

Short Communication

VELVET ANTS (HYMENOPTERA: MUTILLIDAE) FROM CHHATTISGARH, INDIA

INTRODUCTION

Mutillidae is a cosmopolitan family of aculeate hymenoptera. They are commonly referred to as 'velvet ants' because of the appearance of the dense hair that covers their bodies. They exhibit strong sexual dimorphism. The males are winged (rarely brachypterous or apterous) and possess a normal apocritan mesosoma, while the females are entirely apterous, and most of them exhibit complete fusion of the sclerites (Brothers, 1995). Even though Mutillidae are distributed in all biogeographical regions, their greatest diversity occurs in the tropical and subtropical regions of the world. They are commonly found in desert and sandy areas.

Mutillidae currently includes 208 genera and about 4200 described species worldwide under 10 subfamilies (Lelej *et. al.*, 2007; Lelej and Brothers, 2008). From the Oriental region 637 described species in 64 genera have been reported, among which 212 species under 40 genera are reported from India so far (Lelej, 2005).

MATERIAL AND METHODS

The specimens were collected by sweeping and hand picking. After drying and pinning, studies were made using Leica EZ4HD microscope and photographs were taken by Leica Stereozoom microscope with LAS software version 3.8 (Build: 878).

The following abbreviations used in the text: BMNH = The Natural History Museum, London, U.K.; F = Flagellomere of antenna; NHMW = Naturhistorisches Museum, Zoologische Abteilung, Wien, Austria; NZC= Zoological

Survey of India, Kolkata, India; S = Sterna; T = Terga; ZMSP = Zoological Museum of the Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia.

RESULTS

Subfamily MUTILLINAE

Tribe PETERSENIDIINI

Genus *Radoszkowskitilla* Lelej, 2005

2005. *Radoszkowskitilla* Lelej: 75. Type species: *Indratilla ceylonica* Lelej, 1993, by original designation.

Diagnosis: Mesosoma broadest at pronotum; T6 with more or less developed pygidial area, at least flattened shiny area carinate laterally; mesosoma elongated; T2 more or less flattened, with lateral longitudinal carina; prementum tuberculate at apex; head with pale spot on vertex.

Distribution: India, Sri Lanka.

Species from India: *R. ceylonica* (Lelej, 1993) and *R. karnataka* Lelej, 2005.

1. *Radoszkowskitilla ceylonica* (Lelej, 1993) (Fig. 1)



Fig. 1. *Radoszkowskitilla ceylonica* (Lelej, 1993) Female 1993. *Indratilla ceylonica* Lelej, 235. ♀, type locality: Sri Lanka: Anuradhapura (ZMSP).

2005. *Radoszkowskitilla ceylonica*; Lelej, 75. Change of combination.

Material examined: INDIA: Chhattisgarh, Raipur district, Barnawapara Wildlife Sanctuary, 8.ix.2011 (1 ♀), coll. S. K. Gupta & party, NZC Regd. No. 14955/H3.

Diagnosis: Genal carina anterad with acute denticle; T2 medially with weak basal carina and extremely developed lateral longitudinal carina; S2 postero-laterally with well developed arcuate carina; T6 with pygidial area shiny, weakly sculptured in basal third, carinate laterally; vertex with silver spot, pronotum laterally, mesopleura and metapleura below with dense recumbent silvery hairs; mesosoma dorsally with sparse recumbent golden hairs. Body length 6.1 mm.

Distribution: India: Chhattisgarh (new record), Karnataka. *Elsewhere:* Sri Lanka.

Subfamily DASYLABRINAE

Genus *Dasylabris* Radoszkowski, 1885

1885. *Dasylabris* Radoszkowski: 28. Type species: *Mutilla arenaria* Fabricius, 1787.

Diagnosis: Mesosoma with convex mesopleura, mesothorax widest; F2 1.5-2.0x longer than pedicel; lateral felt line disposed on T2; metasomal segment 1 constricted posterad; frons between antennal scrobes without medial process.

Distribution: India, Sri Lanka, Russia, Afghanistan, Mongolia, Korea, China.

Species from India: *D. argentipes* (Smith, 1855), *D. climia* (Cameron, 1902), *D. kraciva* (Nurse, 1903), *D. optima* (Smith, 1855) and *D. rugosa* (Olivier, 1811).

2. *Dasylabris argentipes* (Smith, 1855) (Fig. 2)

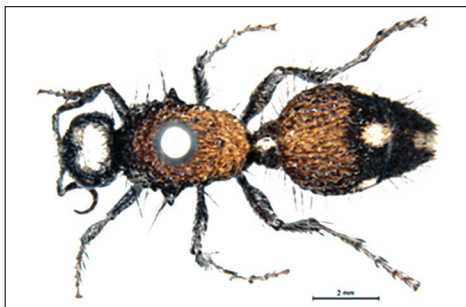


Fig. 2. *Dasylabris argentipes* (Smith, 1855) Female

1885. *Mutilla argentipes* Smith, 31. ♀, type locality: India (Syntypes in BMNH).

2005. *Dasylabris argentipes*; Lelej, 110.

Material examined: INDIA: Chhattisgarh, Khirki Beat, Guru Ghasidas National Park, 12.v.2013 (2 ♀), coll. A. Raha & party, NZC Regd. Nos. 16194/H3 & 16195/H3.

Diagnosis: Black, vertex having an ovate spot of silvery pubescence; gena clothed with silvery pubescence; mesosoma clothed with reddish yellow pubescence; sides of mesosoma armed with a stout tooth, a little before the middle; legs with silvery pubescence; T1 with a spot of silvery pubescence; basal margin of T2 with a small spot of silvery pubescence, beyond which it is clothed with reddish yellow and its apical margin clothed with black, and having three silvery-white ovate spots; T3-T5 with a median spot of the same colour. Body length 11 mm.

Distribution: India: Andhra Pradesh, Chhattisgarh (new record), Karnataka. *Elsewhere:* Sri Lanka.

Genus *Orientilla* Lelej, 1979

1979. *Orientilla* Lelej, 1066. Type species: *Orientilla vietnamica* Lelej, 1979 by original designation.

Diagnosis: Mesosoma with convex mesopleura, mesothorax widest; metasomal segment 1 petiolate; F2 1.5-2x longer than pedicel; lateral felt line disposed on S2.

Distribution: India, Sri Lanka, Myanmar, China, Vietnam, Thailand.

Species from India: *O. aureorubra* (Sichel et Radoszkowski, 1870), *O. kallata* (Nurse, 1902), *O. nobilis* (Smith, 1855) and *O. schmideggeri* Lelej, 2005.

3. *Orientilla aureorubra* (Sichel et Radoszkowski, 1870) (Fig. 3)



Fig. 3. *Orientilla aureorubra* (Sichel et Radoszkowski, 1870) Female

1870. *Mutilla aureorubra* Sichel et Radoszkowski, 304. ♀, type locality: Sri Lanka: Trincomali (Syntypes in NHMW).
2005. *Orientilla aureorubra*; Lelej, 111. Change of combination.

Material examined: INDIA: Chhattisgarh, Raipur district, Barnawapara Wildlife Sanctuary, near Forest Rest House, 07.x.2011 (1 ♀), NZC Regd. No. 16200/H3; Loid Khar Forest, 28.vii.2011 (1 ♀), NZC Regd. No. 16199/H3; Barnawapara Wildlife Sanctuary, Bar village, 7.viii.2011 (1 ♀), NZC Regd. No. 16198/H3, coll. S. K. Gupta & party.

Diagnosis: Head, mesosoma, and basal two segments of metasoma coarsely punctured, the rest of metasoma more sparsely and finely punctured; head nearly as wide as mesosoma; mesosoma elongate, rounded anteriorly, constricted posteriorly, with a pointed tubercle little before the middle on each side; first metasomal segment petiolate, swollen posteriorly. Head and mesosoma dark red; metasoma black, sparsely pubescent; antennae black; legs black, ciliated with golden yellow hairs; the 2nd and 3rd metasomal segments with transverse bands of golden pubescence. Body length 12-15 mm.

Distribution: India: Chhattisgarh (new record), Maharashtra. *Elsewhere:* Sri Lanka.

SUMMARY

The fauna of Mutillidae from Chhattisgarh is studied here for the first time, based on a small collection from the state. 3 species belonging to 2 subfamilies were found existing and it is first record of the family from Chhattisgarh.

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