THREE NEW SPECIES OF *MACRATRIA* NEWMAN, 1838 (COLEOPTERA: ANTHICIDAE) FROM ECUADOR AND PERU

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Abstract

Macratria carbo sp. nov., *M. pulmonaria* sp. nov. (both - eastern Andes, Ecuador) and *M. tambopata* sp. nov. (south Amazonian lowlands, Peru), are described and illustrated based on material from the Natural History Museum, London.

Keywords: Taxonomy, Macratriinae, Ecuadorian Andes, Amazon.

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INTRODUCTION

Macratria Newman, 1838 (Macratriini LeConte, 1862) is a highly speciose cosmopolitan group of ant-like flower beetles of the subfamily Macratriinae LeConte, 1862. Macratria is generally tropical and subtropical in the distribution and is also known from Eocene amber deposits (Chandler 2002; Telnov 2011, 2012; Telnov & Bukejs 2019). South American Macratria did not attract the attention of taxonomists for more than 80 years until Telnov (2023) presented descriptions and new faunistic data of six Southern and Central American species. Currently, 43 Macratria species are known from the Americas not counting the three described herein, of which four are limited to the United States, two are endemic to the West Indies, and the remaining 37 species occur in Central and South America (Telnov 2023). The present paper is focused on the descriptions of three new species of *Macratria* from the Ecuadorian Andes and the Peruvian Amazon based on material from the Natural History Museum in London, United Kingdom: *Macratria carbo* sp. nov., *M. pulmonaria* sp. nov., and *M. tambopata* sp. nov. Considering a high number of undescribed species that have accumulated in various museums, especially in the Americas (D.S. Chandler pers. comm. iv.2012), providing a checklist of and a key to American *Macratria* appears premature.

MATERIAL AND METHODS

Paired morphological structures are generally treated as singular in text. For morphological studies, a Leica S6D binocular stereomicroscope (Leica Microsystems, Wetzlar, Germany) was used. Habitus images were produced with a Canon 5D SLR camera (Canon Co., Tokyo, Japan) and a Laowa 25 mm macro lens (Anhui Changing Optics Technology Co., Hefei, China). Genitalia were relaxed in KOH solution, mounted on microscope slides and fixed in dimethyl hydantoin formaldehyde (DMHF), studied and imaged using an AmScope BH 200 light microscope (AmScope Co., Los Angeles, U.S.A.) with an attached external Sony DSC-WX100 (Sony Co., Tokyo, Japan) digital camera for imaging. After the study, terminalia and genitalia were mounted on a card near the corresponding specimen and fixed in DMHF. Helicon Focus 7 software (Helicon Soft, Kharkiv, Ukraine) was used for image stacking. Further image manipulations were done using GNU Image Manipulation Program (GIMP). Label text is reproduced verbatim. All type specimens of new species are provided with a black framed label on red paper with "HOLOTYPUS" or "PARATYPUS", respectively. Labels, if more than one on the same specimen, are separated by a double slash. Author's comments are placed in square

Acronym of a material repository:

BMNH – Natural History Museum (formerly British Museum, Natural History), London, United Kingdom.

RESULTS

brackets.

New descriptions

Macratria carbo sp. nov. (Figs 1–3) urn:lsid:zoobank. org:act:462AADE5-C4F3-4FEA-A361-CF60FD9A1938 **Type material designated.** Holotype ♂, BMNH: ECUADOR Napo prov. Las Palmas env. ca 6 km N of Cosanga 2.xii.2009 0°33'44"S, 77°52'33", 2020m beating of vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]. The antennomeres 9–11 of the left antenna missing.

Paratypes 9 specimens. 2 unsexed specimens BMNH: same labels as holotype; 19 BMNH: ECUADOR Napo prov. Cosanga env. 22.xi.2009 Yanayacu Station 0°35'S, 77°53'W, 2100 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 1♀ BMNH: ECUADOR Napo prov. Cosanga env. 24.xi.2009 Yanayacu-Stream Trail 0°35'S, 77°53'W, 2100 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 1 unsexed specimen & 1♀ BMNH: ECUADOR Napo prov. Cosanga env. 25.xi.2009 Cosanga-Yanayacu Rd. montane forest 2000 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 3∂, BMNH: ECUADOR Napo prov. Cosanga env. 2.xii.2009 Cosanga-Yanayacu Rd. montane forest 2000 m beating of vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed].

Derivatio nominis. From Latin 'carbo' (carbon, charcoal) to point out the entirely black body of the species. Noun in apposition.

Measurements, holotype male, total body length 4.4 mm; head length 0.8 mm, head width across compound eyes 0.7 mm, pronotal length 1.1 mm, maximum pronotal width 0.8 mm, elytral length 2.8 mm, combined maximum elytral width 1.1 mm. Male paratypes 4.6–4.8 mm, female paratypes 5.4–6 mm long.

Description. Holotype male (Figs 1A–B, 2). Dorsum and venter uniformly black, mouthparts partially brown, tarsi brown, two terminal tarsomeres yellowish. Head slightly glossy dorsally and ventrally, elliptical, subtruncate at insertion of antenna. Frons moderately wide, about $0.6 \times$ as wide as dorsal eye length. Compound eye large, strongly protruding from lateral outline of head, occupying nearly whole lateral side of head posterior to antennal insertion, nearly 3.7× as long as short, constricted tempus. Interfacetal setae long, dense. Head base wide, subtruncate, medially broadly notched. Frontoclypeal suture or impression lacking. Head dorsal punctures circular to elliptical, dense, deep, much larger on frons and occiput compared to anterior part of head. Intervening spaces smooth, generally narrower than to twice as wide (on vertex) as punctures. Head dorsal setae whitish to slightly yellowish, subdecumbent, sparse, not concealing dorsal surface of head. Tactile setae sparse, erect, moderately long. Antenna moderately long, distinctly widened in distal half, not or hardly exceeds beyond base of pronotum when directed posteriorly. Basal antennomere slightly elongate, about $1.6-1.7 \times$ as long as antennomere two. Antennomere three about $1.4 \times$ as long as antennomere two, about same length as antennomere four. Antennomeres 3-6 elongate, 7-11 widened and flattened. Penultimate antennomere distinctly longer than wide. Terminal antennomere elongate fusiform, about 1.6-1.7× as long as penultimate antennomere, shorter than combined length of antennomeres 9-10. Terminal maxillary palpomere shortly cultriform. Pronotum slightly glossy dorsally, not quite flattened in dorsal aspect, elongate elliptical, slightly wider than head across compound eyes. Anterior margin truncate medially. Lateral margins rounded laterally and on anterolateral angles, slightly constricted in posterior two thirds. Dorsal pronotal punctures larger than those on head, deep, circular to slightly elliptical. Intervening spaces smooth, narrower than to (rarely) as wide as punctures. Pronotal dorsal setation brownish yellowish, rather long and dense, not fully appressed, not concealing dorsal sculpture of pronotum. Basal fovea of pronotum wide, without dense setae. Tactile setae sparse, erect to suberect, much longer than ordinary setae. Scutellar shield small, broadly emarginate at posterior margin, punctate, subopaque. Elytron elongate, moderately glossy, slightly constricted posteriorly. Humerus broadly rounded. Postbasal transverse impression not indicated. Punctures on each elytron confused (no striae present), denser and deeper on anterior, sparser and smaller on posterior portion. Intervening spaces smooth to rugose (near elytral base). Elytral setation brownish yellowish, suberect, long and dense, directed posteriorly, not concealing dorsal sculpture of elytron. Tactile setae sparse, erect, longer than ordinary setae. Lateral humeral stria not shifted dorsad, not visible in dorsal view. Sutural stria complete, moderately broad. Metathoracic wing fully developed. Legs long and stout. Femur clavate. Tibia distinctly widened distally, densely setose, metathoracic tibia slightly arched at outer margin. Tibial terminal spurs paired, margins serrate. Basal prothoracic tarsomere strongly widened. Basal metathoracic tarsomere about 1.5× as long as combined length of remaining metathoracic tarsomeres. Pretarsal claws not dentate. Male tergite VII broadly rounded at posterior margin (Fig. 2A). Male sternite VII rather broad, rounded medially at posterior margin (Fig. 2B). Male tergite VIII deeply medially emarginate, lateral lobes large, broadly rounded (Fig. 2C), sternite VIII apically deeply emarginate, sternite IX Y-shaped (Fig. 2C). Aedeagus (Fig. 2D-F) rather slender, tegmen apex acute and strongly hook-like, curved in lateral aspect (Fig. 2E-F). Paramere apically narrowed, rounded (Fig. 2D). Sexual dimorphism. Female (Figs 1C–D, 3) generally larger and stouter, frons about 0.7- $0.8 \times$ as wide as dorsal eye length, antennomeres 5-6 less slender than those in male, terminal antennomere $1.6-1.7 \times$ as long as penultimate antennomere, basal prothoracic tarsomere comparatively shorter than that of male. Female tergite VII subtruncate (Fig. 3A), sternite VII broadly rounded (Fig. 3B) at posterior margin. Female tergite VIII and sternite VIII and IX as in fig. 3C.

Differential diagnosis. *Macratria carbo* sp. nov. is externally similar to black-coloured South and Central American congeners but is specifically different in the widened terminal antennomeres, the black femora and tibiae, the shape of the pronotum which is widened in anterior portion, and the shape of the male terminalia and genitalia. *Macratria parallela* Champion, 1890 (Panama) possess similar dorsal colouration but is different in the stronger elongated terminal antennomere, the rounded head base, the obliquely laterally directed, appressed elytral setae and the shape of the male genitalia. The entirely black *Macratria scabrida* Champion, 1916 (Brazil) has a stronger and more widely impressed head base, a more densely punctured dorsal forebody, obliquely laterally directed and appressed elytral setae, and the shape of the male genitalia, specifically the hook-like tegmen apex, is different.

Ecology. Collected from vegetation in mid-montane rainforests at 2000–2100 m a.s.l. **Distribution.** Ecuador: Napo Province, eastern slopes of the Andes.



Figure 1. *Macratria carbo* sp. nov., dorsal view. A – Paratype 3; B – ditto, forebody; C – Paratype 2; D – ditto, forebody [not to scale]. Images courtesy D. Telnov.



Figure 2. Macratria carbo sp. nov., paratype ♂, terminalia and genitalia. A – Tergite VII, dorsal view; B – Sternite VII, ventral view; C – Tergite VIII and sternites VIII and IX; D – Aedeagus; E – ditto, lateral view; F – ditto, apicale, magnified [not to scale]. Images courtesy D. Telnov.



Figure 3. *Macratria carbo* sp. nov., paratype ♀, terminalia. A – Tergite VII, dorsal view; B – Sternite VII, ventral view; C – Tergite VIII and sternites VIII and IX [not to scale]. Images courtesy D. Telnov.

Macratria pulmonaria **sp. nov.** (Figs 4–6) urn:lsid:zoobank.org:act:3787329E-8D82-4254-B971-AFA29F2080E9

Type material designated. Holotype ∂, BMNH: ECUADOR Napo prov. Cosanga env. 2.xii.2009 Cosanga-Yanayacu Rd. montane forest 2000 m beating of vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]. Paratypes 9 specimens. 3 BMNH: same labels as holotype; 1♀ BMNH: ECUADOR Napo prov. Cosanga env. 22.xi.2009 Yanayacu Station 0°35'S, 77°53'W, 2100 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 1♂ BMNH: ECUADOR Napo prov. Cosanga env. 24.xi.2009 Yanayacu-Stream Trail 0°35'S, 77°53'W, 2100 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 2♀ BMNH: ECUADOR Napo prov. Cosanga env. 25.xi.2009 Cosanga-Yanayacu Rd. montane forest 2000 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 1 PBMNH: ECUADOR Napo prov. Las Palmas env. ca 6 km N of Cosanga 2.xii.2009 0°33'44"S, 77°52'33", 2020m beating of vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed]; 1 BMNH: ECUADOR Napo prov. Cosanga env. 15.xii.2009 Yanayacu-Macucaloma Tr. 0°35'S, 77°53'W, 2100 m beating of forest vegetation L. SEKERKA & K. ŠTAYEROVÁ lgt. [printed, label green] // BMNH{E} 2009-56 L. Sekerka [printed].

Derivatio nominis. From Latin 'pulmonarius' (lung-like, related to lungs) referring to the presence of the human lung-like structures in the male aedeagus of this species. Feminine.

Measurements, holotype male, total body length 5 mm; head length 0.8 mm, head width across compound eyes 0.8 mm, pronotal length 1.1 mm, maximum pronotal width 0.8 mm, elytral length 3.1 mm, combined maximum elytral width 1.2 mm. Male paratypes 4.8–4.9 mm, female paratypes 4.9–5 mm long.

Description. Holotype male (Figs 4A-B, 5). Head dorsally dark brown to black-brown, pronotum and basal portions of elytra blackbrown, rest of elytra brown. Mouthparts and antennomeres 1-2 yellow, 3-4 yellowish brown, remaining antennomeres brown. Legs yellow, metatibia and base of mesotibia brown. Head nearly triangular, slightly glossy dorsally and ventrally. Frons narrow, about 0.6× as wide as dorsal eye length. Compound eye large, strongly protruding from lateral outline of head, occupying nearly whole lateral side of head posterior to antennal insertion, over 3× as long as short, subparallel tempus. Interfacetal setae moderately long, dense. Head base wide, truncate, not notched. Frontoclypeal suture or impression lacking. Head with dorsal punctures circular, dense, moderately deep, larger on frons and occiput compared to anterior part of head. Intervening spaces smooth, generally narrower than to twice as wide as punctures. Head dorsal setae yellowish, subdecumbent, dense, not fully concealing dorsal surface of head. Tactile setae sparse, erect, long. Antenna moderately long, filiform, slightly widened in distal half, barely exceeds beyond base of pronotum when directed posteriorly. Basal antennomere slightly elongate, about $1.5-1.6 \times$ as long as antennomere two. Antennomere three about $1.4 \times$ as long as antennomere two, nearly same length as antennomere four. Antennomeres 3-8 elongate, 9-11 thickened. Penultimate antennomere distinctly longer than wide. Terminal antennomere elongate, apically angulate, about 1.6× as long as penultimate antennomere, shorter than combined length of antennomeres 9-10. Terminal maxillary palpomere cultriform. Pronotum slightly glossy dorsally, flattened in dorsal aspect, shortly elliptical, as wide as head across compound eyes. Anterior margin truncate medially. Lateral margins rounded laterally and on anterolateral angles, slightly constricted

in posterior two thirds. Dorsal pronotal punctures larger than those on head, deep, circular to slightly elliptical. Intervening spaces smooth, narrower than punctures. Pronotal dorsal setation brownish yellowish, rather long and dense, not fully appressed, not fully concealing dorsal sculpture of pronotum. Basal fovea of pronotum wide, without dense setae. Tactile setae sparse, erect to suberect, much longer than setae. Scutellar shield small, trapezoidal, truncate at posterior margin, punctate, subopaque. Elytron elongate, moderately glossy, slightly constricted posteriorly. Humerus broadly rounded. Postbasal transverse impression not indicated. Punctures on each elytron confused (no striae present), denser and deeper on anterior, sparser and smaller on posterior portion. Intervening spaces smooth to rugose (near elytral base). Elytral setation brownish golden, suberect, long and dense, directed posteriorly, not concealing dorsal sculpture of elytron. Tactile setae sparse, erect, longer than ordinary setae. Lateral humeral stria not shifted dorsad, not visible in dorsal view. Sutural stria complete, moderately broad. Metathoracic wing fully developed. Legs long and stout. Femur clavate. Tibia distinctly widened distally, densely setose, metathoracic tibiae slightly arched at outer margin. Tibial terminal spurs paired, margins serrate. Basal prothoracic tarsomere strongly widened. Basal metathoracic tarsomere about $1.7 \times$ as long as combined length of remaining metathoracic tarsomeres. Pretarsal claws not dentate. Male tergite VII notched medially at posterior margin (Fig. 5A). Male sternite VII rather broad, broadly emarginate at posterior margin (Fig. 5B). Male tergite VIII and sternite VIII and IX as in fig. 5C. Aedeagus (Fig. 5D-E) with parameres apically rounded and each with two long setae, penis apically somewhat inverted lyriform, a paired "human lung-like structure" on subapical portion (Fig. 5D-E).

Sexual dimorphism. Female (Figs 4C–D, 6) frons about $0.6 \times$ as wide as dorsal eye length, antennomeres 4–8 less slender than those of male, terminal antennomere $1.5-1.6 \times$ as long

as penultimate antennomere, basal prothoracic tarsomere comparatively shorter than that of male. Female tergite VII subtruncate apically (Fig. 6A). Sternite VII truncate at posterior margin (Fig. 6B). Female tergite VIII and sternite VIII and IX as in fig. 6C.

Differential diagnosis. *Macratria pulmonaria* sp. nov. is externally similar to numerous South and Central American congeners with brown elytra and a darker forebody, but is specifically different in the shape of the male aedeagus in

combination with the truncate head base, the densely punctured dorsal forebody, and the female with a broadly subtruncate posterior margin of the sternite VII. Proper identification of this species is only possible by using the male genitalia.

Ecology. Collected from vegetation in mid-montane rainforests at 2000–2100 m a.s.l. **Distribution.** Ecuador: Napo Province, eastern slopes of the Andes.



Figure 4. *Macratria pulmonaria* sp. nov., habitus, dorsal view. A – Paratype \Im ; B – Paratype \Im ; Inot to scale]. Images courtesy D. Telnov.



Figure 5. *Macratria pulmonaria* sp. nov., paratype \mathcal{J} , terminalia and genitalia. A – Tergite VII, dorsal view; B – Sternite VII, ventral view; C – Tergite VIII and sternites VIII and IX; D – Aedeagus; E – Aedeagus, apicale, magnified [not to scale]. Images courtesy D. Telnov.



Figure 6. Macratria pulmonaria sp. nov., paratype \bigcirc , terminalia. A – Tergite VII, dorsal view; B – Sternite VII, ventral view; C – Tergite VIII and sternites VIII and IX [not to scale]. Images courtesy D. Telnov.

Macratria tambopata sp. nov. (Figs 7–8) urn:lsid:zoobank.org:act:1208CCDB-0572-4376-9096-D88AB9A77CE2

Type material designated. Holotype ♂, BMNH: PERU Madre de Dios Rio Tambopata Res. 30 km (air) SW Pto. Maldonato, 290m 12°50'S 069°20'W [printed] // N.E.Stork [printed] 21.ii.1982 [handwritten] B.M. 1982– 183 [printed] // NHMUK 013663789 [printed, supplemented with a QR code].

Derivatio nominis. Toponymic. Named after the Tambopata River and its national reserve. Noun in apposition.

Measurements, holotype male, total body length 6.6 mm; head length 1.1 mm, head width across compound eyes ~1 mm, pronotal length 1.6 mm, maximum pronotal width 1 mm, elytral length 3.9 mm, combined maximum elytral width 1.5 mm.

Description. Holotype male (Figs 7–8). Dorsum brown, head rufous-brown. Mouthparts, labrum, antenna, femora and foretibia yellow. Remaining tibiae and tarsi rufous-brown. Ventral pterothorax rufous-brown, abdomen yellowish-brown. Head broadly elliptical, subopaque to opaque dorsally and ventrally. Frons moderately wide, about 0.7× as wide as dorsal

eye length. Compound eye large, hemispheric, strongly protruding from lateral outline of head, about twice as long as converging tempus. Interfacetal setae long, dense. Frontoclypeal suture or impression not observed. Head base narrow, subtruncate. Occiput and vertex with median longitudinal sulcus. Head dorsal punctures circular, dense (much denser on anterior half of head, sparse in area of median sulcus), rather flat. Intervening spaces smooth, generally narrower than punctures except both sides of median sulcus where intervening spaces about as wide as punctures. Head dorsal setae tan, thickened (somewhat scale-like), dense, fully concealing dorsal surface of head except around median sulcus. Tactile setae sparse, erect, extraordinary long, present dorsally and (sparser) ventrally. Antenna rather short, filiform, not or hardly widened in distal half, hardly exceeds beyond base of pronotum when directed posteriorly. Basal antennomere thickened, about twice as long as antennomere two. Antennomere three about $1.6 \times$ as long as antennomere two, barely longer than antennomere four. Antennomeres 3-8 elongate, 9-11 elongate and thickened of them 9–10 widened distally, about equally long. Penultimate antennomere distinctly longer than wide. Terminal antennomere elongate fusiform, apically angulate, about $1.3 \times$ as long as penultimate antennomere, much shorter than combined length of antennomeres 9-10. Terminal maxillary palpomere cultriform. Pronotum subopaque dorsally, slightly glossy, flattened in dorsal aspect, elongate elliptical, as wide as head across compound eyes. Anterior margin truncate medially. Lateral margins distinctly constricted in anterior portion of pronotum and slightly so prebasally. Dorsal pronotal punctures larger than those on head, irregularly shaped, very dense and shallow. Intervening spaces smooth, much narrower than punctures. Pronotal dorsal setation brownish yellowish, rather long and dense, appressed, effectively but not completely concealing dorsal sculpture of pronotum. Basal fovea of pronotum wide, without dense setae. Tactile setae sparse, erect

to suberect, extraordinary long compared to the length of ordinary setae. Scutellar shield small, trapezoidal, truncate at posterior margin, punctate, subopaque, densely setose. Elytron strongly elongate and slender, slightly glossy, slightly and gradually constricted from humeral to apical area. Humerus broadly rounded. Postbasal transverse impression not indicated. Punctures on each elytron of two types: larger and coarser punctures in basal half arranged into six (in dorsal view) poorly defined, in part confused longitudinal striae; much smaller punctures around and all-over posterior half of elytron are confused and flat. Intervening spaces smooth to subrugose (on basal third), variably wide. Elytral setation brownish yellowish, rather long and dense, appressed, arranged into five longitudinal stripes of setae, directed posteriorly or obliquely laterally. Tactile setae sparse, erect, very long. Lateral humeral stria not shifted dorsad, not visible in dorsal view. Sutural stria complete, narrow. Metathoracic wing fully developed. Procoxa with dense appressed whitish setae, mesocoxa and metaventrite with dense appressed golden (medially) to whitish (laterally) setae. Legs long and stout. Femur clavate. Tibia distinctly widened distally, densely setose, metathoracic tibiae slightly arched at outer margin. Tibial terminal spurs paired, margins serrate. Basal prothoracic tarsomere moderately widened. Basal metathoracic tarsomere about $1.7 \times$ as long as combined length of remaining metathoracic tarsomeres. Pretarsal claws not dentate. Male tergite VII strongly and deeply notched medially at posterior margin, dorsally with shallow medial longitudinal furrow, with few long submedian and numerous shorter setae (Fig. 8A). Male sternite VII short and broad, medially emarginate at posterior margin (Fig. 8B). Male tergite VIII enlarged, later lobes broad and apically rounded, medially deeply cleft to base (Fig. 8C), sternite VIII and IX as in fig. 8D. Aedeagus (Fig. 8E-G) strongly elongate, parameres apically acutely angulate, penis apically narrow, apex hook-like, curved and preapically angulate in lateral view (Fig. 8G).

Sexual dimorphism. Female is unknown.

Differential diagnosis. *Macratria tambopata* sp. nov. has no similar congeners in South America, and is peculiar in the strongly elongate body, the head shape with a longitudinally sulcate vertex, the elytra with longitudinal bands of setae, the presence of the extraordinarily long tactile setae on the dorsum, and the shape of the male terminalia (in particular the medially furrowed tergite VII) and genitalia (in particular, the apically hooked and preapically angulate tegmen).

Ecology. Collected from vegetation in mid-montane rainforests at 2000–2100 m a.s.l. **Distribution.** Peru: Tambopata National Reserve.



Figure 7. *Macratria tambopata* sp. nov., holotype \mathcal{O} . A – Habitus, dorsal view; B – ditto, latero-ventral view and antenna; C – Dorsal forebody [not to scale]. Images courtesy D. Telnov.



Figure 8. *Macratria tambopata* sp. nov., holotype \mathcal{E} , terminalia and genitalia. A – Tergite VII, dorsal view; B – Sternite VII, ventral view; C – Tergite VIII and sternites VIII and IX; D – Aedeagus; E – ditto, apicale, magnified [not to scale]. Images courtesy D. Telnov.

CONCLUSIONS

Four species of *Macratria* are known from Ecuador and four other species – from Peru including the species described herein (D. Telnov, unpublished checklist) obviously representing a tiny fraction of expected diversity of this genus in South America. Further studies on the Neotropical *Macratria* are needed which is aggravated by the situation at the Muséum national d'histoire naturelle (Paris, France), where (as was found by the author) the type material of several species described by earlier authors is lost or cannot be allocated.

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REFERENCES

- Chandler D.S. 2002. 117. Anthicidae Latreille 1819. In: Arnett R.H., Thomas M.C., Skelley P.E., Frank J.H. (eds.), American Beetles. Volume 2. Polyphaga: Scarabaeoidea through Curculionoidea. CRC Press, Boca Raton, London, New York and Washington, D.C. 549-558 pp.
- Telnov D. 2011. Taxonomische Revision der Gattung Macratria Newman, 1838 (Coleoptera: Anthicidae: Macratriinae) aus Wallacea, Neuguinea und den Salomonen. In: Telnov, D. (ed.), Biodiversity, Biogeography and Nature Conservation in Wallacea and New Guinea. Volume I. The Entomological Society of Latvia, Rīga, Pp. 97–285, pls 17–37.

- Telnov D. 2012. Macratriinae (Coleoptera: Anthicidae) of the Baltic amber. *Latvijas Entomologs* 51: 28–40.
- Telnov D. 2023. New species and records of Macratriinae LeConte, 1862 (Coleoptera: Anthicidae) from the Americas with five new descriptions. *Zootaxa* 5389 (2): 173–192. https://doi.org/10.11646/zootaxa.5389.2.2
- Telnov D., Bukejs A. 2019. Catalogue and composition of fossil Anthicidae and Ischaliidae (Insecta: Coleoptera). *Palaeontologia Electronica* 22.1.18A: 1–27. https://doi. org/10.26879/885

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