

FIRST RECORD OF THE RARE ANT *PARATOPULA CEYLONICA* WHEELER (HYMENOPTERA:FORMICIDAE) FROM UTTAR PRADESH, INDIA WITH A NOTE TO THE GENUS

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ABSTRACT– The rare species *Paratopula ceylonica* Wheeler is reported with description and illustrations, from Uttar Pradesh.

Key words : Hymenoptera, Formicidae, *Paratopula ceylonica*, rare species, Uttar Pradesh.

INTRODUCTION

Paratopula Wheeler is a small genus containing only 10 species. From India so far 3 species have been reported viz. *P. andamanensis* Forel, *P. ceylonica* (Emery) and *P. intermedia* Sheela & Narendran (1998). The first species *Atopomyrmex ceylonicus* was described by Emery (1901) from Sri Lanka based on a single female. Forel (1902) described a species *Leptothorax taylori* based on worker and female from Orissa and West Bengal. Wheeler (1919) erected the genus *Paratopula* synonymising *Atopomyrmex ceylonicus* as *P. ceylonica*. In 1988 Bolton merged *L. taylori* with *P. ceylonica*. Forel (1903) described another species *P. andamanensis* based on a single male from Andaman Is. The third species from India, *P. intermedia* was reported by Sheela & Narendran (1998) based on a single worker from Kerala. While studying the Formicid fauna of Uttar Pradesh, a single worker *P. ceylonica* was collected by sweeping on bushes. Since the group is so rare and only minimum number of specimens exist in the collections all over the world, the species is reported here with detailed description, a comparison with the related species *P. intermedia* and a check list of species.

MATERIALS AND METHODS

The specimen was collected using sweep net and the study was carried out, using SZX9 WILD Stereozoom Microscope.

Abbreviations used: AL-Alitrunk Length, CI-Cephalic Index, ED- Eye Diameter, HL- Head Length, HW- Head Width, PW- Pronotal Width, TL- Total Length, W-Worker.

MCSN-Museo Civico di Storia Naturale "Giacomo Doria" Genoa, Italy.

MHN- Museum d' Histoire Naturelle, Geneva, Switzerland.

NCZI- National Zoological Collections, Zoological Survey of India, Kolkata, India.

RESULTS AND DISCUSSION

Check list of the species (based on Bolton 1988)

Species	Known castes	Distribution
<i>andamanensis</i> (Forel,1903)	male	Andaman Is.
<i>ankistra</i> (Bolton,1988)	worker, female?	Borneo
<i>catocha</i> (Bolton,1988)	worker	Sulawesi
<i>ceylonica</i> (Emery,1901)	male, female, worker	India (Orissa, Uttar Pradesh, Sri Lanka, West Bengal)
<i>demeta</i> (Bolton,1988)	worker	E. Malaysia
<i>intermedia</i> (Sheela & Narendran, 1998)	worker	India (Kerala)
<i>longispina</i> (Stitz,1938)	female	Borneo
<i>macta</i> (Smith,1857)	worker, female?	Borneo, Philippines
<i>oculata</i> (Smith,1857)	female?, male	Borneo, W. Malaysia, Singapore
<i>sumatrensis</i> (Forel,1913)	female	Sumatra

Paratopula ceylonica (Emery)

Atopomyrmex ceylonicus Emery, 1901: 114. Holotype female, SRI LANKA (MCSN).

Leptothorax taylori Forel, 1902: 228. Syntype worker and female, INDIA: Orissa (Taylor), Barrakpur (Rothney (MHN)).

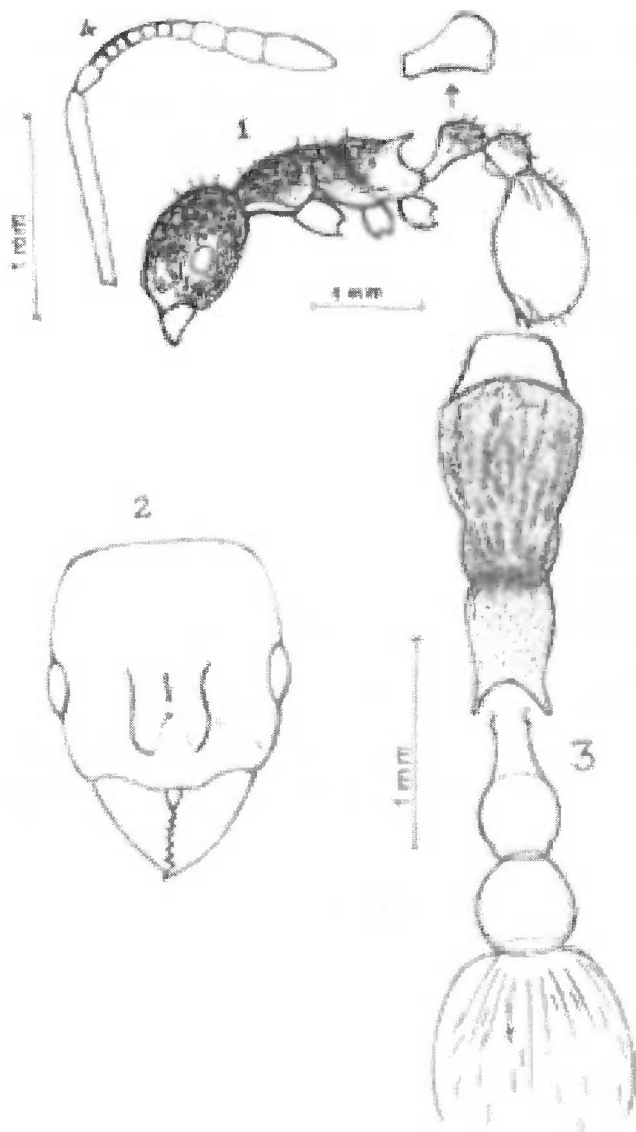


Fig. 1-2 : *Paratopula ceylonica* Emery, 1-Body profile, 2-Head front view, 3-Antenna, 4-Thorax and pedicel-dorsal view.

Paratopula ceylonica, Wheeler, 1919:144.

Worker: TL-5.3 mm, HL-1.18 mm, HW-0.98 mm, CI-83, SL-0.82 mm, SI-83, PW-0.65 mm, AL-1.66 mm, ED-0.24mm.

Colour golden yellow with scape, clypeus and legs lighter and mandibles darker but masticatory margin black; sparse, short, erect, brownish yellow hairs present on head, thorax and abdomen; mandibles, antennae, legs and gaster show a wide spread short appressed pubescence; flagellum of antennae, apex of coxae, trochanter and base of femur with a few short, decumbent setae. Head, thorax and abdomen uniformly rugose, reticulate; ground sculpture evenly punctate, conspicuous on head, thorax and petiole; mandibles, legs except coxae and gaster except base

are smooth; coxae lightly punctate and base of gaster with longitudinal striations; whole insect shining.

Head: Mandibles with three teeth at apex, of which apical one acute and 5 or 6 ill-defined teeth towards base; clypeus longitudinally striate, convex; its anterior margin medially shallowly indented; frontal carinae not well defined; eyes prominent, lateral, placed in the middle, more anterior.

Thorax: Pronotal humeri almost rounded; pronotum (excluding collar) slightly broader than long; pro-mesonotum shallowly convex; pro-mesonotal suture not distinct; meso-metanotal suture deeply impressed and base of propodeum convex and gradually sloping towards apex; spines slender, tips not sharp; slightly longer than distance between bases(6:5); metasternal process rounded.

Abdomen: Petiole node longer than its anterior peduncle; length and breadth of node subequal in dorsal view; post-petiole distinctly broader than long, 1.3x breadth of petiole; gaster broadly oval.

Material Examined : 1W. INDIA: Uttar Pradesh, Lucknow, 13-iv-2006, Sheela, S. Reg. No. 10510/H3 (NCZI).

Discussion : Main differences between *P. ceylonica* and *P. intermedia* are given below.

	<i>P. ceylonica</i>	<i>P. intermedia</i>
1.	TL- 5.3mm	TL- 6.8mm
2.	Propodeal spines 1.2x distance between its bases	Propodeal spines 1.7x distance between its bases
3.	Metasternal process rounded at apex	Metasternal processes tending to be hooked at apex.
4.	Post petiole broader than long	Post petiole longer than broad

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