco Science, Guizhou University, Guiyang, 550025
P.R. CHINA

⁷State Key Laboratory of Rice Biology, Institute of Insect Sciences, Zhejiang University,
Hangzhou, 310058, CHINA

e-mails: ^{1*}qasimagri@yahoo.com, ^{1*}mqasim@kum.edu.pk,

²carpente@amnh.org, ³mrafiquekhan58@gmail.com, ⁴a_rafiyam@yahoo.com,

⁵kakojan112@gmail.com, ⁶junaidali206@gmail.com, ⁷hafeez_203@yahoo.com

*Corresponding author

ABSTRACT

A new species, *Subancistrocerus pakistanensis* Qasim, Carpenter et Rafique sp. nov. is described and illustrated from Pakistan, based on several specimens collected in the Multan Region. Genus *Subancistrocerus* is recorded for the first time from Pakistan.

Key words: Potter wasps, new species, distribution, Punjab, Vespoidea.

INTRODUCTION

The genus *Subancistrocerus* de Saussure 1855, was described as a name for division I of the subgenus *Ancistrocerus* Wesmael of the genus *Odynerus* Latreille in de Saussure, 1852. It was declared available from the date of publication by Opinion 893 (ICZN, 1970). The type species, *Odynerus sichelii* de Saussure, 1855, was subsequently designated by Bequaert (1925). The genus is mainly distributed in the Oriental Region, which contains 25 species and two additional subspecies (Giordani Soika, 1994; Gusenleitner, 2000; Kumar, 2013; Li and Chen, 2014). Five species and one additional subspecies are recorded from Ethiopian Region (Carpenter et al, 2010) and two species from the Australian Region (Giordani Soika, 1993, 1994). In the present study this genus is recorded for the first time from Pakistan.

MATERIALS AND METHODS

Wasps were collected from different localities of the Multan region during 2014-2016 by using the aerial net. Specimens were identified to the species level using Olympus SZX7, Model SZ2-ILST stereo-microscope and photographed by using Olympus SZX7 stereomicroscope attached with a Sony CCD digital camera. After the identification, all specimens were housed at National Insect Museum (NIM), National Agriculture Research Centre, (NARC), Islamabad, Pakistan, and American Museum of Natural History (AMNH), New York, USA.

Taxonomy

***Subancistrocerus* de Saussure, 1855**

Subancistrocerus de Saussure, 1855: 206. Type species: *Odynerus sichelii* de Saussure, 1855, by subsequent designation of Bequaert, 1925: 61, confirmed by Opinion 893.

Epancistrocerus de Saussure, 1856: 352, in Errata, substitute name for *Subancistrocerus* de Saussure. Type species: *Odynerus sichelii* de Saussure, 1855, by subsequent designation of Bequaert, 1925: 61.

Diagnostic characters. This genus is similar to some species of *Pseudonortonia* Giordani Soika, with which it shares metasomal tergum 1 with two transverse carinae. However, *Subancistrocerus* differs from *Pseudonortonia* in having tergum 1 wider than long in dorsal view and both transverse carinae close to each other at the crest of the declivity (Carpenter et al., 2009).

***Subancistrocerus pakistanensis* Qasim, Carpenter et Rafique sp. nov. (Figs. 1A-E)**

Type material. Holotype: PAKISTAN: ♀; Punjab Province, Multan; 30.1974° N, 71.4743° E, Elev.: 141 m, August 04, 2015; leg. M. Qasim; deposited in NIM, NARC, Islamabad, Pakistan.

Paratypes. PAKISTAN: ♀; Same data as holotype; deposited in NIM, NARC, Islamabad, Pakistan and AMNH, New York, USA.

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Etymology. The specific name *pakistanensis* refers to the country name “Pakistan” where the type specimens were collected.

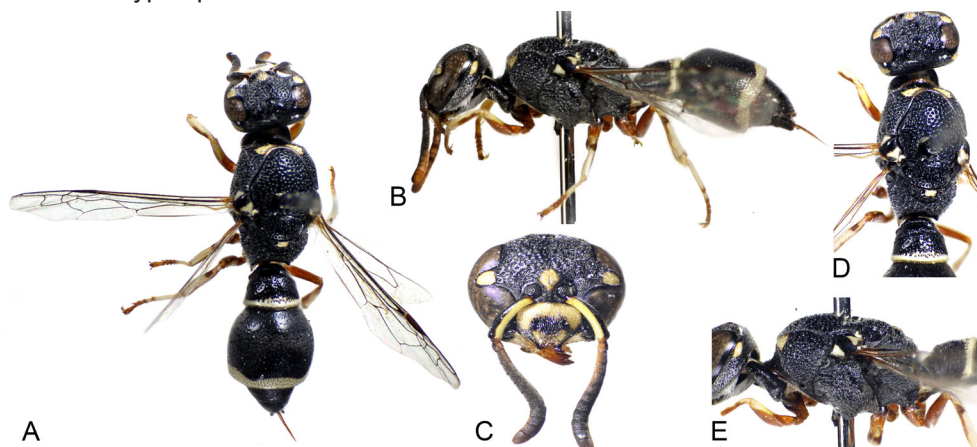


Fig. 1. A. *Subancistrocerus pakistanensis* Qasim, Carpenter et Rafique, sp. nov. Female (holotype), dorsal habitus; B. Same, lateral view; C. Head, frontal view; D. Mesosoma, dorsal view; E. Same, lateral view.

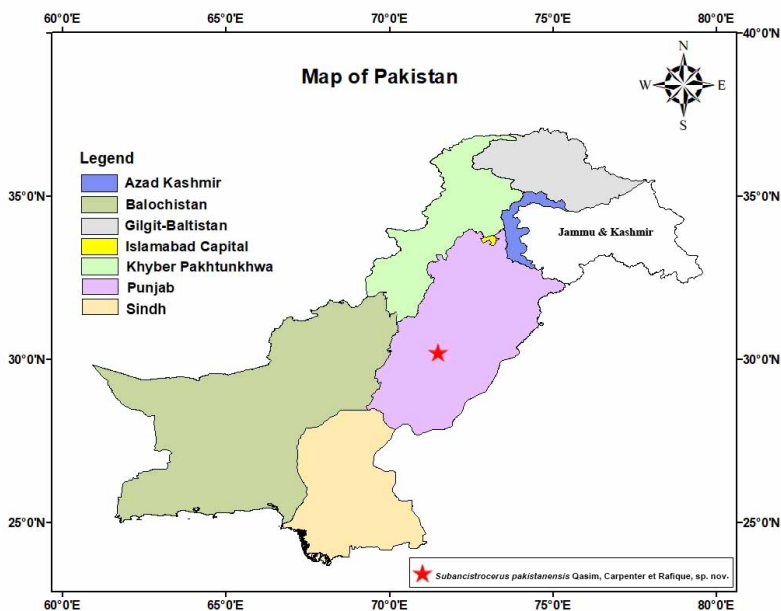


Fig. 2. Distribution map of *Subancistrocerus pakistanensis* Qasim, Carpenter et Rafique, sp. nov.

Diagnostic characters and remarks

Distinguished from other species of *Subancistrocerus* by the combination of having the first metasomal segment narrow and short and the body black with abundant whitish yellow markings. According to Giordani Soika (1994), key this species out to *S. sichelii* (de Saussure), the type of the genus, which has been recorded from India. Like that species, the pale markings are whitish yellow. But the pale markings are much less abundant in *S. sichelii* than in this species, with the tegula being entirely black in all the specimens at the American Museum of Natural History (AMNH) while the tegula is whitish except medial stripe black in this species. The first metasomal segment is differently shaped in the two species, being narrower and shorter in the *S. pakistanensis* specimens, which are also smaller in size. The shape is like that of *S. venkataramani* Kumar, but the pale markings in that species are bright yellow.

Description. *Holotype female*.

Body length approximately: head 0.53 mm, mesosoma 2.81 mm, T1+T2 3.03 mm; forewing length approximately: 5.21 mm.

Structure. Clypeus (Fig. 1C) truncate apically, sparsely punctate and depressed medially. Labrum (Fig. 1C) short. Mandible five-dentate with long distal tooth. Interantennal space with median frontal prominence (Fig. 1C). Area between eyes and antennae without macropunctures. Frons, vertex and temple with coarse punctures (Figs 1C-D). Vertex short. Cephalic foveae small and contiguous. Pronotum, scutum, scutellum, propodeum and mesopleuron densely punctate except metapleuron largely impunctate (Figs 1D-E); punctures larger and deeper than those on head; anterior face of pronotum with median foveae surrounded with smooth area; propleuron with fine, dense punctures. Tegula campanulate. Parategula from its hind margin strongly concave. Propodeum shallowly coarsely punctate, with submarginal carina projecting as long tooth (Fig. 1D). Tergum 1 (T1) with two transverse carinae (Fig. 1D). Sternum 1 (S1) strongly ridged, forming what appear to be paired central pits. S2 strongly convex, with basal groove coarsely ridged.

Color. Body black, with abundant whitish yellow markings as follows: Clypeus whitish except for transverse mesal spot black, apical margin brownish. Mandible brownish, basally white and teeth dark brown. All antennal articles black except scape whitish ventrally. White spot between antennae somewhat expended from middle. Ocular sinus with white spot. Temple with white spot. Pronotum with two triangular whitish spots. Metanotum medially with white spot. Tegula whitish except medial stripe. Parategula completely white. All femora brownish except apically white on fore and mid femur. All tibiae dorsally whitish with basal small brownish area in mid and hind tibiae and ventrally brownish. All tarsi brownish except pro and mid tarsi whitish with apically brownish spots. T1, T2 and S2 with white apical bands.

Key to species of the genus *Subancistrocerus* from the Indian subcontinent

(Modified from the key by Kumar, 2013)

1. Apical margin of metasomal T2 with reflexed and with regular series of large punctures..... *reflexus* Giordani Soika
 - Apical margin of metasomal T2 without reflexed and lack of large punctures.....2
2. Forewing hyaline with dark infuscation in the marginal cell; head, mesosoma and metasoma black with predominantly brownish yellow to yellowish brown maculations..... *camicrus* (Cameron)
 - Forewing hyaline without dark infuscation in the marginal cell; head, mesosoma and metasoma black with predominantly pale yellowish white or yellow maculations..... 3
3. Clypeus black with sometimes a curved pale yellowish white line at base and rarely two pale yellowish white spots towards apex; tegula usually black, rarely with two yellow spots at anterior and posterior apices; metanotum black without yellow mark; legs predominantly black with yellowish white maculations..... *sichelii* (de Saussure)
 - Clypeus yellow except a brownish to blackish patch medially and a brown border on apical margin; tegula medially brown to black with two yellow spots; metanotum black with a yellow mark anteromedially; legs predominantly brown with yellow maculations..... 4
4. Pale markings bright yellow; second transverse carina of T1 weakly pronounced....
*venkataramani* Kumar
 - Pale markings pale whitish; second transverse carina of T1 strongly pronounced....
*pakistanensis* Qasim, Carpenter et Rafique **sp. nov.**

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