

## Short Communication

# NEW RECORD AND REDESCRIPTION OF *ODONTOMUTILLA SPECIOSA* SMITH, 1855 (HYMENOPTERA: MUTILLIDAE) FROM THE INDIAN SUBCONTINENT

### INTRODUCTION

The genus *Odontomutilla* was described by Ashmead in 1899 based on the type species *Mutilla saussurei* Sichel et Radoszkowski. Thirty four valid species of this genus are reported from the Oriental Region of which eleven species from the Indian subcontinent (Lelej, 2005). The species *Odontomutilla speciosa* (Smith) is so far recorded from China. In this paper, we report *O. speciosa* for the first time from the Indian subcontinent based on the specimen collected from Maharashtra, India. Since the original description is not sufficient for the proper identification of the species, detailed redescription with sufficient photographs is provided here. A checklist of the species of the genus *Odontomutilla* from the Indian subcontinent is also provided.

### MATERIAL AND METHODS

All the photographs were taken by Leica Stereozoom microscope with LAS software version 3.8 (Build: 878) and the morphology was studied by Leica EZ4HD microscope. The specimen is added to the 'National Zoological Collections' of the Hymenoptera Section of the Zoological Survey of India, Kolkata (NZC).

**Abbreviations:** BMNH = Natural History Museum, London, UK; F1-F10 = Flagellomeres 1 to 10; T1-T5 = Metasomal terga 1 to 5; S1-S5 = Metasomal sterna 1 to 5.

### *Odontomutilla speciosa* (Smith, 1855) (Figs. 1-6)

1855. *Mutilla speciosa* Smith, 40. Holotype ♀, type locality: "Hong Kong" (BMNH).

2005. *Odontomutilla speciosa*; Lelej, 117.

**Redescription:** Female (Figs. 1 & 2): Length 12 mm. Head, scape, pedicel, clypeus, mandible except apex and mesosoma reddish brown; apical



1. Body profile

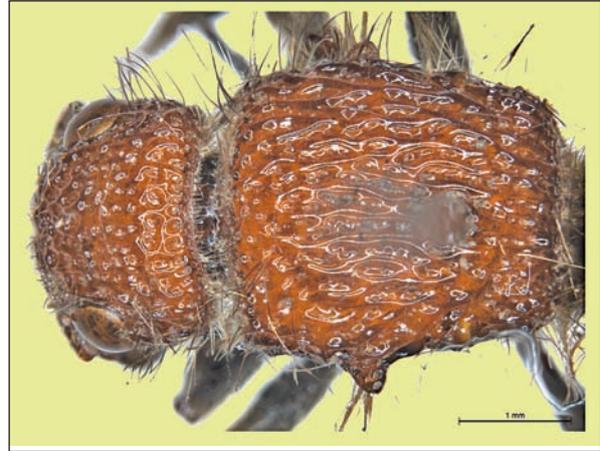
part of mandible, upper side of flagellomeres, coxae, femur and lower side of pleurae dark brown; palps pale brownish; metasoma black; head covered with erect sparse brown setae; frons, scape, pedicel, basal part of mandible with moderately dense golden setae; posterior margin of head with fringe of golden yellow setae; F1 and F2 with sparse golden setae; F3-F10 covered with golden micropubescence; dorsal side of mesosoma with erect brown setae; metapleural carina covered with tuft of erect long golden setae; propleura



2. Body dorsal view

and metapleura with less golden setae; femur with moderately dense and rest of the legs with sparse erect golden setae; tibial and tarsal spines brown; T1 above with closely packed black setae; T1 having a spot with golden hairs at the centre; T2-T6 above with sparse, erect black setae; T2 above with one middle, and two lateral ovate spots of golden pubescence placed transversely; T3 and T4 covered with interrupted broad band of golden pubescence; T5 and T6 covered with erect black setae; apical margins of S2-S5 with erect, dense golden setae; two lateral sides of apical margin of pygidium with tuft of long, brown setae.

*Head* (Figs. 3 & 4): Coarsely rugose; smaller than mesosoma; elongated, slightly convex behind compound eyes, dorsally almost flattened; posterior margin straight; postero-lateral margin of head rounded; eyes small, oval; distance between two



4. Head and mesosoma dorsal view

eyes 1.40 mm; clypeus weakly elevated basally with anterior margin slightly curved towards outside; ratio of longitudinal eye diameter to distance between eye and mandibular base 1.69; mandible stout, bidentate, narrower at apex.



5. Metasoma dorsal view



3. Head frontal view



6. Pygidium

*Mesosoma* (Fig. 4): Mesonotum distinctly broader than pronotum and propodeum; pronotum slightly wider than propodeum; dorsal surface coarsely rugose; mesopleura with strong lateral carina; metapleura smooth and shiny; propleura with micropunctures and short pubescence; scutellar scale absent; mesosoma concave dorsally; femur with small punctures; tibia with three rows of tibial spines; tarsal spines present apically.

*Metasoma* (Fig. 5): Elongate, longitudinally rugose; T1 wide, not constricted posteriorly, narrower than T2; T2 with deep antero-lateral pubescent fovea; dorsal part of T2 somewhat flat; anterior part of T3-T6 with micropunctures; S2 with distinct median carina; S2-S6 having micropunctures; pygidium with well defined lateral carina; apical 1/3 pygidial area (Fig. 6) with irregular striations and rest with small tooth-like projections.

*Measurements*: Pedicel length 0.18 mm; F1 length 0.28 mm; F2 length 0.26 mm; F3 length 0.29 mm; longitudinal eye diameter 0.91 mm; malar space 0.71 mm; mesosoma width (maximum width of mesonotum) 3.18 mm; mesosoma length 2.92 mm; T2 length 3.57 mm.

*Male*: Unknown.

*Material examined*: 1 ♀, INDIA: Maharashtra, Satara district, Khandala ( 72° 37' E 18° 75' N), 19.iv.1983, Coll. A.R. Lahiri & Party, NZC Regd. No. 15032/H3.

*Distribution*: India (New record): Maharashtra. *Elsewhere*: China: SE (Xianggang, Guangdong).

*Discussion*: The specimen which we studied differs from the original description of Smith (1855) by having: (1). Size 12 mm (4 lines [=8.8 mm] in original description); (2). Coxa and femur of legs dark brown and rest brown (Rufo-piceous in original description); (3). One golden small spot on the basal part of T1 (This spot is not mentioned in the original description).

#### **Checklist of species of the genus *Odontomutilla* Ashmead, 1899 from the Indian Subcontinent**

1. *Odontomutilla assamensis* Hammer, 1962 - India (Meghalaya).

2. *Odontomutilla aurifex* (Smith, 1879) - India (Maharashtra).
3. *Odontomutilla buddha* (Cameron, 1892) - India (Maharashtra).
4. *Odontomutilla familiaris trimaculata* Hammer, 1962 - India (Assam).
5. *Odontomutilla indiga* (Bingham, 1908) - India (Uttar Pradesh).
6. *Odontomutilla miranda* (Smith, 1855) - India (exact locality not known).
7. *Odontomutilla perelegans* (Cameron, 1897) - Sri Lanka, India (Punjab), Pakistan.
8. *Odontomutilla pulchrina* (Smith, 1855) - India (Tamil Nadu, Kerala, Karnataka).
9. *Odontomutilla sikkimensis* André, 1904 - India (Sikkim).
10. *Odontomutilla speciosa* (Smith, 1855) - India (Maharashtra - new record). *Elsewhere*: China.
11. *Odontomutilla spectra* (Bingham, 1908) - India (Uttar Pradesh).
12. *Odontomutilla trichocondyla* (André, 1894) - India (Karnataka), Sri Lanka.

#### **SUMMARY**

*Odontomutilla speciosa* (Smith, 1855) reported here for the first time from the Indian subcontinent. With this addition of one species, the genus *Odontomutilla* is now represented by twelve species from the Indian subcontinent. The species *O. speciosa* (Smith) is redescribed here and a checklist of the species of the genus *Odontomutilla* Ashmead from the Indian Subcontinent is also provided.

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