

# A new genus and four new species of the subtribe Ateleutina from Mesoamerica (Hymenoptera: Ichneumonidae, Cryptinae)

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The ichneumonid subtribe Ateleutina is recorded from the Neotropical Region for the first time. A second genus of the subtribe, *Tamaulipeca* gen. n., is described with two new species: *T. clypeator* sp. n. (Mexico) and *T. dorsator* sp. n. (Costa Rica). In the genus *Ateleute*, new species *A. grossa* sp. n., *A. tinctoria* sp. n. (Mexico) and a new subspecies *A. carolina maculator* subsp. n. (Mexico, Costa Rica) are described.

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Of the cryptine subtribe Ateleutina, only the genus *Ateleute* was hitherto known in world fauna. This genus is widely distributed but most of its species are concentrated in Africa (Yu & Horstmann, 1997). Only one Nearctic species (Townes, 1967) was described (from South Carolina). By the courtesy of Dr. D.B. Wahl of the American Entomological Institute, Gainesville, USA (AEI), the authors examined the type of this species and much additional material of the subtribe Ateleutina. They also used material from the Entomological Museum of the Universidad Autonoma de Tamaulipas (Mus. UAT) collected mainly in Malaise traps in forests around Gomez Farias (Mexico, Tamaulipas). A new genus, four new species and one new subspecies are described from Mexico and Costa Rica. The subtribe is recorded from America south of the USA for the first time.

## Key to the genera of subtribe Ateleutina

- 1. Areolet in fore wing present (Fig. 8). Clypeus truncate apically ..... *Ateleute* Foerster
- Areolet in fore wing entirely absent (Fig. 3). Clypeus with strong median tooth at apex (Fig. 1) ..... *Tamaulipeca* gen. n.

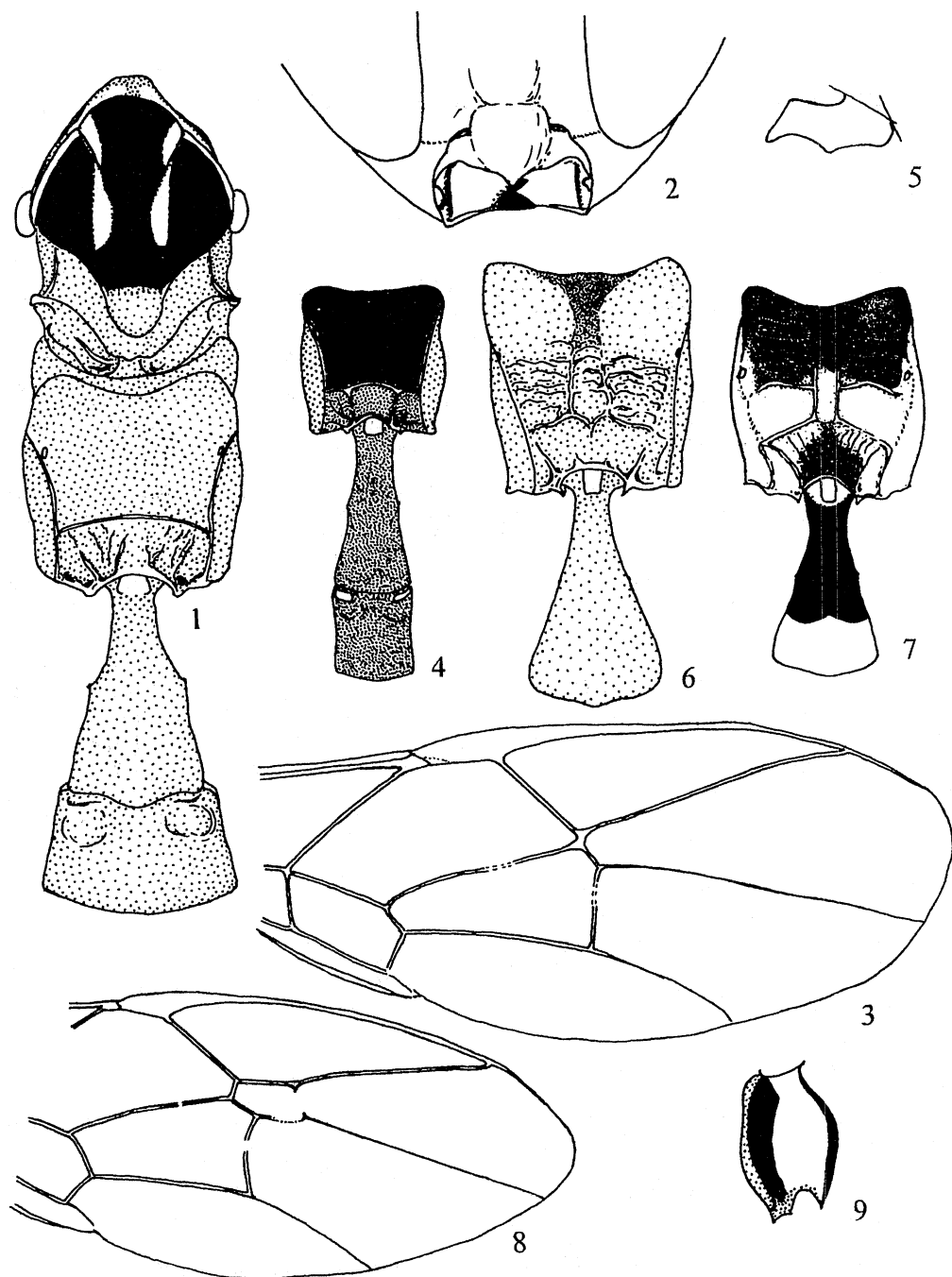
## Genus *Ateleute* Foerster

Townes, 1969: 298, 490 (fig. 257); Yu & Horstmann, 1997: 220 (catalogue of world fauna, bibl.).

More than 30 species of *Ateleute* have been described, most of them from Madagascar and Africa, but some from Europe (1 species), Japan (2) and China (1). One species is known from North America and two new species and one subspecies are described from Mexico and Costa Rica here.

## Key to the American species of *Ateleute*

- 1. Mesoscutum entirely black. Front wing about 8 mm – All metasomal tergites black with white apical band. Mesopleurum, metapleurum, propodeum, base of first tergite and legs mainly fulvous ..... 2. *A. grossa* sp. n.
- Mesoscutum black with a pair of white stripes divided by notaulices (as in Fig. 1). Front wing about 4-6 mm ..... 2
- 2. Mesopleurum, propodeum and metasoma black with white spots (Figs 7, 10). Hind coxae white dorsally, bordered by black laterally (Fig. 9), light fulvous ventrally; fore and middle coxae and propleurum white ..... 3. *A. tinctoria* sp. n.
- Mesopleurum, propodeum, metasoma and all coxae light fulvous; propleurum blackish ..... 1. *A. carolina* Townes
- a (b). Propodeum entirely fulvous. – Southeast of USA ..... 1a. *A. carolina carolina* Townes
- b (a). Propodeum fulvous with median dark brown spot at base (Fig. 6) or sometimes from base to apex. – Mexico, Costa Rica ..... 1b. *A. carolina maculator* subsp. n.



Figs 1-9. *Tamantlipeca* and *Ateleute*. 1-3, *T. clypeator*, female: 1, mesosoma and base of metasoma, dorsal view; 2, lower part of head, anterior view; 3, fore wing; 4-5, *T. dorsator*, male: 4, propodeum and base of metasoma, dorsal view; 5, paramere, lateral view; 6, *A. carolina maculata*, female, propodeum and first metasomal tergite, dorsal view; 7-9, *A. tinctoria*, female: 7, propodeum and first metasomal tergite, dorsal view; 8, fore wing; 9, hind coxa, latero-posterior view.

1. *Ateleute carolina* Townes, 1967

Townes, 1967: 181.

1a. *Ateleute carolina carolina* Townes, 1967

*Holotype* (Townes collection, AEI, examined): ♀, "Greenville, South Carolina, emerged from case of *As-tala confederata* (Psychidae), Feb. 23, 1963, Peter Hut-tenschwiler".

*Distribution*. USA: South Carolina.

1b. *Ateleute carolina maculator* Kasparyan & Hernandez, subsp. n.

(Fig. 6)

*Holotype*. ♀, Costa Rica, Guanacaste, Santa Rosa Park, 24.X.1977 (D.H. Janzen, Dry Hill), AEI.

*Paratypes*. Mexico, *Tamaulipas*, Gomez Farias: 1 ♀, Los Cedros, Trampa Amarillas, 25.II.1995 (J. Coronado, L. Hernandez), Mus. UAT; 8 ♀, same locality, Trampa Malaise, 8.V-3.VII.1999 (S. Hernandez), Mus. UAT. Costa Rica: 2 ♀, Guanacaste, 29.IX, 6.XII.1977 (D.H. Janzen, Riparian), AEI.

*Diagnosis*. The subspecies differs from *A. carolina carolina* in the characters given in the key (see also Fig. 6).

*Distribution*. Mexico (*Tamaulipas*), Costa Rica.

2. *Ateleute grossa* Kasparyan & Hernandez, sp. n.

*Holotype*. ♀, Mexico, *Tamaulipas*, Gomez Farias, Alta Cimas, Tr. Malaise (2), 3.VII-7.VIII.1999 (S. Hernandez), Mus. UAT.

*Diagnosis*. *A. grossa* differs from other species of the subtribe in the large size and from American species in the coloration: mesonotum entirely black, pleura of mesosoma and propodeum pale orange, and tergites of metasoma black with white band apically.

*Description*. Female (holotype). Front wing 8.7 mm long. Antenna with 37 flagellar segments; flagellum 1.38 times as long as front wing; its segments 1, 4, 7 and 12 (and most of following segments) about 8, 5, 2.2 and 1.1 times as long as wide, respectively. Basal flagellar segments 1 to 4 compressed, segments 5 to 9 cylindrical and segment 10 and most of following depressed (flattened ventrally and this flattened area covered with short sensory hairs); maximum width of flagellum about twice the minimum width of segment 1; flagellum setiform apically. Apical margin of clypeus abruptly truncate; clypeus about 0.8 times as long as distance between clypeal foveae. Malar space about 0.85 times as long as basal width of mandible. Occipital carina absent dorsally, joining hypostomal carina just beyond mandible. Ocellar-eye distance 1.4 times the maximum diameter of lateral ocellus; vertex

concave between lateral ocellus and eye. Face mat, with close, distinct but shallow punctures centrally and long and dense whitish hairs laterally. Frons rugose, with smooth areas above antennal sockets. Vertex smooth, with short, sparse hairs; temple distinctly concave (impressed) in upper half, with thin setiferous punctures, smooth and shining; its lower part smooth, finely granulate. Pronotum, mesopleurum (except for speculum), metapleurum and propodeum with dense whitish hairs; mesopleurum around metapleural pit and on speculum evenly granulate, rest areas with punctures or rugose punctate; metapleurum and pleural area of propodeum scabrous; rest areas of propodeum rugulose. Median longitudinal carinae of propodeum distinct to apical carina; lateral longitudinal carina present only between basal and apical transverse carinae; pleural carina present. Distal *rm* of areolet in front wing nearly absent. First tergite about twice as long as wide; its maximum width at apex about 3 times its minimum width (at base). Tergites smooth; tergites 1-4 dorsally with short, sparse hairs, tergites 5-8 rather densely pubescent. Ovipositor sheath 0.75 times as long as hind tibia.

Head black; clypeus on lower margin and mandibles dark ferruginous; palpi white. Antenna black; flagellar segments 5 to 9 entirely, apex of segment 4 and dorsum of segment 10 white; flattened ventral part of segments 10 to 25 blackish. Prothorax black; its propleurum at apical part and pronotum at anterior edge laterally pale orange. Tegulae whitish. Mesoscutum, scutellum and postscutellum entirely black. Mesopleurum, mesosternum, metapleurum and propodeum pale orange; mesopleurum with large black spot in front upper corner; propodeum with two brown spots basally (on first lateral areas). Legs uniformly fulvous with segment 5 of all tarsi brown and segments 1-4 of hind tarsus pale stramineous. Pterostigma blackish. Tergites of metasoma black with white apical band widened laterally and narrowed dorsally on tergites 4-7 and interrupted medially on tergite 8; basal half of tergite 1 orange; epipleura white; sternites white with a pair of black spots on sternites 1-5. Ovipositor sheath black.

3. *Ateleute tinctoria* Kasparyan & Hernandez, sp. n.

(Figs 7-10)

*Holotype*. ♀, Mexico, *Tamaulipas*, Gomez Farias, Los Cedros, 30.I-6.II.1999, Malaise trap 1 (S. Hernandez, C. Covarrubias), Mus. UAT.



Fig. 10. *Ateleute tinctoria*, thorax and abdomen, lateral view.

*Paratypes.* 1 ♀, same data; 1 ♀, as above, but 17-24.IV.1999 (S. Hernandez), Mus. UAT.

*Diagnosis.* *A. tinctoria* differs from the American species in the coloration (Fig. 10): pleura, propodeum and dorsum of hind coxae black with large white spots; metasoma black, banded by white, with fulvous apex.

*Description.* Female. Front wing 4.6-5.1 mm. Antenna with 30-32 flagellar segments. Flagellar segments 1, 4, 7 and 10 (and most of following segments) 6-7, 5, 2.2, 1.25 times as long as their maximum width, respectively. Basal flagellar segments 1 to 4 (5) compressed; segment 9 and following segments depressed (flattened and with sensory areas ventrally); maximum width of flagellum at middle part 1.3-1.4 times the minimum width of segments 1 and 2; flagellum setiform apically. Apical margin of clypeus weakly convex or nearly truncate; clypeus 0.8 times as long as distance between clypeal foveae. Malar space 0.7-0.8 times the basal width of mandible. Occipital carina absent dorsally, joining hypostomal carina just beyond mandible. Ocellar-eye distance 1.2 times the maximum diameter of lateral ocellus. Face mat, with conspicuous punctures and rather long and dense hairs. Frons rugose-granulate, in holotype with more or less vertical wrinkles. Vertex and temples almost

polished, with inconspicuous microsculpture; pronotal lobes (except for smooth front margin), epicnemium and area around sternaulus weakly scabrous. Mesopleurum (including speculum) finely granulate; speculum smoother. Mesopleural pit deep, situated halfway between front and hind margins of mesopleurum. Mesoscutum evenly granulate, without hairs at central part of lobes, with rugae between lateral lobes behind the middle. Scutellum with lateral carinae distinct almost to apex.

Metapleurum and propodeum laterally with dull scabrous sculpture. Propodeum rugulose; rugae tending to transverse on dorsal part of propodeum and vertical on apical area. Median longitudinal carinae more or less distinct (Fig. 7); in holotype, areola a little widened from apical to basal transverse carina. Lateral longitudinal carinae of propodeum absent except for short abscissa bordering apical area laterally; pleural carinae present. First tergite 1.75 times as long as wide; its maximum width at apex about 3 times the minimum width at base (Fig. 7). Tergites smooth, finely granulate; tergite 1 almost polished. Tergites 1-3 with a few scattered hairs; tergites 4-8 rather densely pubescent. Ovipositor sheath transversely truncate at apex, half as long as hind tibia (Fig. 10).

Head black; clypeus, mandibles except for reddish-brown teeth, and palpi white. Antennae black with flagellar segments 5-9 white. Thorax and abdomen black with white pattern as in Fig. 10. Mesoscutum coloured more or less as in *Tamaulipeca clypeator* (Fig. 1), but scutellum black laterally; metanotum almost entirely black, except for small white spot at apex of postscutellum. Propodeum white with first lateral areas and basal area black and with large black spot on apical area (Figs 7, 10). Legs red; fore and middle coxae white; hind coxae dor-

sally white bordered by black. Tergites 1-4 of metasoma black basally and white apically (Figs 7, 10); segments 5 and 6 each with very narrow, transverse, dorsobasal, black stripe; white dorsally and pale fulvous laterally; segments 7 and 8 almost completely light fulvous with narrow dorsoapical white band at tergite 7. Ovipositor sheath fulvous in basal half and blackish in apical half. Pterostigma light brownish, weakly darkened subbasally and before base of radial vein.

### Genus *Tamaulipeca* Kasparyan, gen. n.

*Type species: Tamaulipeca clypeator* Kasparyan & Hernandez, sp. n.

*Description.* Front wing about 2.2-5 mm long. Clypeus on lower margin projecting downwards as a median tooth (Fig. 2), not truncate. Lower mandibular tooth longer than upper tooth. Base of mandible weakly swollen, with deep, narrow basal groove. Temples strongly convergent backward, short, weakly convex. Occipital carina joining hypostomal carina near base of mandible. Upper margin of pronotum not swollen. Epomia absent. Notauli deep and long. Sternauli usually traceable to middle coxa but weak in middle part. Prepectal carina absent below sternaulus, its lateral abscissa (epicnemial) distinct and finishing before front edge of mesopleurum about on level of upper 0.6 of hind margin of pronotum. Mesopleural pit lying about halfway between front and hind edge of mesopleurum. Postpectal carina complete. Propodeum long; its spiracles round, almost touching pleural carina. Basal transverse carina of propodeum, median and lateral longitudinal carinae before apical transverse carina absent; apical transverse carina complete, without crests or apophyses. Outer lateral surface of hind coxa shallowly concave in middle third. Areolet entirely absent; *RS* and *M* outward of *rm* strongly divergent; *rm* very short, as long as wide (Fig. 3). Nervellus intercepted at lower 0.33. Distal part of anal vein beyond *cu-a* distinct. First tergite smooth, stout, evenly enlarged from base to apex (Fig. 1); its spiracles about at its basal 0.45; apex of sternite about at basal 0.3 of first segment. Median dorsal carinae and basal pit of first tergite absent; dorsolateral carinae present before spiracles but very weak. Ovipositor sheath sharply truncate apically, 0.53 times as long as hind tibia.

*Discussion.* The new genus differs from *Ateleute* in the clypeus unusually strongly projecting downward and pointed at apex (apex of clypeus truncate in *Ateleute*). Another impor-

tant apomorphy of the new genus is the lack of areolet in the front wing. Among about 30 species of *Ateleute* (including undescribed species) in AEI collection, the areolet is absent only in males of *A. minusculae* Uchida (but present in females); however, this Japanese species differs from other species of *Ateleute* in the habitus, colour and some other respects and maybe should be placed in a separate subgenus.

The new genus includes two species described below: *T. clypeator* Kasp. & Hern., sp. n. (Mexico, Tamaulipas) and *T. dorsator* Kasp., sp. n. (Costa Rica, Guanacaste).

### Key to the species of *Tamaulipeca*

1. Head with face and orbits mostly whitish yellow. Mesonotum black with a pair of wide anterolateral white spots and two central white stripes (Fig. 2). Scutellum, pleura, propodeum and metasoma light fulvous ..... 1. *T. clypeator* sp. n.
- Head completely and mesosoma dorsally black. Tergites of metasoma dark reddish brown. .... 2. *T. dorsator* sp. n.

### 1. *Tamaulipeca clypeator* Kasparyan & Hernandez, sp. n. (Figs 1-3)

*Holotype.* ♀, Mexico, Tamaulipas, Gomez Farias, Los Cedros, tr. Malaise, selva baja, 28.XI-10.XII.1998 (S. Hernandez A., C. Covarrubias), Mus. UAT.

*Description.* Female (holotype). Front wing 4.9 mm long. Antenna with 27 flagellar segments; 1st-5th flagellar segments thin and long; flagellum from apical part of 5th segment widened; terminal segments (last 3 segments) tapered to apex. Flagellar segments 1, 4, 7 and 10 respectively 9, 6.5, 2 and 1.25 times as long as wide; 10th segment 2.2 times as wide as minimum width of segments 1 and 2. Areas with trichoid sensillae present on 10th and following flagellar segments. Clypeus 1.1 times as high as distance between clypeal foveae. Malar space 0.6 times the basal width of mandible. Occipital carina absent dorsally, ending at level of upper 0.6 of eye laterally. Distance between lateral ocellus and eye 0.8 times the greatest diameter of lateral ocellus. Face and clypeus mat, with short and rather dense hairs; frons shining, very finely granulate, sparsely pubescent; vertex and temples almost polished. Pronotum and mesothorax more or less evenly and finely granulate; speculum very small, polished; mesoscutum smooth, almost polished at lateral lobes, with a few hairs at frontal slope of central lobe, laterally and along notauli. Scutellum with short lateral carina at its basal

0.1. Metapleurum and propodeum mat, with dull fine microsculpture and before apical transverse carina of propodeum with thin transverse striation. Propodeum with complete, weakly and evenly arched apical transverse and with thin pleural carina. Hind coxae dull, finely granulate. Maximum width of first tergite about 3.3 times its minimum width and 0.6 times its length. Tergites smooth, polished, but with discernible fine microsculpture. First and second tergites almost hairless, with very sparse short hairs; remaining tergites with denser pubescence and tergites 6 to 8 with longer hairs. Ovipositor sheath about 0.55 times as long as hind tibia. Wing venation as in Fig. 3. Nervellus broken on lower 0.33; anal vein distinct outward of nervellus.

Fulvous. Scapus and pedicellum whitish below, brownish above; flagellum black, its first segment reddish brown below; apical half of segment 7 and segments 8-13 white. Head dirty white; frons with black median longitudinal stripe, which is expanded beyond ocellar area to occiput and to hind margin of compound eye. Temples in hind half brownish, this coloration expanded to eye at upper and lower 0.25 of temple, thus hind orbits only in median half white. Pronotum on front margin widely white, except for narrow collar and median dorsal area. Mesoscutum black with white anterolateral margins and with two wide laterodorsal white stripes (Fig. 1). Subtegular ridge with white spot extending above the ridge. Hind tibiae brownish red. All tarsi with last segment brown; segments 1-4 of hind tarsi white with fulvous at apical 0.1 of each segment and pale fulvous at basal 0.2 of first segment. Tergites 1-6 fulvous; tergites 7 and 8 yellowish. Ovipositor sheath and pterostigma black.

Male unknown.

## 2. *Tamaulipeca dorsator* Kasparyan, sp. n. (Figs 4-5)

*Holotype*. ♂, Costa Rica, Guanacaste, S. Rosa Park, 16.X.1977 (D.H. Janzen, Dry Hill), AEI.

*Paratypes*. 7 ♂, same locality, 3.VIII-17.XI.1977 (D.H. Janzen, Dry Hill, Riparian), AEI.

*Diagnosis*. This species (male) differs from *T. clypeator* (female) in the head, thorax dorsally, and abdomen entirely brownish black, antenna without white ring, and smaller size; hind tibiae with rather dense, strong, dark setae.

*Description*. Male. Front wing 2.2-3.3 mm long. Antenna with 21-25 flagellar segments.

First and second flagellar segments about 7 times as long as wide; segments 7, 9, 11 (and most of remaining) 5, 4, 3 (2.5) times as long as wide, respectively. Flagellum filiform, but strongly tapered apically (setiform at apex); flagellar segments, except for segment 1, with distinct rhinariae, but tyloids absent (or indistinct). Clypeus 1.25 times as long as distance between clypeal foveae. Malar space 0.4 times the basal width of mandible. Occipital carina widely absent dorsally. Distance between lateral ocellus and eye 0.8 times the greatest diameter of lateral ocellus. Face and clypeus mat, with rather long hairs; frons smooth, finely granulate, with short, sparse hairs; vertex and temples polished, sparsely hirsute. Pronotum and mesothorax more or less evenly and finely granulate. Scutellum with short lateral carina at its basal 0.3 (in holotype). Metapleurum and hind coxa mat, with dull, fine microsculpture. Propodeum before apical transverse carina with granulate sculpture forming very thin, close striation; apical transverse carina and pleural carinae complete; apical area of propodeum with short abscissa of lateral carina (Fig. 4); dorsal surface of propodeum medially (in holotype) with shallow longitudinal groove. Hind tibia (mostly dorsally) and hind basitarsus (mostly ventrally) covered with rather dense, strong, suberect dark setae. Fore wing venation as in *T. clypeator* (Fig. 3), but nervellus a little distad of basal vein. First tergite 2.1 times as long as its greatest width (Fig. 4); dorsal and dorsolateral carinae lacking. First and second tergites smooth, but with discernible fine microsculpture, almost hairless; remaining tergites with conspicuous and longer hairs, rather sparse only at tergite 3. Male clasper as in Fig. 5.

Brownish black. Scapus and pedicellum fulvous ventrally; first flagellar segment brownish ventrally. Mandible yellow, except for ferrugineous lower margin and teeth. Clypeus at apical edge and cheeks just behind mandible light fulvous; maxillary palpus white; labial palpus light fulvous. Propleurum brownish in front 0.6 and light fulvous in hind 0.4. Pronotum whitish fulvous laterally on front margin. Mesopleurum fulvous except for anterior and upper margin; mesosternum and subtegular ridge light fulvous. Metapleurum, hind coxae and hind femora fulvous. Fore and middle legs and hind trochanters I light fulvous; hind trochanters II slightly darkened; hind tibiae and tarsi reddish brown. Sternites of metasoma light brown.

Female unknown.

## References

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