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### NOTE

### ***XENOMERUS ORIENTALIS* WALKER (HYMENOPTERA: PLATYGASTRIDAE): A NEW DISTRIBUTION RECORD FOR INDIA**

Kalmesh Managanvi, A.K. Karnatak & M.A. Khan

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The genus *Xenomerus* was erected by Walker in 1836 with type species *Xenomerus ergenna* Walker (Rajmohana 2006). Recently, the genus was keyed by Mikó et al. (2010), Rajmohana & Narendran (2011), and Veenakumari et al. (2011). In the present study the species *Xenomerus orientalis* Mikó & Masner is reported from

Uttarakhand for the first time.

Specimens were collected during the course of the survey programme, during the month of February 2012 in and around the Pantnagar (Uttarakhand) area. Morphological terminology follows Masner (1979, 1980), Johnson & Masner (1985), and Mikó et al. (2007). Abbreviations used in text: POL: posterior ocellar line, LOL: lateral ocellar line; OOL: Ocular ocellar line; F1, F2,... F10: antennal flagellomeres 1, 2,... 10; T1, T2, ... T5: metasomal tergites 1, 2,... 5; S1, S2.....S5: metasomal sternites 1, 2.....5; SMV-Sub marginal vein; MV: Marginal vein; PMV: Post marginal vein; STV: Stigmal vein. Antenna, wings and legs were mounted in Canada balsam after overnight immersion in 10% KOH and exposure to 70%, 80%, 99% ethyl alcohol and clove oil. Photographs of wings were taken with the help of Leica Live Image Analyzer set up developed by Olympus. Scanning electron microscopy (SEM) was done on Jeol JSM6610LV/A/LA (Japan optical electrical limited) after 24nm thick palladium coating in a JFC1600 Sputter Coater (Japan optical electrical limited) at  $6 \times 10^{-2}$  mbar; and images were taken at 23–24 Pa, between 150 and 370x. All images were processed in Adobe Photoshop 7.0. The specimens studied in the present

## *Xenomerus orientalis* Walker (Hymenoptera: Platygastridae): a new distribution record for India

Kalmesh Managanvi<sup>1</sup>, A.K. Karnatak<sup>2</sup> & M.A. Khan<sup>3</sup>

<sup>1</sup> Department of Entomology, Bihar Agricultural University, Sabour Bhagalpur, Bihar 813210, India

<sup>2,3</sup> Department of Entomology, G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand 203183, India

<sup>1</sup> kalmesh.managanvi@gmail.com (corresponding author),

<sup>2</sup> k\_karnatak@yahoo.co.in, <sup>3</sup> makhan@rediffmail.com

work are retained in the Entomological Museum, G.B. Pant University of Agriculture & Technology, Pantnagar.

### *Xenomerus orientalis* Mikó & Masner (Images 1–8)

*Xenomerus orientalis* Mikó & Masner, in Mikó et al. 2010: Original description, keyed.

**Material studied:** Hym.platy. Nr. KA20, 25.ii.12, female dissected and mounted on slide. India, Uttarakhand, Patharchatta (29.028706N & 79.417444E), host not known, sweep net collection, coll. Kalmesh.

**Female:** Body length 1.15mm: black. Eyes silvery in light brown; antennae dark brown, except radicle light yellow; mandibles deep brown; mesosoma and metasoma black. Wings hyaline with veins dark brown. Coxae black, trochanter yellowish, femur brownish, last tarsomere dark brown.

Head (Image 1): Wider than long in frontal aspect, shining; transverse, frontovertex length 3.42x the total head width (54:15); ocelli arranged in acute angled triangle; POL 1.56x as long OOL; OOL: POL: LOL= 10.6: 16.7:8.6. compound eyes large and bare; antennal

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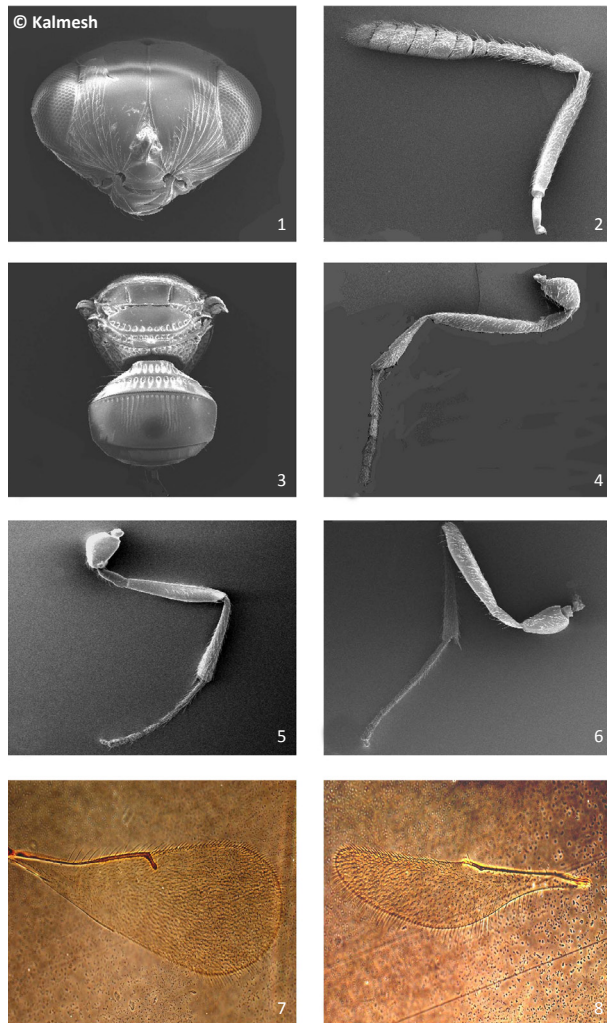
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Images 1–8. *Xenomerus orientalis* Mikó & Masner  
 1 - head in frontal aspect; 2 - antenna; 3 - body dorsal view;  
 4 - fore leg; 5 - mid leg; 6 - hind leg; 7 - fore wing; 8 - hind wing

toruli situated at level well below the lower level of eye margin; occipital carina complete; fine adjacent rugulae radiating fan like from base of mandibles and clypeus, rugulae gradually becoming faint towards upper frons and vertex; frons with well-developed central keel, reaching anterior ocellus; frons width, eye height, malar space are 34.8:21.3:17.3 respectively; mandible strong, broad, protruding outside, wide, tridentate, all teeth are equal, with small bristles on the inside.

Antennae (Image 2): 12 segmented, clava distinct and 6 segmented; antennal formula 1.1.4.6; scape 6.1x as long as wide, 3.5x as long as radicle; antennal segments in relative proportions (length: width) from scape: 30.9:5.0, 8.3:3.8, 7.3:3.8, 6.2:3.5, 3.5:3.8, 3.0:3.7, 4.0:5.5, 4.8:7.1, 5.4:7.5, 4.5:7.5, 4.9:7.2, 6.2:5.0.

Thorax (Image 3): Thorax 1.3x wider than long (51:39); skaphion absent; mesonotum with a distinct

convex bulge; posterior rim bordered by a row of adjacent small deep pits; mesonotum with matt surface; notauli distinct, parallel, incomplete in distal half; scutellum semicircular; metanotum with a small pointed teeth medially; propodeum rather simple without any carina.

Abdomen (Image 3): Abdomen circular; 1.2x longer than its greatest width (57:44); T1 and T2 have longitudinal striations not touching posterior margin; T3 distinctly longest tergite, with striations covering almost 3/4<sup>th</sup> portion sub medially.

Fore wings (Image 7): 5.1x as long as wide (13.42: 4.78); exceeding tip of metasoma in flexed position; marginal fringe short; SMV slightly longer than MV; PMV absent; proportions of (length) SMV: MV: STG; 3.28: 3.22: 0.66.

Hind wings (Image 8): 2.8x as long as wide (11.19: 2.18) with blunt apex; SMV complete, vein length less than half of the length of wing (4.69); three distinct marginal hooks present on coastal margin.

Fore Legs (Image 4): legs smooth, tibial spur long curved and bifurcated.

Mid Legs (Image 5): Tibial spur short and straight.

Hind Legs (Image 6): Tibial spur short and straight.

**Male:** Not known

The genera *Xenomerus* can be distinguished from *Trimorus* by short tridentate mandibles, scaly reticulate sculpture on the inner notauli area and circular metasoma (Rajmohana 2014). The *X. orientalis* may be distinguished from *X. paraorientalis* by the presence of well sculptured vertex and less developed hyperoccipital carina (Mikó et al. 2010), while *X. atomus* has mesoscutellum not being areolaterugose anteriorly.

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