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### A new genus of velvet ants from Sri Lanka

(Insecta, Hymenoptera, Mutillidae)

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*Indratilla*, gen. nov. (type species *I. gynandromorpha*, spec. nov., male) and *I. ceylonica*, spec. nov., female are described. *Indratilla* is the first genus with apterous male in the tribe Trogaspidiini. The relations of the new genus with other genera are discussed.

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During his trip in Sri Lanka in 1982 Dr. G. Medvedev, Zoological Institute, Sankt Petersburg, collected a few mutillid wasps and gave them to me for studying. I found that one male (apterous) and one female are extremly interesting and belong to new a genus of tribe Trogaspidiini.

Indratilla, gen. nov. (Figs 1-6)

Type species: Indratilla gynandromorpha, spec. nov.

#### Description

Male (apterous). Head 1.3 x wider than pronotum. Mandibles with well developed preapical tooth within, and not acute basal lobe beneath. Ocelli small, ratio POL/OOL: 0.6. Clypeus weakly modified, with weakly elevated median part and slightly emarginated anterior margin. Genae with longitudinal carina beneath, anterior margin of which with not acute denticle, ratio height of eye/height of gena (head in lateral view): 0.75. Eyes weakly sinuated within, not reniform. Occipital carina well developed. Antennal tubercles moderately large. Antennae unmodified, 12th and 13th segments dorsoventrally compressed; ratio 3rd/4th/5th segments: 24:24:23. Number of maxillary and labial palps 6 and 4.

Thorax elongated with rounded humeral angles, ratio length (from anterior pronotal margin to base of abdomen - thorax in dorsal view) / minimal width (before propodeal spiracles): 2.5. Tegulae large, not reaching the propodeal spiracles. Scuto-scutellar suture visible, posterior scutal corners produced into small teeth; metanotum well visible; mesopleurae convex. Middle and hind tibiae with a few long apical spines and middle tibiae with one additional preapical spine. Hind coxae with longitudinal carina within.

1st abdominal segment with well developed dorsal and anterior surfaces. 2nd abdominal tergite with slightly plane dorsum and with felt lines on the sides. 1st abdominal sternite with well developed carina, 2nd sternite with basally weak median, longitudinal carina. 7th tergite slightly convex. 8th sternite (hypopygium) with hemitransparent apical part, with weakly rounded posterior margin and with low lateral longitudinal carinae. Genitals with curved down parameres (gonostyles) and short, broad volsellae; penial valvae symmetrical; inferior margin of parameres with long setae, volsellae with dense setae. Argent abdominal design see fig. 1.

Female. Height of head (from anterior margin of clypeus to vertex) equal to its maximum width. Eyes slightly sinuated within, ratio height of eye/height of gena (head in lateral view): 1.14. Genae with longitudinal carina beneath its anterior margin with acute denticle. Clypeus with deeply impressed median part which bears an arcuate carina with 2 preapical and 1 basal denticles. Mandibles with weak preapical tooth within. Antennae with 10th-12th segments compressed dorsoventrally, ratio 3rd/4th/5th segments: 19:14:16. Antennal tubercles well developed. Number of maxillary and labial palps is 6 and 4.

Thorax elongated with rounded humeral angles, ratio length (from anterior pronotal margin to base of abdomen - thorax in dorsal view) / maximum width: 1.86. Scutellar scale well developed. Lateral sides of pronotum with well defined anterior part. Mesopleurae with precoxal carina. Anterior surface of fore coxae with acute tubercle, middle coxae with longitudinal carina beneath, hind coxae with longitudinal carina within. Fore tarsi with comb, middle and hind tibiae with spines outside and on apex.

1st abdominal segment short; without distinct dorsal surface, 1st sternite with triangular carina. 2nd abdominal tergite with strikingly plane dorsum, rounded by high lateral longitudinal carinae, and with weak basal median carina. 2nd sternite with well developed arcuate carinae in the posterior angles. Pygidial area on 6th tergite glabrous and impunctate, defined by lateral carinae. Light abdominal design as in fig. 2.

Remarks. I think that the female *ceylonica* belongs to *Indratilla* because the light design of head and abdomen, the form of head, and the elongated thorax are very similar with those of the male of *I. gynandromorpha*. Probably, the male of *I. gynandromorpha* and the female of *I. ceylonica* are the odd sexes of the same species.

The new genus belongs to subfamily Mutillinae of which only one genus *Gynandrotilla* Arnold, 1946, described from South Africa with an apterous male was known. If *Gynandrotilla* belongs to the tribe Smicromyrmini, *Indratilla* is more related with the tribe Trogaspidiini, especially by the light design of abdomen.

The male of *Indratilla* is easily distinguished from the male of *Gynandrotilla* by having a different light design of abdomen, by form of 1st abdominal tergite (*Gynandrotilla* has it shorter and without distinct dorsum), and by longer tegulae (*Gynandrotilla* has the tegulae scarcely extended beyond scuto-scutellar suture). In the tribe Trogaspidiini the female of *Indratilla* is closest related with the female of the african *Dolichomutilla* Ashm., but differs by having the mandibles without basal denticle beneath, by well developed scutellar scale, and by three longitudinal carinae on dorsum of 2nd abdominal tergite. The female of *Indratilla* is related to the female of *Promecilla* André by having an equally elongated thorax, but is easily distinguished by double light spots on 2nd abdominal tergite.

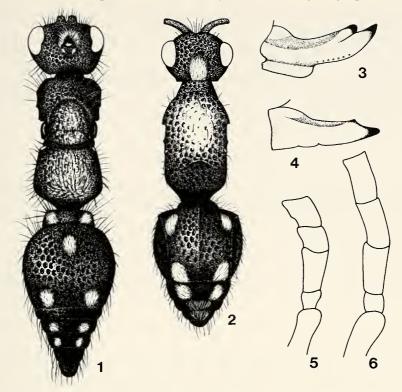
# Indratilla gynandromorpha, spec. nov. (Figs 1, 3, 6)

Types. Holotype:  $\delta$ , Sri Lanka, Wilpattu, 8 Oct. 1982, G. Medvedev leg., deposited in Zoological Institute, Sankt Petersburg.

### Description

Male (apterous). Length 8,6 mm. Head, dorsum of thorax, and 2nd abdominal tergite with large, deep, dense, sometimes confluent punctures. 2nd abdominal sternite with the same but less deep punctures, lateral sides of thorax and rest of abdominal tergites with separate, less large punctures. Tegulae glabrous, shining, with a few punctures within. 3rd-6th abdominal tergites with median, longitudinal, glabrous line, 7th tergite with median, glabrous part broadened to the apex.

Anterior ocellus surrounded by hemicircular argent spot. Genae with more or leas dense, recumbent, argent hairs. Frons and vertex with sparse, erect, black hairs. Dorsum of thorax with sparse, recumbent, golden hairs intermixed with long, erect, brown hairs. 2nd-5th abdominal tergites with sparse, recumbent, golden hairs intermixed with long, erect, black hairs. Hairs on 6th tergite recumbent, yellowish, on 7th tergite whitish. Lower part of pronotal borders, mesopleurae (except anteriorly-lower part), and metapleurae with dense, recumbent, argent hairs. Felt lines whitish. Abdominal sternites with sparse, recumbent and erect, whitish hairs which make a fringle on posterior margin of 2nd-6th sternites; 8th sternite with more dense, erect, whitish hairs.



Figs 1-6. *Indratilla*, gen. nov. 1. 3. 6. *I. gynandromorpha*, spec. nov.,  $\delta$ , holotype. 2. 4. 5. *I. ceylonica*, spec. nov.,  $\varphi$ , holotype. 3. 4. mandibles. 5. 6. 1st-5th antennal segments.

Head black; antennae brown, reddish beneath; mandibles brownish red with black apex; clypeus brownish red. Thorax black, mesonotum, scutellum, metanotum, and dorsum of propodeum ferruginous red; legs brown, middle and hind calcariae whitish, Abdomen brown with sternites, posterior margin of 2nd tergite, and 3rd-5th tergites more reddish.

Female unknown.

Material examined. Only the holotype.

Remarks. I. ceylonica may be the female of this species.

# *Indratilla ceylonica*, spec. nov. (Figs 2, 4, 5)

Types. Holotype: ♀, Sri Lanka, 9 km SW Anuradhapura, dry forest, 10. Oct. 1982, G. Medvedev leg., deposited in Zoological Institute, Sankt Petersburg.

### Description

Male unknown.

Female. Length 7,0 mm. Frons and vertex with large, deep, dense, sometimes confluent punctures; lateral parts of 2nd abdominal tergite with larger punctures; dorsum of thorax with larger, deeper confluent punctures; lateral sides of thorax glabrous with few, fine punctures; dorsal part of 2nd tergite with dense, shallow, separated punctures.

Vertex with argent spot; lateral sides of pronotum, and lower part of meso- and metapleurae with dense, recumbent, argent hairs. Frons and vertex with sparse, erect, black hairs. Dorsum of thorax with

sparse, recumbent, golden hairs intermixed with long erect black ones. 2nd abdominal tergite, except argent spots, with recumbent, black hairs intermixed with sparse, recumbent, golden and sparse, erect, brown ones; felt lines whitish. Posterior margin of 1st abdominal tergite with fringle of sparse, golden hairs. Sides of 6th tergite with erect, yellowish hairs. Legs and abdominal sternites with whitish hairs which make a fringle on posterior margin of 2nd-5th sternites.

Head black, clypeus brownish red, mandibles brownish red with black apex; antennae black, reddish beneath. Thorax brown with brownish red dorsum. Legs and abdomen from brown to black, abdominal sternites brownish red.

Material examined. Only the holotype.

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#### References

Arnold, G. 1946. New species of african Hymenoptera. No 6. - Occas. pap. Nat. Mus. Southern Rhodesia. 12: 49-97 (Mutillidae - 49-55).

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