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New records and new species of Macratriinae from the Papuan region (Insecta: Coleoptera: Anthicidae)

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Abstract

Descriptions of twelve species of *Macratria* Newman new to science are given, namely *M. abun* sp. nov., *M. asmat* sp. nov., *M. brazzaensis* sp. nov., *M. cryptica* sp. nov., *M. forficula* sp. nov., *M. opaca* sp. nov., *M. pluvialis* sp. nov., *M. pseudodensata* sp. nov., *M. riparia* sp. nov., *M. spathulata* sp. nov., *M. tamarau* sp. nov., and *M. trimembris* sp. nov. Additional information on distribution of several known species is given. Updated biogeographical data on Macratriinae of the Indo-Australian transitional zone are presented.

Zusammenfassung

Es werden zwölf für die Wissenschaft neue Arten der Gattung *Macratria* Newman beschrieben: *M. abun* sp. nov., *M. asmat* sp. nov., *M. brazzaensis* sp. nov., *M. cryptica* sp. nov., *M. forficula* sp. nov., *M. opaca* sp. nov., *M. pluvialis* sp. nov., *M. pseudodensata* sp. nov., *M. riparia* sp. nov., *M. spathulata* sp. nov., *M. tamarau* sp. nov. und *M. trimembris* sp. nov. Neue Angaben zur Verbreitung einiger bekannter Arten werden präsentiert. Ergänzende biogeographische Daten über Macratriinae der Indo-Australischer Übergangszone werden diskutiert.

Key words: Coleoptera, Anthicidae, Macratriinae, *Macratria*, Papuan region, Raja Ampat, New Guinea, taxonomy, new species, biogeography

Introduction

The Indo-Australian transitional zone region (Wallacea and the Papuan region) is extraordinary rich for Macratriinae. Previously 108 species have been recorded from this region (TELNOV 2011), of them 106 are believed endemic species and two are shared with neighbouring islands of the Oriental Region (TELNOV 2011). Eighty-four species of *Macratria* Newman, 1838 were first described from the Indo-Australian transition zone recently (TELNOV 2011). Thereafter, finding twelve undescribed species of *Macratria* during one month of field studies on Misool and Waigeo Islands, in the Tamarau Mountains and the North Asmat area was a bit surprising. In this paper, the following new species are described and illustrated: *Macratria abun* sp. nov., *M. asmat* sp. nov., *M. brazzaensis* sp. nov., *M. cryptica* sp. nov., *M. forficula* sp. nov., *M. opaca* sp. nov., *M. pluvialis* sp. nov., *M. pseudodensata* sp. nov., *M. riparia* sp. nov., *M. spathulata* sp. nov., *M. tamarau* sp. nov., and *M. trimembris* sp. nov. New records from the region of the Indo-Australian transition zone are given for five species.

Material and methods

All species are listed alphabetically as a phylogenetic arrangement is not yet possible. All label text is reproduced exactly, with no corrections or additions. All labels are printed. Author's comments are placed in square brackets [ ]. Holotypes of newly described species are placed in the collection of Naturkundemuseum Erfurt.
Last visible ventrites (largest terminal sternite and tergite) discussed by each species' description are the morphological sternite & tergite VII.

Acronyms for the collections:

NME – Naturkundemuseum Erfurt (Germany);
DTC – Collection Dmitry Telnov, Rīga (Latvia).

Additional faunal information on poorly known species of Macratriinae from the Papuan region

***Macratria albertisi* Pic, 1900**
1♀ [DTC] – INDONESIA E, New Guinea, Brazza River upstream from Korowai area, 21.III.2012, riverside vegetation, leg. L.Wagner; 2 ♂ [DTC] – INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Siret River S of Binamsaen, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner;

9 specimens [4 NME, 5 DTC] – INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Brazza River N of Wowtu, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner.
Previously known from the Fly River lowlands and SE Peninsula of Papua New Guinea. New record for lowland area of Asmat territory, southern New Guinea.

***Macratria forticornis* Pic, 1896**
1 ♀ [DTC] – INDONESIA E, Raja Ampat, Waigeo Island, Waisai 9-10 km NEE, 00°23'21"S, 130°54'17"E, 80 m, 18.II.2012, clearing in primary lowland rainforest on limestone, leg. D.Telnov.
Collected on green leafs of young trees at a height of 1–1.5 m at the edge of a secondary lowland rainforest.
First record for Waigeo, previously recorded from the northern Bird's Head Peninsula of New Guinea (TELNOV 2011).

***Macratria furva* Telnov, 2011**
1♀ [DTC] – INDONESIA E, Raja Ampat, Waigeo Island, Waisai 9–10 km NEE, 00°23'21"S, 130°54'17"E, 80 m, 18.II.2012, clearing in primary lowland rainforest on limestone, leg. D.Telnov.
Collected on green leafs of young trees at a height of 1–1.5 m at the edge of a secondary lowland rainforest.
First record for Waigeo, previously known only from Yapen Island (Cenderawasih Bay) (TELNOV 2011).

***Macratria grekei* Telnov, 2011**
7 specimens [3 NME, 4 DTC] – INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Brazza River ~20 km S of Pirabanak, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner.
Previously known from the SE Peninsula of Papua New Guinea and from the southern Bird's Neck isthmus of Indonesian Papua. New record from the large intervening lowland area.

***Macratria wallacei* Champion, 1916 (Figs 24–26, 88)**
13 specimens [DTC] – INDONESIA E, Raja Ampat, Waigeo Island, Waisai 9–10 km NEE, 00°23'21"S, 130°54'17"E, 80 m, 18.II.2012, clearing in primary lowland rainforest on limestone, leg. D.Telnov.
Collected on green leafs of young trees at a height of 1–1.5 m at the edge of a secondary lowland rainforest.
Originally described from "Waigou" and previously known only from ♀ holotype (TELNOV 2011). Male habitus, genitalia, and last ventrites are illustrated for the first time.

Descriptions of new taxa

***Macratria abun* sp. nov.** Figs 1–5, 57–59, 93
Holotype ♂, NME: INDONESIA E, West Papua, Tamarau mts, Fef vill. ~6 km E, 00°49'24"S, 132°29'48"E, 450–500 m, 12.II.2012, primary lowland rainforest, river valley, leg. D.Telnov.
Paratypes 16 specimens [8 NME, 8 DTC] same label as in the holotype.

Measurements. Holotype male, total body length 5.20 mm, maximum combined width at base of elytra 1.21 mm; head 1.05 mm long, across eyes 0.80 mm broad, pronotum 1.25 mm long, maximum width 0.88 mm, elytra 2.90 mm long, 1.21 wide at base. Paratype female: total body length 4.68 mm, 1.10 mm wide across base; head 0.95 mm long, across eyes 0.73 mm broad, pronotum 1.10 mm long, maximum width 0.80 mm, elytra 2.63 mm long, 1.10 wide at base.
Description. Dorsum and venter uniformly black. Mouthparts, palpi and antennae yellow, with slightly darkened three terminal antennomeres. Legs black to black brown, tarsi yellowish to brown. Head oval, flattened dorsally, with very large and strongly prominent eyes. Tempora broadly rounded together with base; head base not notched. Frons narrow, in both sexes slightly narrower than combined length of two basal antennomeres. Punctures very dense, intervening spaces smaller than punctures. Underside of head smooth and shiny, without visible punctures. Pubescence greyish and dense, appressed. Antennae short, hardly reaching over base of elytra in male, not reaching base of elytra in female. Basal antennomere elongate. Third antennomere 1/3 longer than second antennomere. Antennomeres 3–8 elongate and slender, not or slightly thickened distally. Antennomeres 9–10 thickened, widened distally but not much longer than antennomeres 3–8. Terminal antennomere in male elongate, as long as combined length of antennomeres 9–10, in female shorter than combined length of antennomeres 9-10. Terminal maxillary palpomere short cultriform. Pronotum oval with maximum width before middle, flattened and opaque dorsally. Punctures of irregular shape, large and deep, intervening

spaces irregular and much smaller than punctures, dorsal surface coarsely punctate. Pubescence greyish, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum small, truncate apically. Elytra opaque dorsally, laterally almost parallel. Dorsal surface densely punctate, with 5 rows of larger punctures on each elytron reaching apical third. Pubescence greyish to yellowish, long and dense, appressed, almost completely covering dorsal sculpture of elytra. Hind wings fully developed. Legs robust, densely setose. Protarsi distinctly thickened in both sexes. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Apices of last visible ventrites extending beyond elytral apices. Last visible tergite of both male and female broadly rounded apically (Figs 1, 4). Last visible sternite of male short and broad, with broad medioapical excavation (Fig. 2), in female short and broad, with short median projection (Fig. 5). Aedeagus with pointed parameres that are slightly curved apically and very short bipartite median lobe (Fig. 3).

Sexual dimorphism. In females, eyes smaller, terminal antennomere is comparatively shorter and body comparatively more slender.

Variability. Specimens varies in body length from 4.50 to 5.20 mm. Pubescence on pronotum is colourless in some specimens leaving dorsal sculpture of pronotum clearly visible.

Ecology. Specimens of this species were observed and sampled from leafs in a river valley of primary lowland rainforest surrounded by the Tamarau Mountains. When disturbed specimens flew actively from one tree to another.

Differential diagnosis. This species externally resembles several uniformly black species of *Macratria*, but is specifically different primarily due to the shape of the male aedeagus. Among species whose male's last visible sternite is excavated apically, *M. dani* Telnov, 2011 (Baliem valley, Central Cordillera of New Guinea), *M. jayawijaya* Telnov, 2011 (Jayawijaya Mountains, Central Cordillera of New Guinea), and *M. nigrita* Telnov, 2011 (Cyclops Mountains, North New Guinea) are the most similar. In *M. dani* the parameres are broader, and are not pointed and not curved apically. *M. jayawijaya* has the median lobe of the aedeagus distinctly longer, and the parameres bear a pair of very long preapical setae. In *M. nigrita* the parameres are slender and not curved apically, and the aedeagus is generally broader.

Etymology. Named after the Abun, one of main Papuan tribes and languages native to the Tamarau Mountains.

Distribution. Known from the Tamarau Mountains, central Bird's Head Peninsula of New Guinea.

***Macratria asmat* sp. nov.** Figs 6–10, 60–62

Holotype ♂, NME: INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Brazza River N of Wowtu, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner [holotype is missing 3-11 left antennomeres].

Paratypes 1♂, 2♀ [DTC] same label as in the holotype [both female paratypes missing their forebodies].

Measurements. Holotype male, total body length 4.35 mm, maximum combined width at base of elytra 1.04 mm; head 0.90 mm long, across eyes 0.72 mm broad, pronotum 1.10 mm long, maximum width 0.68 mm, elytra 2.35 mm long, 1.04 wide across base.

Description. Dorsum and venter uniformly black. Mouthparts, palpi and antennae brown to yellow; when antennae are pale, three terminal antennomeres are darkened. Legs brown to yellow. Head round, opaque dorsally, with very large and strongly prominent eyes covering whole sides of head. Head base broadly rounded, not notched. Frons narrow, in male narrower than combined length of two basal antennomeres. Punctures very dense, intervening spaces smaller than punctures. Underside of head smooth and shiny, minutely punctured. Pubescence greyish to brownish, very dense, appressed. Antennae slender, in male reaching base of elytra. Basal antennomere cylindrical. Third antennomere only slightly longer than second antennomere. Antennomeres 3–8 elongate and slender, not or slightly thickened distally. Antennomeres 9–10 distinctly widened distally, somewhat longer than antennomeres 3–8. Terminal antennomere in male elongate, as long as combined length of antennomeres 9–10. Terminal maxillary palpomere short cultriform. Pronotum cylindrical, flattened and opaque dorsally. Punctures large, deep and very dense, intervening spaces microreticulate, much smaller than punctures, dorsal surface coarsely punctate. Pubescence greyish to brownish, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum small, truncate apically. Elytra opaque dorsally, laterally almost parallel. Dorsal surface densely punctate, with 4 weakly defined rows

of larger punctures on each elytron hardly reaching apical half. Pubescence greyish to brownish, long and very dense, appressed, almost completely covering dorsal sculpture of elytra. Hind wings fully developed. Legs long, tibiae densely setose. Protarsi distinctly thickened in male. Metafemora with a patch of sparse long and erect setae on inner margin (Fig. 62). Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Apices of last visible ventrites extending beyond elytral apices. Last visible tergite of male broadly rounded apically (Fig. 6), of female – narrowly rounded (Fig. 9). Last visible sternite of male short and broad, with short medioapical excavation (Fig. 7), in female – broadly triangular and truncate apically (Fig. 10). Aedeagus with long and slender, basally dentate parameres and with short bipartite median lobe (Fig. 8).

Sexual dimorphism. Remains unknown as female paratypes are missing their forebodies.

Variability. Paratype male is larger, body length 5.0 mm.

Ecology. Specimens of this species were observed and sampled from leafs in a river valley with primary lowland rainforest.

Differential diagnosis. This species externally resembles several uniformly black coloured species of *Macratria* with brownish pubescence. The medioapically excavated last visible sternite of the male, in combination with the narrow and basally dentate parameres of the aedeagus separates this species from similar species such as *M. fulvipes fulvipes* Pascoe, 1860 (Sulawesi), *M. grisescens* Telnov, 2011 (Mangole Island, Sula Islands), *M. maculipennis* Pic, 1900 and *M. opacicollis* Pic, 1900 (both from SE Peninsula of Papua New Guinea), *M. matrozisi* Telnov, 2011 (Owen Stanley range, SE Peninsula of Papua New Guinea), *M. soricina* Marseul, 1882 (Aru Islands) and others. Also presence of a long setae on metafemora makes *M. asmat* unique within its genus.

Etymology. Named after Asmat, one of main Papuan tribes and languages native to southern lowlands of New Guinea.

Distribution. Known from North Asmat territory, Brazza River valley of New Guinea.

***Macratria brazzaensis* sp. nov.** Figs 11–15, 63–65

Holotype ♂, NME: INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Brazza River ~18 km S of Pirabanak, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner [holotype is missing left middle and posterior leg, as also tarsomeres 2–5 of both protarsi].

Paratypes 5 specimens 1♂, 4♀ [2 NME, 3 DTC] same label as in the holotype.

Measurements. Holotype male, total body length 2.72 mm, maximum combined width at base of elytra 0.80 mm; head 0.55 mm long, across eyes 0.56 mm broad, pronotum 0.67 mm long, maximum width 0.50 mm, elytra 1.50 mm long, 0.80 wide at base. Paratype female: total body length 3.07 mm, 0.80 mm wide across base; head 0.67 mm long, across eyes 0.57 mm broad, pronotum 0.70 mm long, maximum width 0.53 mm, elytra 1.70 mm long, 0.80 wide at base.

Description. Dorsum and venter uniformly black with head somewhat dark reddish black. Mouthparts, palpi and antennae yellow, with or without 3–4 terminal antennomeres being darker. Legs brown to black brown, protarsi usually paler. Head round, dorsally smooth and somewhat flattened. Eyes round, very large and strongly prominent, occupying whole sides of head in males or leaving short converging posteriad tempora in female. Head base nearly straight in male, broadly rounded in female, not notched apically. Frons narrow, in male narrower, in female equal to combined length of two basal antennomeres. Punctures minute and dense, intervening spaces smaller than to 2x larger than punctures. Pubescence greyish, fine and sparse. Antennae reaching base of elytra. Basal antennomere cylindrical. Third antennomere very slightly longer than second antennomere. Antennomeres 3–8 elongate and slender, not thickened distally. Antennomeres 9–10 thick, widened distally. Terminal antennomere in male elongate, 1/3 longer than, in female as long or indistinctly shorter than combined length of antennomeres 9–10. Terminal maxillary palpomere cultriform. Pronotum dorsally opaque, broad cylindrical, with maximum width before middle. Punctures very coarse and dense but flat and fine, intervening spaces smaller than punctures, microreticulate. Pubescence greyish, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum small, truncate apically. Elytra dorsally opaque, laterally almost parallel. Dorsal surface densely microreticulate, with larger punctures on each elytron arranged into 3–4 irregular and weakly defined rows (in dorsal view) not reaching middle of elytra. Pubescence yellowish, long and dense, appressed, almost completely covering dor-

sal sculpture. Hind wings fully developed. Legs slender. Protarsi distinctly thickened in both sexes. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2-4. Last visible ventrites completely hidden under elytra. Last visible tergite of male bluntly pointed apically (Fig. 11), in female broader rounded apically (Fig. 14). Last visible sternite of male short, broadly but very flat excavated medio-apically (Fig. 12), in female short and broad, with rounded and flat medio-apical projection (Fig. 15). Aedeagus with broad median lobe and short, pointed parameres (Fig. 13).

Sexual dimorphism. Females with comparatively shorter terminal antennomere, which is shorter or equal to combined length of antennomeres 9–10. Tempora longer and head base broadly rounded in female, but truncate and without visible tempora in male.

Ecology. Specimens of this species were observed and sampled from leafs in a river valley with primary lowland rainforest.

Differential diagnosis. At first glance *Macratria brazzaensis* resembles species of *M. pygmaea* species-group, but in fact does not belong to it. The parameres are short in *M. brazzaensis*, not like in members of *pygmaea* species-group. No other morphologically similar species to *M. brazzaensis* known in the Oriental and Australian chorons.

Etymology. Named after the River Brazza in the North Asmat territory of New Guinea.

Distribution. Known from North Asmat territory, Brazza River valley of New Guinea.

***Macratria cryptica* sp. nov.** Figs 16–18, 66–67, 93

Holotype ♂, NME: INDONESIA E, West Papua, Tamarau mts, Fef vill. ~6 km E, 00°49’24”S, 132°29’48”E, 450–500 m, 12.II.2012, primary lowland rainforest, river valley, leg. D.Telnov.

Measurements. Holotype male, total body length 3.62 mm, maximum combined width at base of elytra 0.84 mm; head 0.72 mm long, across eyes 0.64 mm broad, pronotum 0.80 mm long, maximum width 0.60 mm, elytra 2.10 mm long, 0.84 wide at base.

Description. Dorsum and venter uniformly black. Mouthparts, palpi and antennae yellowish, with three terminal antennomeres darkened. Legs black to black-brown, pro- and mesotarsi yellowish to brownish. Head round, opaque dorsally, with very large but not strongly prominent eyes occupying the whole sides of head and not leaving visible tempora. Head posterior to eyes broadly rounded, not notched. Frons broad, in male slightly broader than combined length of two basal antennomeres. Punctures minute and very dense, intervening spaces smaller than punctures. Underside of head smooth and shiny, without visible punctures. Pubescence greyish, fine and sparse, appressed. Antennae short, not reaching base of elytra. Basal antennomere cylindrical. Third antennomere only slightly longer than second antennomere. Antennomeres 3–7 elongate and slender, not or slightly thickened distally; antennomere 8 a bit shorter than previous. Antennomeres 9–10 longer than previous ones, widened distally. Terminal antennomere in male elongate and pointed, shorter than combined length of antennomeres 9–10. Terminal maxillary palpomere short cultriform. Pronotum elongate, opaque dorsally, with maximum width in anterior half, narrowing laterally toward base. Punctures larger than on head, coarse and dense but flat, intervening spaces smaller than punctures, microreticulate. Pubescence greyish, fine, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum broad, truncate apically. Elytra dorsally slightly shiny, laterally almost parallel. Dorsal surface densely microreticulate, large punctures on each elytron arranged into 4 weakly defined rows (in dorsal view). Punctures becoming very small and sparse posteriad to middle, rows disappear in postmedian half. Pubescence greyish, long and dense, appressed. Hind wings fully developed. Legs long and slender, densely setose. Protarsi slightly thickened in male. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Last visible ventrites completely hidden under elytra. Last visible tergite of male elongate, rounded apically (Fig. 16). Last visible sternite of male long and broad, truncate apically (Fig. 17). Aedeagus with long basal part, thin and somewhat pointed parameres; median lobe short and broad (Fig. 18).

Sexual dimorphism. Female is unknown.

Ecology. Specimens of this species were observed and sampled from leafs in a river valley of primary lowland rainforest surrounded by the Tamarau Mountains.

Differential diagnosis. This species externally resembles several uniformly black coloured species of *Macratria*, but is specifically different primarily due

to shape of male aedeagus and in very large eyes of male (occupying the whole sides of head). The aedeagus is similar to the following species from the Indo-Australian transition zone: *Macratria confertopunctata* Telnov, 2011 (Paniai Lakes, Central Cordillera of New Guinea) (median lobe of the aedeagus is long and slender), *M. finisterrensis* Telnov, 2011 (Finisterre Mountains and Kaindi Mountains, eastern Papua New Guinea) (parameres longer, median lobe longer), *M. hatamensis* Telnov, 2011 (Arfak Mountains, Bird's Head Peninsula of New Guinea) (medial lobe tripartite distally with lateral parts dentate and median lobe very narrow), *M. kovalevskyi* Telnov, 2011 (Baliem valley, Central Cordillera of New Guinea) (median lobe more slender), *M. nigrita* Telnov, 2011 (male's last visible sternite excavated apically), *M. riedeli* Telnov, 2011 (Arfak Mountains of northern Bird's Head Peninsula and Lakes Paniai in Central Cordillera of New Guinea) (terminal antennomere of male strongly elongate, 1,5x longer than combined length of 9–10 antennomeres). Visually also similar to here described *M. abun* (Tamarau Mountains, Bird's Head Peninsula of New Guinea) and *M. pluvialis* (NW Bird's Head Peninsula of New Guinea), but differs clearly in shape and structure of male's last ventrites and the aedeagus.

Etymology. Named from Latin "crypticus" [hidden], because this species looks very similar to many other uniformly black coloured species of *Macratria* and is only surely identifiable by structure of male genital organs.

Distribution. Known from the Tamarau Mountains, central Bird's Head Peninsula of New Guinea.

Macratria forficula sp. nov. Figs 21–23, 68–69, 93

Holotype ♂, NME: INDONESIA E, West Papua, Tamarau mts, Fef vill. 6,5 km NW, 00°47'04"S, 132°22'27"E, 480 m, 11.II.2012, riverside, from leafs of young trees, leg. D.Telnov [the holotype is missing the terminal segment of left metatarsus].

This species does belong to *M. gestroi* species-group (see TELNOV 2011 for definition of the group).

Measurements. Holotype male, total body length 5.07 mm, maximum combined width at base of elytra 1.10 mm; head 1.0 mm long, across eyes 0.85 mm broad, pronotum 1.30 mm long, maximum width 0.73 mm, elytra 2.77 mm long, 1.10 wide across base.

Description. Dorsum and venter uniformly black, abdomen brown. Mouthparts, palpi and antennae yellow, with darkened four terminal antennomeres. Pro- and mesofemora yellow, metatibiae brown. All tibiae and tarsi black to brown. Head round, smooth and flattened dorsally, with very large and strongly prominent eyes. Tempora broadly rounded together with base; head base not notched. Frons narrow, equal to combined length of two basal antennomeres. Punctures minute, dense on the frons, sparse on vertex. Intervening spaces smaller than punctures on frons, much larger than these on vertex. Underside of head smooth and shiny, densely minutely punctate. Pubescence whitish and dense, appressed to suberect. Antennae slender, in male reaching over base of elytra. Basal antennomere cylindrical. Third antennomere 1/4 longer than second antennomere. Antennomeres 3–7 elongate and slender, not thickened distally, antennomere 8 a bit shorter than previous. Antennomeres 9–10 distinctly widened distally, not or very slightly longer than antennomeres 3–7. Terminal antennomere in male strongly elongate, longer than combined length of antennomeres 9-10. Terminal maxillary palpomere cultriform. Pronotum smooth dorsally, elongate and slender with maximum width around the middle. Punctures minute and dense on the disc, intervening spaces as large as to smaller than punctures, microreticulate. Pubescence greyish, long and dense, appressed. Basal groove with a bit more dense short whitish pubescence. Scutellum small, truncate apically. Elytra smooth and dorsally convex, laterally almost parallel. Dorsal surface irregularly punctate, with 4 irregular and weakly defined rows of somewhat larger punctures on each elytron (in dorsal view). These rows are not reaching apical third. Pubescence greyish, long and dense, appressed, almost completely covering dorsal sculpture of elytra. Hind wings fully developed. Legs long and slender. Basal metatarsomere in male longer than combined length of metatarsomeres 2–4. Last visible ventrites completely hidden under elytra. Last visible tergite of male shortly rounded apically and with weak median excavation (Fig. 21). Last visible sternite of male very short, with two long and robust antlers-like lateral processes that are somewhat modified interiorly and dentate preapically. Apical margin between processes is biangulate and medially slightly impressed (Fig. 22). Aedeagus slender, with long tripartite median lobe (Fig. 23).

Sexual dimorphism. Female is unknown.

Ecology. Single known specimen of this species sam-

pled from leaf of young tree on sunny place in river valley of primary lowland rainforest surrounded by the Tamarau Mountains.

Differential diagnosis. This species morphologically resembles another species of *M. gestroi* species-group. Due to medially biangulate apical margin of male's last visible sternite, this species is similar with *M. misoolensis* Telnov, 2011 (Misool Island, Raja Ampat), *M. ronaldi* Telnov, 2011 (southern Bird's Neck isthmus of New Guinea), and *M. viking* Telnov, 2011 (SE Peninsula, the Northern Province of Papua New Guinea). Lack of hair spots on elytra and even more specifically shaped last visible sternite of male (lateral processes are dentate on inner margin) makes this new species clearly different from all members of its species-group.

Etymology. Named from Latin "forficula" [little scissors] because of scissors-like last visible sternite of male.

Distribution. Known from the Tamarau Mountains, central Bird's Head Peninsula of New Guinea.

***Macratria opaca* sp. nov.** Figs 19–20, 70–71, 93

Holotype ♀, NME: INDONESIA E, West Papua, Tamarau mts, Fef vill. 6,5 km NW, 00°47'04"S, 132°22'27"E, 480 m, 11.II.2012, riverside, from leafs of young trees, leg. D.Telnov.

Measurements. Holotype female, total body length 4.30 mm, maximum combined width in the middle of elytra 1.17 mm; head 0.80 mm long, across eyes 0.71 mm broad, pronotum 1.0 mm long, maximum width 0.81 mm, elytra 2.48 mm long, 1.17 wide in the middle.

Description. Dorsum and venter uniformly black, abdomen dark brown. Mouthparts, and four basal antennomeres are paler brown. Head small, round, opaque and slightly convex dorsally. Eyes large, not strongly prominent. Tempora about 1/2 of eye's length, converged toward base. Head base nearly truncate, with very indistinct short median notch. Frons in female broader than combined length of two basal antennomeres. Punctures minute and very dense, intervening spaces smaller than punctures. Pubescence greyish, fine and sparse. Antennae thin, in female reaching base of elytra. Basal antennomere cylindrical. Third antennomere 1/4 longer than second antennomere. Antennomeres 3–8 elongate and slender, very slightly thickened distally. Antennomeres 9–10 distinctly widened distally, not or slightly longer than antennomeres 3–8. Terminal antennomere in female elongate, slightly longer than combined length of antennomeres 9–10. Terminal maxillary palpomere cultriform. Pronotum opaque dorsally, broad oval with maximum width before middle. Punctures large, coarse and dense with intervening spaces smaller than punctures on the disc, equal to larger than punctures along lateral margins. Pubescence almost colourless, fine and short, appressed. Basal groove covered by dense, long whitish pubescence. Scutellum broad and short, truncate apically. Elytra opaque dorsally, very slightly widened at middle. Dorsal surface very dense punctate and microreticulate on intervening spaces. Four very weakly defined rows of larger punctures on each elytron, only reaching middle (in dorsal view). Pubescence colourless to pale yellowish, very fine but dense. A band of long and dense white hairs before middle of elytra, broadly interrupted on suture and not reaching lateral margins. Legs slender. Basal metatarsomere in female longer than combined length of metatarsomeres 2–4. Last visible ventrites completely hidden under elytra. Last visible tergite of female almost truncate apically (Fig. 19). Last visible sternite of female very broad, broadly rounded apically (Fig. 20).

Sexual dimorphism. Male is unknown.

Ecology. Single known specimen of this species sampled from leaf of young tree on sunny place in river valley of primary lowland rainforest surrounded by the Tamarau Mountains.

Differential diagnosis. This species resembles several white-spotted species of *Macratria* from the Indo-Australian transition zone, primarily *M. balkei* Telnov, 2011 (Nabire surroundings, New Guinea), *M. distincticornis* Pic, 1900 (Onin Peninsula and Nabire surroundings, New Guinea), *M. pumicosa* Telnov, 2011 (Yapen Island, Cenderawasih Bay of New Guinea) and *M. riedeli* Telnov, 2011 (Central Cordillera and northern Bird's Head Peninsula of New Guinea). From these species *M. opaca* differs in having broad frons (very narrow in *M. balkei*), narrow head (broader than pronotum in *M. balkei* and *M. riedeli*, nearly as wide as pronotum in *M. pumicosa*), less coarse punctured pronotum (strongly coarse punctured in *M. pumicosa*), nearly straight head base (broadly rounded in *M. balkei, M. distincticornis, M. pumicosa*, and *M. riedeli*), pronotum short and broad, widened in anterior half (pronotum is slender in *M. riedeli* but in *M. balkei* its maximum width is at and not before middle).

Etymology. Named from Latin "opacus" [opaque, shady] because of opaque dorsum of the body.
Distribution. Known from the Tamarau Mountains, central Bird's Head Peninsula of New Guinea.

***Macratria pluvialis* sp. nov.** Figs 27–31, 72–74
Holotype ♂, NME: INDONESIA E, West Papua, road between Mega & Makbon vill., 00°45'40"S, 131°45'45"E, 110 m, 14.II.2012, primary lowland rainforest, on riverside vegetation, leg. D.Telnov [the holotype is missing right antennomeres 7–11].
Paratypes 45 specimens [27 NME, 18 DTC] same label as in the holotype.

Measurements. Holotype male, total body length 4.37 mm, maximum combined width at base of elytra 1.10 mm; head 0.90 mm long, across eyes 0.76 mm broad, pronotum 1.15 mm long, maximum width 0.80 mm, elytra 2.70 mm long, 1.10 wide at base. Paratype female: total body length 5.50 mm, maximum combined width at base of elytra 1.20 mm; head 1.05 mm long, across eyes 0.80 mm broad, pronotum 1.30 mm long, maximum width 0.90 mm, elytra 3.0 mm long, 1.20 wide at base.
Description. Dorsum and venter uniformly black to brown. Mouthparts, palpi and antennae yellow, with slightly darkened three terminal antennomeres. Legs black to brown, tarsi yellowish to brown. Generally very similar to above described *Macratria abun*, but specifically different in following: Head somewhat prolongated posteriad to eyes, tempora longer (in females). Antennomeres 9–11 more elongate (in males). Last visible tergite of both male and female narrowly rounded apically (Figs 27, 30). Last visible sternite of male short and broad, truncate apically and very weakly excavated on the apical margin (Fig. 28), in female broadly triangular, with median apically rounded projection (Fig. 31). Aedeagus with long and curved, distally rounded parameres, median lobe narrow (Fig. 29A, B & C).
Sexual dimorphism. In females, eyes smaller and head slightly prolongate posteriad to eyes, terminal antennomere comparatively shorter and body comparatively more slender.
Variability. Specimens varies in body length from 4.37 to 5.50 mm. Dorsal body colouration varies from black to brown, pubescence – from greyish to golden.
Ecology. Specimens of this species were observed and sampled from leafs of young trees in shady creek valley of secondary lowland rainforest. Specimens were collected after strong tropical rain, during the shower. When disturbed, specimens flew actively from one tree to another.
Etymology. Named from Latin "pluvialis" [rainy, showery, calling rain] as this species was collected immediately after heavy rain.
Distribution. Known from lowland part of NW Bird's Head Peninsula, between the Tamarau Mountains and Sorong area.

***Macratria pseudodensata* sp. nov.** Figs 32–36, 75–77
Holotype ♂ NME: INDONESIA E, New Guinea, Brazza River upstream from Korowai area, 21.III.2012, riverside vegetation, leg. L.Wagner.
Paratypes 15 specimens: 2♂ [1 NME, 1 DTC] same label as in the holotype; 2♂, 1♀ [DTC] INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Brazza River ~20 km S of Pirabanak, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner; 4♂, 4♀ [4 NME, 4 DTC] INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Siret River S of Binamsaen, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner; 1♂, 1♀ [DTC] INDONESIA E, New Guinea S, Asmat regency, North Asmat dist., Brazza River N of Wowtu, 05–10.VIII.2012, primary lowland rainforest, riverside vegetation, leg. L.Wagner.

This species does belong to *M. gestroi* species-group (see TELNOV 2011 for definition of the group).
Measurements. Holotype male, total body length 3.37 mm, maximum combined width at base of elytra 0.79 mm; head 0.70 mm long, across eyes 0.60 mm broad, pronotum 0.77 mm long, maximum width 0.52 mm, elytra 1.95 mm long, 0.79 wide at base. Paratype female: total body length 5.50 mm, maximum combined width at base of elytra 1.0 mm; head 0.70 mm long, across eyes 0.66 mm broad, pronotum 0.85 mm long, maximum width 0.58 mm, elytra 2.10 mm long, 1.0 wide at base.
Description. Externally similar to *Macratria densata* Pic, 1900 (Trans-Fly area and SE Peninsula of Papua New Guinea) but differs in the combination of the following characters: Dorsum and venter uniformly black. 5–6 basal antennomeres yellow, rest of antenna darkened. Legs are brown to yellowish in males, black in

females. Eyes very large, occupying the whole sides of head. Head opaque dorsally, very densely and quite roughly punctured, intervening spaces distinctly smaller than punctures. Frons very narrow in male, but slightly broader than combined length of two basal antennomeres; in female frons is broader than in male. Terminal antennomere in male strongly elongate, about 1.5–1.7x longer than combined length of antennomeres 9–10. Pronotum with maximum width before middle, dorsally densely punctured, opaque. Basal groove covered with dense yellowish pubescence. Elytra smooth dorsally, narrowed toward apices in male. Elytral pubescence yellowish, very dense. In female specimens patches of denser but not longer pubescence builds very indistinct hair spots in basal third of each elytron. Basal metatarsomere in male longer than combined length of metatarsomeres 2–4. Last visible ventrites completely hidden under elytra. Last visible tergite of male elongate triangular, pointed apically (Fig. 32), in female broadly rounded apically (Fig. 35). Last visible sternite of male short and broad, with two robust, densely and long pubescent antlers-like lateral processes. Apical margin between processes is truncate (Fig. 33). Last visible sternite of female very broadly rounded apically (Fig. 36). Aedeagus with thin lateral processes on phallobase, median lobe apically distinctly tripartite (Fig. 34A, B).

Sexual dimorphism. Female have distinctly less elongate terminal antennomere, comparatively broader frons and broader pronotum. Females generally darker with less yellowish dorsal pubescence and completely dark legs. Elytra with less distinct hair spots in females.

Ecology. Specimens of this species were observed and sampled from leafs in a river valley with primary lowland rainforest.

Differential diagnosis. This species morphologically resembles *Macratria densata* Pic, 1900 and *M. pamelaschmidti* Telnov, 2011 (Guadalcanal Island, Solomon Islands) very much. Males of *M. pseudodensata* have longer terminal antennomere than in both mentioned species, females are not darker coloured in those, the aedeagus is slightly different in shape and absence of lateral processes. In *M. densata*, last visible sternite of male is strongly gibbose between very large and long lateral processes.

Etymology. Named because of external similarity with New Guinean *Macratria densata*.

Distribution. Known from North Asmat territory, Brazza River valley of New Guinea.

***Macratria riparia* sp. nov.** Figs 37–41, 78–80, 92

Holotype ♂, NME: INDONESIA E, Raja Ampat, Misool Island S, Biga vill. ~7,50 km W, River Biga valley, 02°01’23”S, 130°12’38”E, 45–78 m, 03.II.2012, primary lowland rainforest on limestone, river valley, leg. D.Telnov.

Paratypes 55 specimens: 18 specimens [8 NME, 10 DTC] same label as in the holotype; 36 specimens [16 NME, 20 DTC] INDONESIA E, Raja Ampat, Misool Island (central), River Gam upstream, Gamta vill. ~7 km NW, 01°57’47”S, 130°16’12”E, 70–350 m, 04–06. II.2012, primary lowland rainforest, riverside vegetation, leg. D.Telnov; 1 specimen [DTC] INDONESIA E, Raja Ampat, Waigeo Island, Waisai 9–10 km NEE, 00°23’21”S, 130°54’17”E, 80 m, 18.II.2012, clearing in primary lowland rainforest on limestone, leg. D.Telnov.

Measurements. Holotype male, total body length 4.40 mm, maximum combined width at base of elytra 0.97 mm; head (neck excluded) 0.70 mm long, across eyes 0.70 mm broad, pronotum 1.0 mm long, maximum width 0.62 mm, elytra 2.60 mm long, 0.97 wide at base. Paratype female: total body length 4.40 mm, maximum combined width across middle of elytra 1.05 mm; head 0.80 mm long, across eyes 0.70 mm broad, pronotum 1.0 mm long, maximum width 0.67 mm, elytra 2.60 mm long, 1.05 wide at base.

Description. Dorsum brown with pronotum or whole forebody black-brown, mouthparts, palpi, legs and antennae yellow to pale yellowish brown (latest with at least three terminal antennomeres distinctly darkened). Eyes black. Venter uniformly blackish brown, last visible tergite and sternite paler brown. Head circular with round, extremely large and strongly prominent, finely faceted eyes occupying almost the whole sides of head. Tempora very short, head base broadly rounded with a short but broad median notch. Frons narrow, in male distinctly narrower than combined length of two basal antennomeres. Punctures minute and flat but very dense, intervening spaces smaller than punctures. Underside of head less dense punctured. Pubescence yellowish, fine and dense. Antennae long, reaching over base of elytra. Basal antennomere elongate. Third antennomere 1/3 longer than second antennomere. Antennomeres 3–8 long and slender, slightly thickened distally. 9–10 thickened distally (in females stronger than in males)

but not shortened. Terminal antennomere strongly elongate, almost 1/3 longer than (in males) to nearly equal in length (in females) with 9–10 antennomeres together. Terminal maxillary palpomere cultriform. Pronotum narrow and elongate, dorsally slightly flattened, without lustre. Punctures coarser and denser than on head, intervening spaces smaller than punctures. Pubescence yellowish, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum short and broad, truncate apically. Elytra elongate, without distinct lustre, laterally slightly narrowed toward apices (almost parallel). Punctures on each elytron arranged into 6 regular rows (in dorsal view). Intervening spaces microreticulate. Pubescence yellowish, long and very dense, appressed and almost completely hiding the dorsal surface of elytra. Hind wings fully developed. Legs long and slender. Protarsi distinctly thickened in both sexes. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Apice of last visible tergite extending beyond elytral apices. Last visible tergite of male and female narrowed and rounded apically (Figs 37, 40). Last visible sternite of male deeply excavated apically and with a projection on each side of excavation (Fig. 38), in female broadly triangular, rounded medio-apically (Fig. 41). Aedeagus with short and distally flattened parameres (Fig. 39).

Sexual dimorphism. Females have shorter terminal antennomere, shorter basal metatarsomere and broader frons.

Variability. Some specimens are generally darker blackish brown; other specimens are less darkened on head than another. Total body length varies from 3.80 mm to 4.90 mm.

Ecology. Based on material so far seen, this species exhibits a strong riparian preference. Specimens were collected from green leafs of riparian plants (Gen. sp.) growing in profusion on muddy riverbanks of rivers Biga and Gam in Misool (Fig. 92). Beetles were seating or ant-like in movement on leaves in both sunny and cloudy weather, disappearing on their underside during the rain. When disturbed, beetles flew actively around their host plants, resembling a cloud of mosquitoes. The single specimen from Waigeo collected in a different habitat (low tree vegetation on forest edge), possibly a migrant from the nearby stream valley.

Differential diagnosis. Males of the following *Macratria* from the Indo-Australian transition zone bear apically a distinctly excavated last visible sternite: *M. aquila* Telnov, 2011 (Jayapura surroundings, North New Guinea), *M. baliemensis* Telnov, 2011 (Baliem valley, Central Cordillera of New Guinea), *M. bicoloritarsis* Telnov, 2011 (SE Papua New Guinea), *M. dani* Telnov, 2011 (Baliem valley, Central Cordillera of New Guinea), *M. debellatrix* Telnov, 2011 (Yapen Island, Cenderawasih Bay of New Guinea), *M. flaveosetosa* Telnov, 2011 (Jayawijaya Mountains, Central Cordillera of New Guinea), *M. forticornis* Pic, 1896 (North of Bird's Head Peninsula of New Guinea & Waigeo Island), *M. jayawijaya* Telnov, 2011 (Jayawijaya Mountains, Central Cordillera of New Guinea), *M. nigrita* Telnov, 2011 (Cyclops Mountains, North New Guinea), *M. spungisi* Telnov, 2011 (Morobe Province, East New Guinea), and *M. weberi* Telnov, 2011 (Jayawijaya Mountains, Central Cordillera of New Guinea). Of these, only *Macratria debellatrix* and *M. forticornis* have the apical excavation on last visible male sternite similarly deep and provided with lateral projections as in *M. riparia*. However, *M. forticornis* belongs to different species-group: due to its long black body, strongly enlarged basal antennomeres 9–11, presence of fine longitudinal hair band on pronotum etc. (see TELNOV 2011 for definition of *forticornis* species-group). *M. debellatrix* differs clearly from new species in being larger (total body length 5.43 mm), black in coloration, in having strongly enlarged apical three antennomeres, 8th antennomere being very short, and in the aedeagus (parameres rounded and slightly curved apically, median lobe tripartite apically).

Etymology. Named from Latin "riparius" [riparian] because of ecological preference for riparian habitats.

Distribution. Known from Misool Island and Waigeo Island, Raja Ampat.

***Macratria spathulata* sp. nov.** Figs 42–46, 81–83, 93

Holotype ♂, NME: INDONESIA E, West Papua, Tamarau mts, Fef vill. ~6 km E, 00°49'24"S, 132°29'48"E, 450–500 m, 12.II.2012, primary lowland rainforest, river valley, leg. D.Telnov.

Paratypes 9 specimens 3♂, 6♀ [4 NME, 5 DTC] same label as in the holotype.

Measurements. Holotype male, total body length 3.50 mm, maximum combined width at base of elytra 0.84 mm; head 0.75 mm long, across eyes 0.66 mm broad, pronotum 0.85 mm long, maximum width 0.58 mm,

elytra 2.0 mm long, 0.84 wide at base. Paratype female: total body length 3.60 mm, maximum combined width at base of elytra 0.84 mm; head 0.75 mm long, across eyes 0.63 mm broad, pronotum 0.85 mm long, maximum width 0.59 mm, elytra 2.10 mm long, 0.84 wide at base.

Description. Head dark red, pronotum black to black-brown, elytra brown. Mouthparts, palpi and antennae yellow. Legs yellow, in some specimens with darkened metatibiae and tarsi. Underside brown, on head reddish. Some paratypic specimens with completely or laterally black elytra. Head shovel-shaped, smooth and shiny, somewhat flattened dorsally. Eyes round, very large and strongly prominent, finely faceted. Tempora short, about 1/3 of eye' length. Head base nearly straight, with very weak and broad median notch. Frons narrow, in both sexes slightly broader than combined length of two basal antennomeres. Punctures minute and sparse, intervening spaces equal to or 2x larger than punctures. Underside of head smooth and shiny, without visible punctures. Pubescence yellowish, fine but not dense, suberect. Antennae slender, reaching base of elytra. Basal antennomere cylindrical. Third antennomere only slightly longer than second antennomere. Antennomeres 3–8 elongate and slender, not or slightly thickened distally. Antennomeres 9–10 thickened. Terminal antennomere in male slightly longer, in female as long as combined length of antennomeres 9–10. Terminal maxillary palpomere cultriform. Pronotum dorsally opaque, cylindrical, broad on anterior and posterior margins and only slightly expanded laterally. Punctures very coarse and dense but flat, intervening spaces smaller than punctures, microreticulate. Pubescence yellowish, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum broad, truncate apically. Elytra dorsally opaque, laterally narrowed toward apices. Dorsal surface densely microreticulate, punctures on each elytron arranged into 4 irregular and weakly defined rows (in dorsal view). Pubescence yellowish, long and dense, appressed. Hind wings fully developed. Legs densely setose. Protarsi distinctly thickened in both sexes. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Last visible ventrites completely hidden under elytra. Last visible tergite of male broadly rounded apically and with very flat median excavation (Fig. 42), in female narrowly rounded apically (Fig. 45). Last visible sternite of male short and broad, broadly but flat excavated medio-apically (Fig. 43), in female with medio-apical projection which is shallowly excavated at middle (Fig. 46). Aedeagus somewhat anchor-shaped, with strongly widened parameres (Fig. 44).

Sexual dimorphism. Females have comparatively shorter terminal antennomere, which is not or very slightly longer than combined length of antennomeres 9–10.

Variability. Some specimens (teneral?) are generally brown with yellow appendages.

Ecology. Specimens of this species were observed and sampled from leafs in a river valley of primary lowland rainforest surrounded by the Tamarau Mountains. When disturbed specimens flew actively from one tree to another.

Differential diagnosis. Several species of *Macratria* from the Indo-Australian transition zone bear truncate head base, for example *M. celebensis* Champion, 1916 (Sulawesi without exact locality), *M. dani* Telnov, 2011 (Baliem valley, Central Cordillera of New Guinea), *M. nigrita* Telnov, 2011 (Cyclops Mountains, North New Guinea), *M. obtusicapita* Telnov, 2011 (Bintang Mountains, Central Cordillera of New Guinea), *M. phallocryptus* Telnov, 2011 (Jayawijaya and Bintang Mountains, Central Cordillera of New Guinea), *M. sanguiceps* Telnov, 2011 (Central Sulawesi), and *M. weberi* Telnov, 2011 (Jayawijaya Mountains, Central Cordillera of New Guinea). From those species, *Macratria spathulata* differs primarily in the shape of the aedeagus, tricolorate body (dark red head, blackish pronotum, brown or black elytra) with yellow appendages, terminal antennomeres being elongate but not extreme like in *M. dani* or *M. obtusicapita*), eyes being very large and frons narrow and smooth.

Etymology. Named from Latin "spathulatus" [spathulate] because of shovel-shaped, basally truncate head.

Distribution. Known from the Tamarau Mountains, central Bird's Head Peninsula of New Guinea.

***Macratria tamarau* sp. nov.** Figs 47–51, 84–87, 93

Holotype ♂, NME: INDONESIA E, West Papua, Tamarau mts, Fef vill. ~6 km E, 00°49'24"S, 132°29'48"E, 450–500 m, 12.II.2012, primary lowland rainforest, river valley, leg. D.Telnov.

Paratypes 11 specimens 6♂, 5♀ [4 NME, 7 DTC] same label as in the holotype.

Measurements. Holotype male, total body length 3.40 mm, maximum combined width at base of elytra 0.80 mm;

head 0.70 mm long, across eyes 0.60 mm broad, pronotum 0.75 mm long, maximum width 0.52 mm, elytra 2.0 mm long, 0.80 wide. Paratype female: total body length 3.20 mm, 0.79 mm wide at base; head 0.65 mm long, across eyes 0.57 mm broad, pronotum 0.75 mm long, maximum width 0.52 mm, elytra 1.80 mm long, 0.79 wide at base.

Description. Dorsum and venter uniformly black. Mouthparts, palpi and antennae yellow, with darkened three terminal antennomeres. Legs black to black-brown, tarsi yellowish to pale brown. Single paratypic specimen uniformly brown with black apical area of elytra. Head round, with very large and strongly prominent eyes. Head posterior to eyes broadly rounded, base not notched. Frons narrow, in both sexes slightly narrower than combined length of two basal antennomeres. Punctures minute and dense, intervening spaces smaller than punctures. Underside of head smooth and shiny, without visible punctures. Pubescence greyish, fine but not dense, appressed. Antennae slender, reaching over base of elytra. Basal antennomere cylindrical. Third antennomere only slightly longer than second antennomere. Antennomeres 3–8 elongate and slender, not or slightly thickened distally. Antennomeres 9–10 thickened. Terminal antennomere in male elongate, as long as combined length of antennomeres 9–10, in female shorter than combined length of antennomeres 9–10. Terminal maxillary palpomere cultriform. Pronotum elongate, opaque dorsally, cylindrical, broad on anterior margin and slightly narrowing laterally toward base. Punctures much larger than on head, coarse and dense but flat, intervening spaces smaller than punctures, microreticulate. Pubescence greyish, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum broad, truncate apically. Elytra dorsally slightly shiny, laterally indistinctly narrowed toward apices. Dorsal surface densely microreticulate, punctures on each elytron arranged into 4 weakly defined rows (in dorsal view). Punctures becoming very small and sparse posteriad to middle. Pubescence greyish, long and dense, appressed. Hind wings fully developed. Legs long and slender, densely setose. Protarsi distinctly thickened in males. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Last visible ventrites completely or almost hidden under elytra. Last visible tergite of male elongate, rounded apically and with very weak median excavation (Fig. 47), in female broadly rounded apically (Fig. 50). Last visible sternite of male triangular, truncate apically and here covered with numerous elongate scale-lake setae and several very long hairs (Fig. 48), in female broadly triangular and narrowly rounded apically (Fig. 51). Aedeagus with long and thin parameres (Fig. 49).

Sexual dimorphism. Females have comparatively shorter terminal antennomere and narrower protarsi.

Variability. A single specimen (teneral?) is generally pale brown with yellow appendages and darkened apices of elytra (Fig. 87).

Ecology. Specimens of this species were observed and sampled from leafs in a river valley of primary lowland rainforest surrounded by the Tamarau Mountains. When disturbed specimens flew actively from one tree to another.

Differential diagnosis. This species externally resembles several uniformly black coloured species of *Macratria*, but is specifically different primarily due to shape of the male aedeagus and last sternite (covered by numerous elongate scale-like setae on apical margin).

Etymology. Named after locus typicus, the Tamarau (also known as Tamrau) Mountains of New Guinea's Bird's Head Peninsula.

Distribution. Known from the Tamarau Mountains, central Bird's Head Peninsula of New Guinea.

***Macratria trimembris* sp. nov.** Figs 52–56, 89–91

Holotype ♂, NME: INDONESIA E, Raja Ampat, Misool Island S, Biga vill. ~7,50 km W, River Biga valley, 02°01'23"S, 130°12'38"E, 45–78 m, 03.II.2012, primary lowland rainforest on limestone, river valley, leg. D.Telnov.

Paratypes 29 specimens [15 NME, 14 DTC] same label as in the holotype.

This species does belong to *M. beccarii* species-group (see TELNOV 2011 for definition of the group).

Measurements. Holotype male, total body length 6.70 mm, maximum combined width at base of elytra 1.57 mm; head (neck excluded) 1.20 mm long, across eyes 0.90 mm broad, pronotum 1.60 mm long, maximum width 1.16 mm, elytra 3.60 mm long, 1.57 wide at base. Paratype female: total body length 7.40 mm, 1.70 mm wide at base; head 1.25 mm long, across eyes 0.98 mm broad, pronotum 1.80 mm long, maximum width 1.27 mm, elytra 4.0 mm long, 1.70 wide at base.

Description. Dorsum and venter uniformly black, pronotum and elytra with weak bluish lustre. Legs brown to black; when black than meso- and metafemora with a narrow pale brown ring before base. Mouthparts brown to yellowish brown, maxillary palpi yellow with terminal palpomere darkened. Two to five first antennomeres paler than black terminal ones. Sternites 1–4 with somewhat paler brown apical membrane. Head rhomboid with round, midsized and prominent, finely faceted eyes1.25–1.3x longer than converging posteriad tempora. Head base nearly straight, with distinct and broad but short median notch. Frons broad, in male distinctly broader than combined length of two basal antennomeres. Punctures minute and flat but very dense, intervening spaces smaller than punctures. Underside of head smooth and shiny, with almost invisible minute punctures. Pubescence yellowish to golden, fine and dense, appressed. Antennae long and strongly clavate, reaching base of elytra. Basal antennomere elongate cylindrical. Third antennomere 1/3 longer than second antennomere. Antennomeres 3–5 elongate and not thickened distally. In male, antennomeres 6–7 strongly shortened and thickened distally, antennomere 8 very short, flattened and asymmetrical. In female, antennomeres 6–8 are elongate, flattened and somewhat thickened distally. Antennomeres 9–11 in male strongly enlarged (antennomeres 9–11 are longer than 1–8 combined), 9–10 thickened, terminal antennomere long and narrow. In female antennomeres 9–11 also strongly enlarged but their combined length more or less equal to combined length of antennomeres 1-8. Terminal maxillary palpomere cultriform. Pronotum broad, expanded laterally across the middle. Punctures stronger and larger than on head, intervening spaces smaller than punctures. Pubescence golden, long and dense, appressed. Basal groove without dense whitish pubescence. Scutellum subquadrate, truncate apically. Elytra broad, laterally narrowed toward apices. Punctures on each elytron arranged into 4 rows (in dorsal view), leaving sutural area irregularly punctured. Pubescence yellowish to golden, fine and long but relatively sparse, appressed, directed slightly obliquely laterally. Hind wings fully developed. Legs robust, densely setose. Protarsi distinctly thickened in both sexes. Basal metatarsomere in both sexes longer than combined length of metatarsomeres 2–4. Last visible tergite is extending beyond elytral apices. Last visible tergite of male elongate and broadly rounded apically (Fig. 52), in female elongated and angulate apically (Fig. 55). Last visible sternite of male broadly triangular, shortly flattened and indistinctly notched medio-apically (Fig. 53), in female broadly triangular and not flattened (Fig. 56). Aedeagus with distally rounded parameres (Fig. 54).

Sexual dimorphism. Females generally larger, with broader frons and comparatively longer antennomeres 6–8.

Ecology. Specimens were observed and sampled from leafs of young trees in river valley of lowland primary rainforest on limestone. When disturbed, specimens flew actively from one tree to another, but generally remained in same small area.

Differential diagnosis. Among members of *Macratria beccarii* species-group *Macratria trimembris* is specific due to shape of male's last visible sternite (flattened and slightly excavated apically, without groups of long hairs or denticles), the aedeagus (parameres not strongly widened and without group of long setae), notched head base, elytra not excavated medio-laterally and elytral pubescence being directed obliquely laterally. Visually close to *M. debellatrix* Telnov, 2011 (Yapen Island, Cenderawasih Bay of New Guinea), but male of this species have apically deeply excavated last visible sternite and less long terminal antennomere.

Etymology. Named from Latin "trimembris" [three-segmented, tripartite] because of strongly enlarged three terminal antennomeres of this species.

Distribution. Known from Misool Island, Raja Ampat.

Biodiversity and endemism

According to the last published research in this region (TELNOV 2011) there were 108 species of *Macratria* known from the zone of Indo-Australian transition, of these 106 species believed endemic. Adding twelve species described here, the total number rises to 120 species, of which 118 endemics.

Data on species richness and regional endemism of *Macratria* in the Indo-Australian transition zone were recently summarized and analyzed by TELNOV (2011). The recent discoveries of 2012 slightly change this pattern (Tables 1 & 2). However, there are still several large areas such as Timor, Bismarck Islands, most of Lesser Sunda Islands (also known as Nusa Tenggara) etc. whose remain unknown for Macratriinae, although many other regions the diversity is on the increase (Raja Ampat Islands, mainland of New Guinea) due to recent fieldwork efforts.

Table 1. Species richness and endemism of *Macratria* Newman in the zone of Indo-Australian transition.

Island group or region	Island	Species richness	Proportion of endemic species
Admiralty Islands			-
Aru Islands	no data	1	100% endemic
	Wokam	1	0% endemic
Bismarck Islands	New Britain	-	-
	New Ireland	-	-
d'Entrecasteuax, Louisiade & Trobriand Islands		-	-
Kei Islands		-	-
Lesser Sunda Islands	Flores	-	-
	Lombok	1	0% endemic
	Sumba	-	
	Sumbawa	1	100% endemic
Lesser Sunda (region)		2	50% endemic
Moluccan Islands (excl. Aru)	Bacan	3	0% endemic
	Banda Islands	-	-
	Buru	1	0% endemic
	Gebe	-	-
	Halmahera	5	40% endemic
	Morotai	1	0% endemic
	Seram & Lease Islands	1	0% endemic
	Ternate	1	0% endemic
North Moluccas (region)		6	83% endemic
Central Moluccas (region)		1	100% endemic
New Guinea & Cenderawasih Bay Islands		85	99% endemic
	Papua New Guinea	40	98% endemic
	Indonesian Papua (excl. Cenderawasih Bay Islands)	43	99% endemic
	Biak & Numfoor	1	100% endemic
	Yapen	4	75% endemic
Sula Islands	Mangole	2	100% endemic
Sulawesi	Sulawesi, Buton & Peleng	15	87% endemic
Sulawesi (region North)		9	89% endemic
Sulawesi (region Central)		5	80% endemic
Sulawesi (region South)		4	75% endemic
Sulawesi (region East)		-	-
Sulawesi (without precise data)		1	100% endemic
Raja Ampat Islands	Batanta	-	-
	Gag	-	-
	Misool	3	100% endemic
	Salawatti	1	0% endemic
	Waigeo, Gam & Mansuar	4	25% endemic
Raja Ampat (region)		6	67% endemic
Tanimbar Islands		-	-
Timor		-	-
Solomon Islands	Bougainville Island	-	-
	Guadalcanal & Tulaghi	4	75% endemic
	Malaita	1	0% endemic
	New Georgia	1	0% endemic
	San Cristobal & Uki	1	0% endemic
	Santa Isabel	1	0% endemic
Solomon Islands (region)		5	100% endemic

Endemism in *Macratria* is consequently high in mountain areas and on large islands, but lower in lowland regions of New Guinea's mainland (Table 2).

Table 2. Diversity and endemism of *Macratria* Newman by geographical systems of the Indo-Australian transition zone.

Area	Species richness	Proportion of endemic species
Aru Islands	2	50% endemic
Raja Ampat Islands	6	67% endemic
Bird's Head Peninsula (totally)	14	92% endemic
Arfak Mountains and environs	3	100% endemic
Tamarau Mountains and environs	7	100% endemic
Cenderawasih Bay Islands, Nabire, Waropen & Wapoga areas of New Guinea)	13	85% endemic
Bomberai & Onin peninsulas	1	0% endemic
Bird's Neck isthmus	2	50% endemic
Central Cordillera (totally)	39	90% endemic
Baliem valley and environs	4	75% endemic
Jayawijaya Mountains and slopes	8	50% endemic
Bintang (Star) Mountains	5	20% endemic
Owen Stanley Mountains and SE Peninsula of Papua New Guinea	15	72% endemic
Cyclops Mountains	2	100% endemic
Sepik valley	3	100% endemic
Finisterre Mountains	4	75% endemic
Kaindi Mountains	3	66% endemic
Bismarck Range	1	100% endemic
Southern lowlands (Trans-Fly, Merauke and Asmat areas)	6	67% endemic

Corrections

TELNOV (2011: 105) stated *Macratria balkei* Telnov, 2011 belongs to the *gestroi* species-group, however this is incorrect due to different shape of male last visible sternite and aedeagus.

Redescription of terminal antennomere of *Macratria distincticornis* Pic, 1901 (TELNOV 2011: 139) must be corrected as follows: "Das Apikalglied sehr lang und schlank, beim Männchen 2,1 x länger, beim Weibchen etwa so lang bis etwas länger als die Glieder 9–10 zusammen".

Acknowledgements

My friendly and very competent accompanier Laszlo Wagner (Budapest, Hungary) is herewith thanked for being with me during the 2012 expedition to Raja Ampat and the Tamarau Mountains, as also for assistance with sampling specimens in North Asmat area.

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TELNOV, D. (2011): Taxonomische Revision der Gattung *Macratria* Newman, 1838 (Coleoptera: Anthicidae, Macratriinae) aus Wallacea, Neuguinea und den Salomonen: 97–285, pls. 17-37. – In: TELNOV D. (ed.) Biodiversity, Biogeography and Nature Conservation in Wallacea and New Guinea. Rīga, The Entomological Society of Latvia: 434 pp. + 92 pls.

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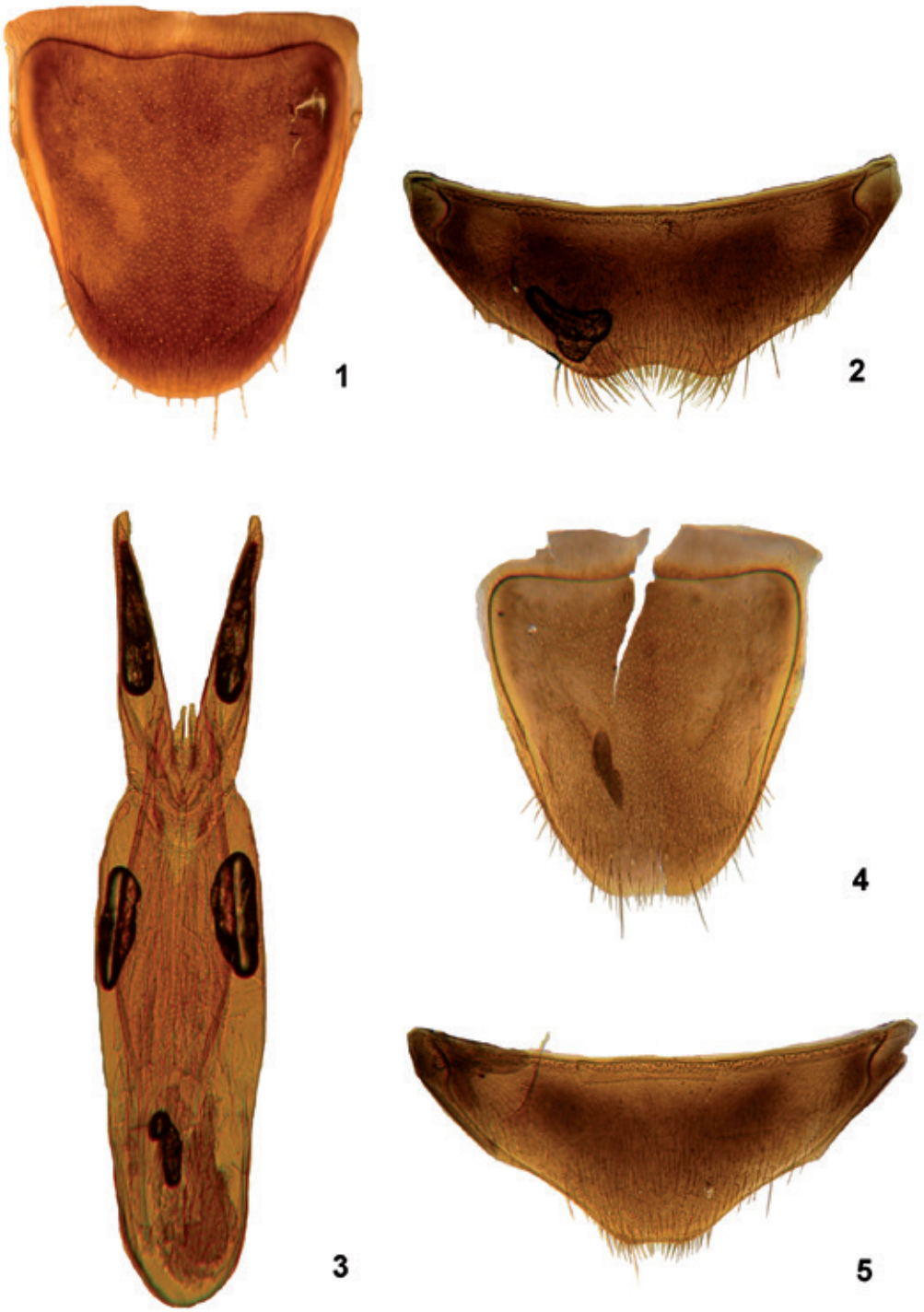
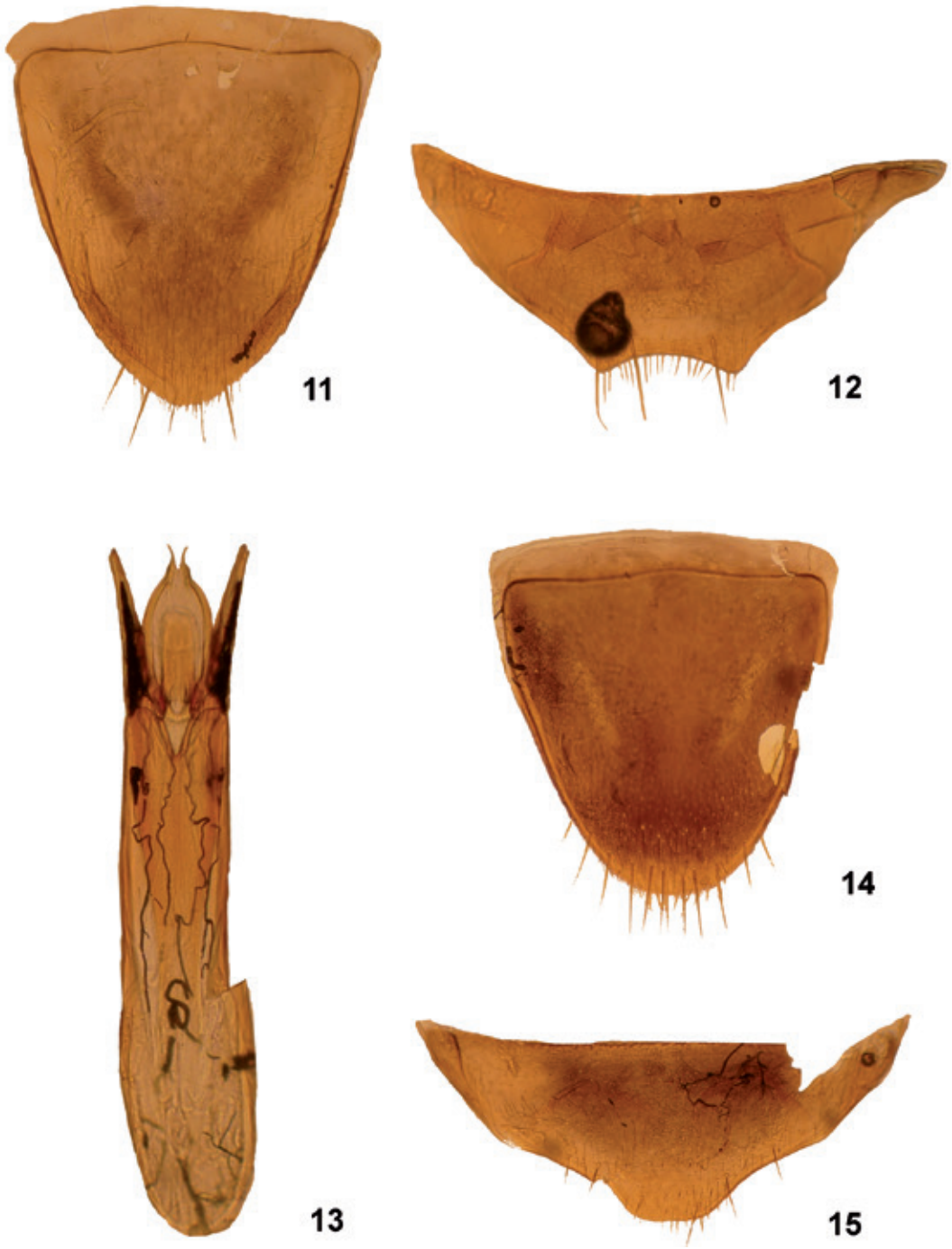


Figures 1–5. *Macratria abun* sp. nov., paratypes ♂ & ♀. 1 – last visible tergite (♂), dorsal; 2 – last visible sternite (♂), ventral; 3 – aedeagus; 4 – last visible tergite (♀), dorsal; 5 – last visible sternite (♀), ventral.

Figures 6–10. *Macratria asmat* sp. nov., paratypes ♂ & ♀. 6 – last visible tergite (♂), dorsal; 7 – last visible sternite (♂), ventral; 8 – aedeagus; 9 – last visible tergite (♀), dorsal; 10 – last visible sternite (♀), ventral.



Figures 11–15. *Macratria brazzaensis* sp. nov., holotype ♂, paratypes ♂ & ♀. 11 – last visible tergite (holotype ♂), dorsal; 12 – last visible sternite (holotype ♂), ventral; 13 – aedeagus (paratype); 14 – last visible tergite (paratype ♀), dorsal; 15 – last visible sternite (paratype ♀), ventral.

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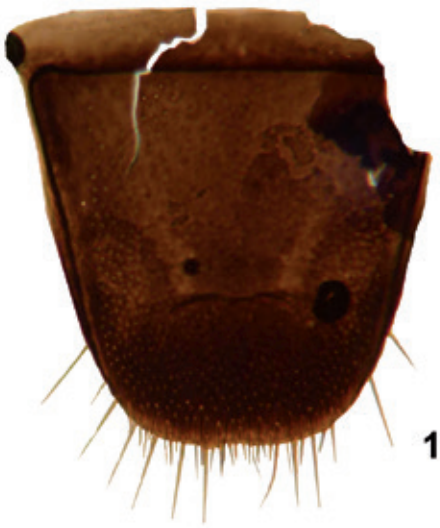

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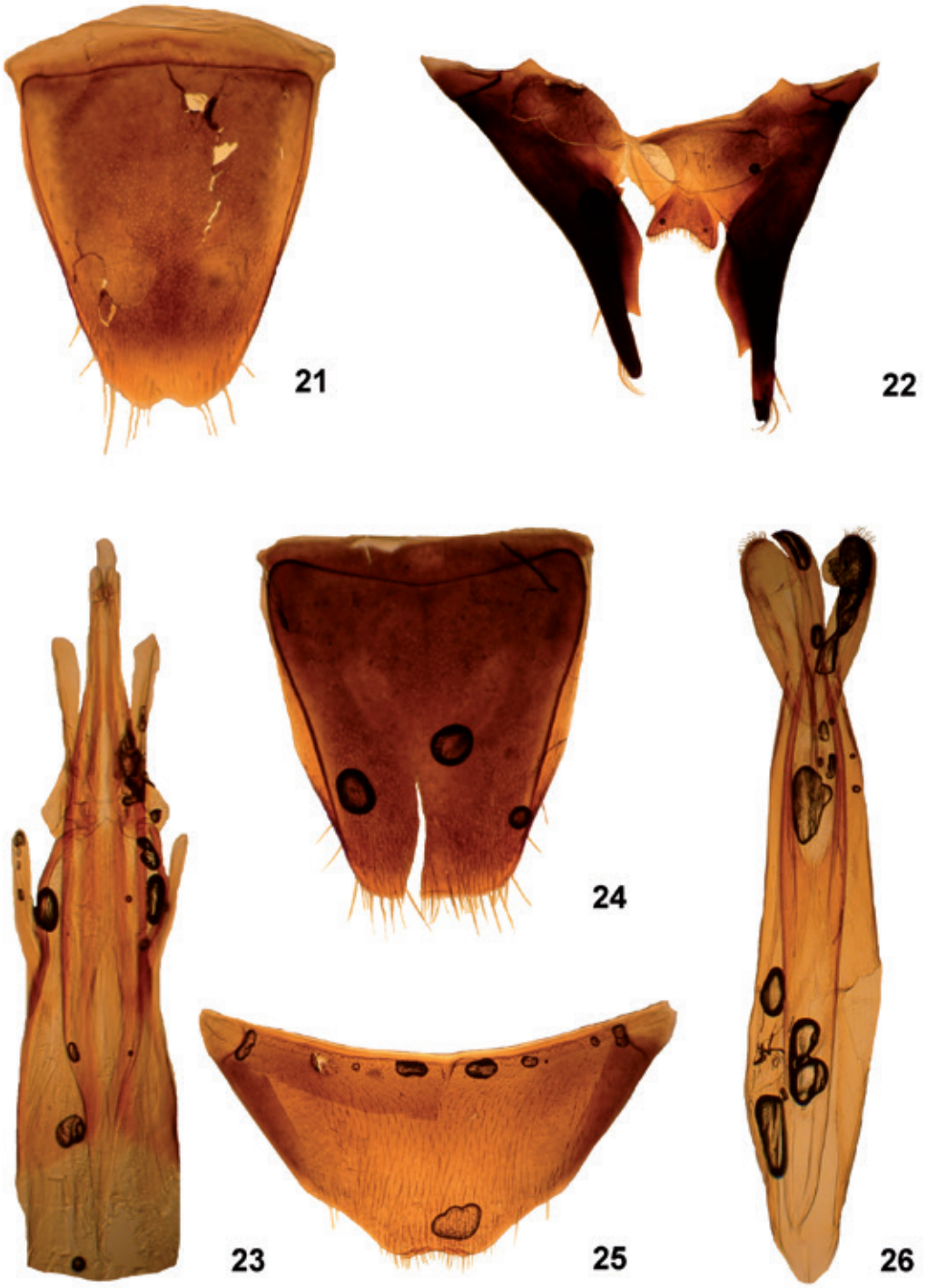
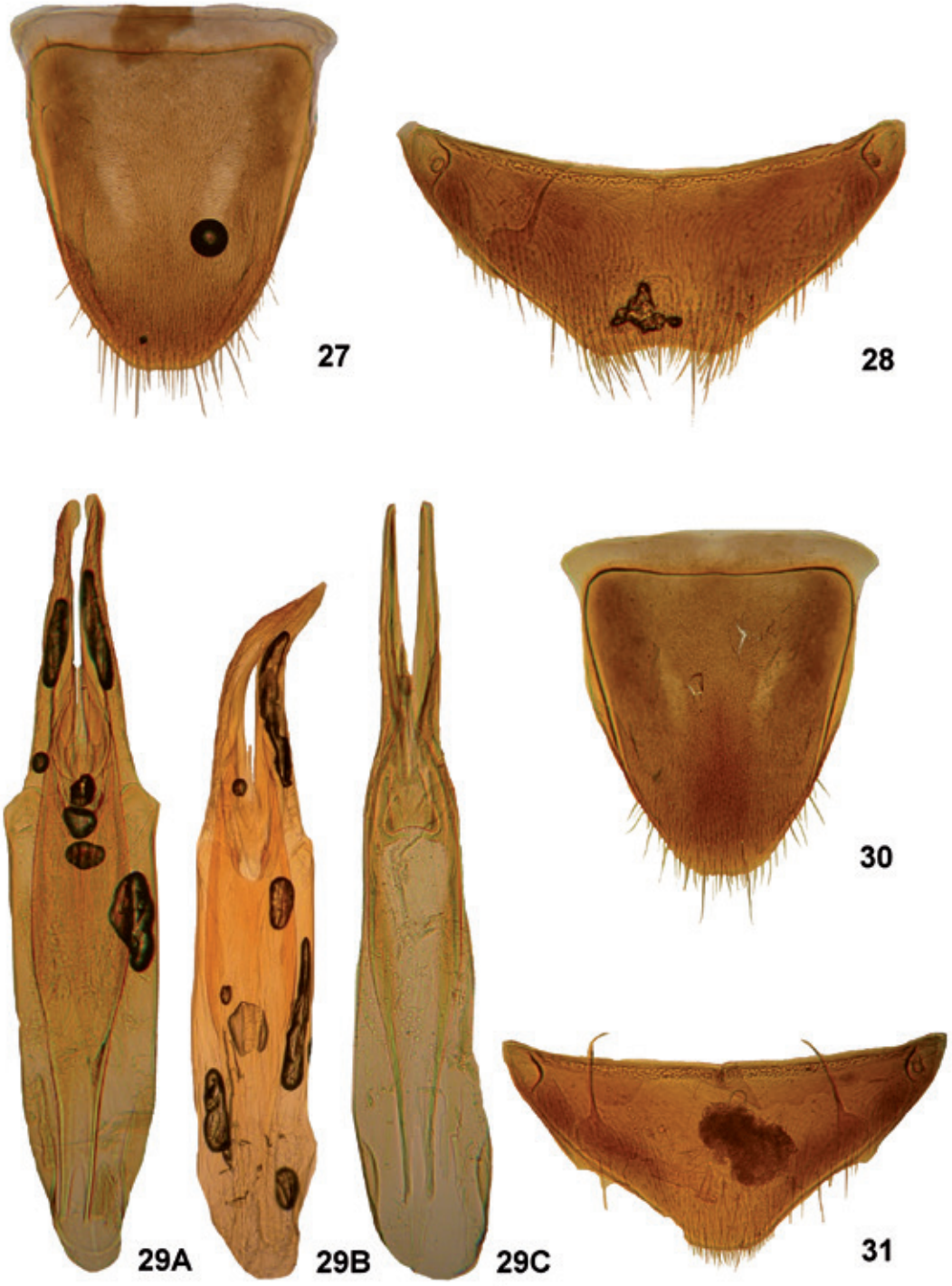
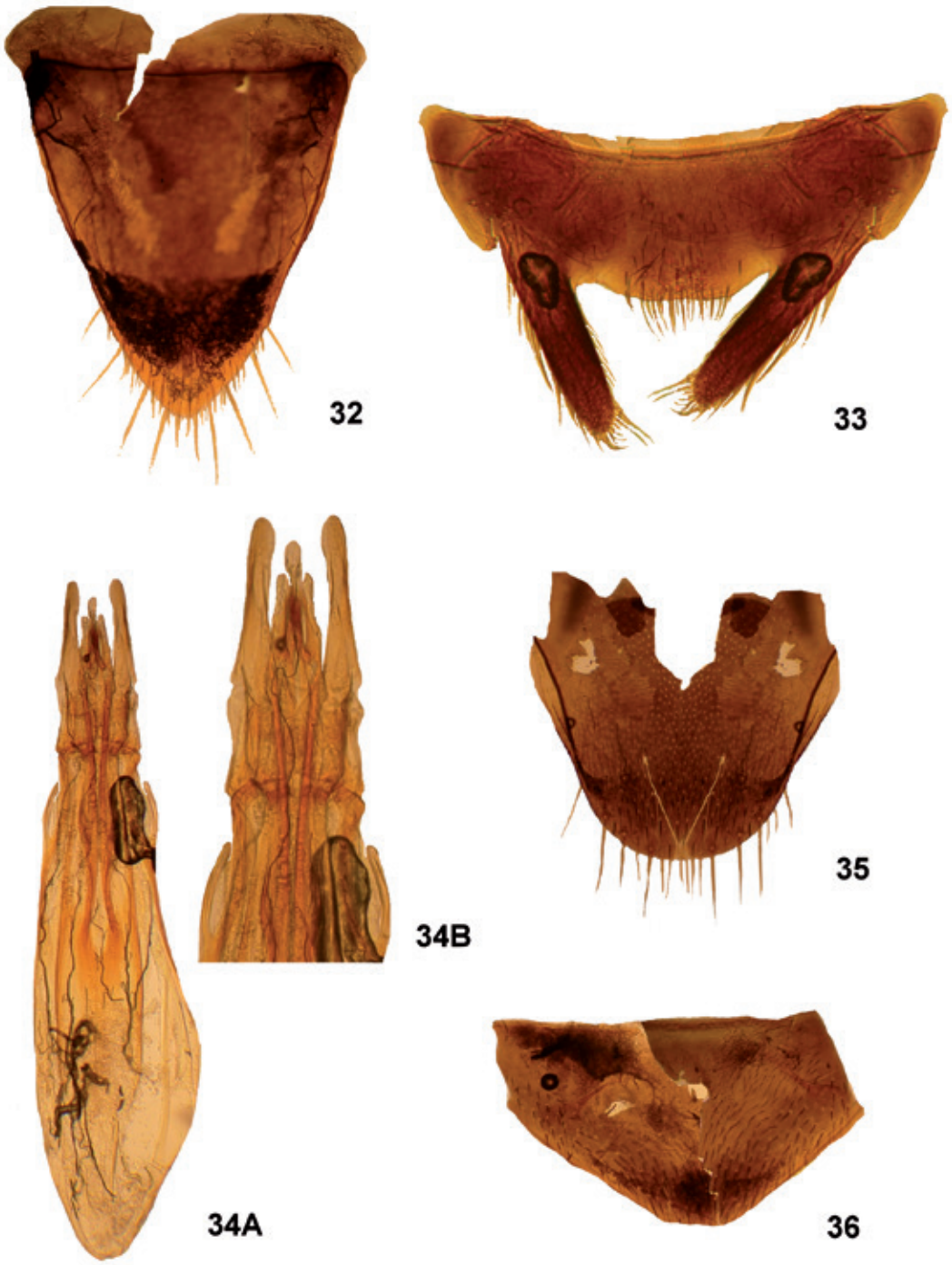
Figures 16–20. 16–18: *Macratria cryptica* sp. nov., holotype ♂. 16 – last visible tergite, dorsal; 17 – last visible sternite, ventral; 18 – aedeagus; 19–20: *Macratria opaca* sp. nov., holotype ♀. 19 – last visible tergite, dorsal; 20 – last visible sternite, ventral.



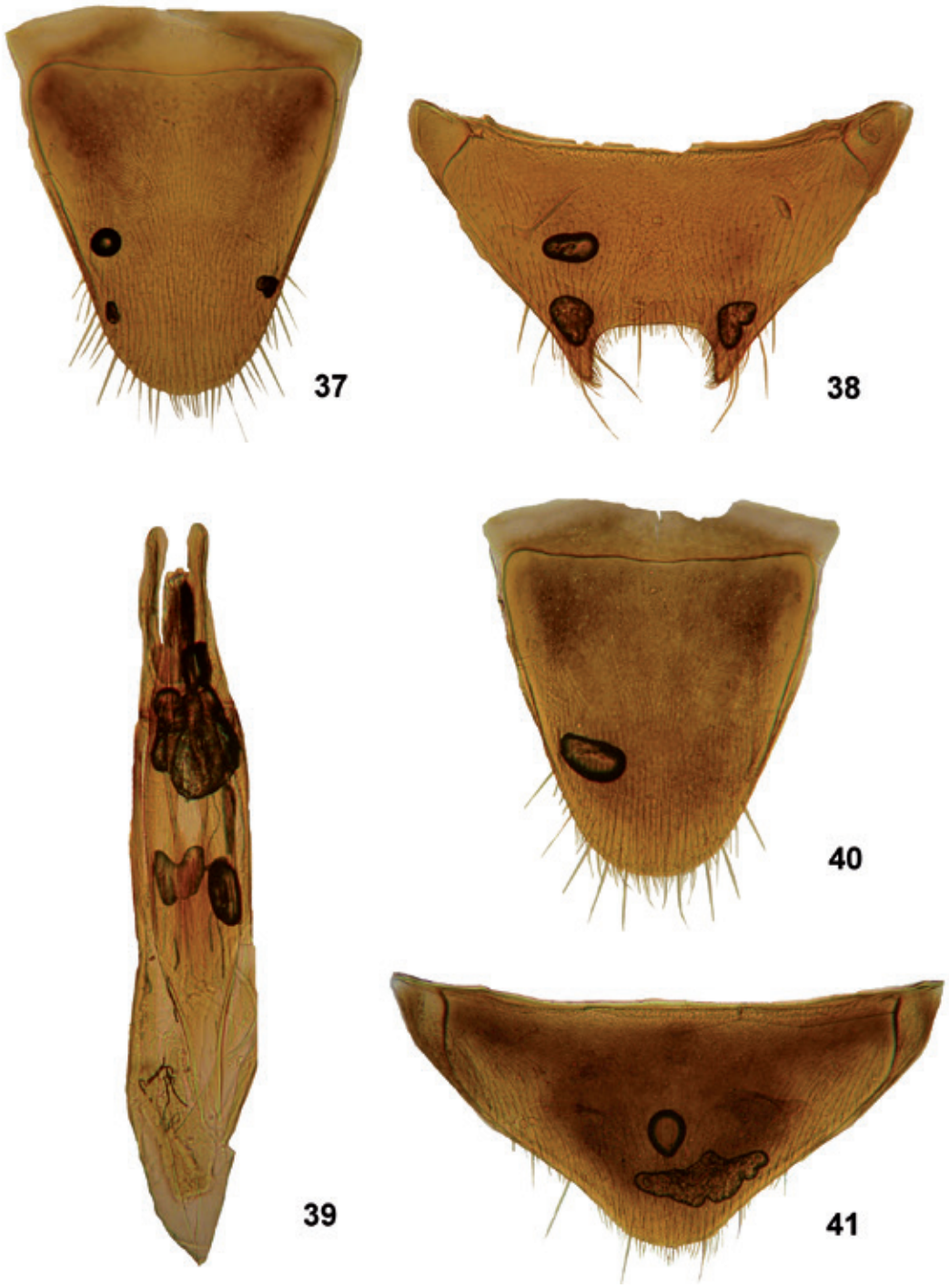
Figures 21–26. 21–23: *Macratria forficula* sp. nov., holotype ♂. 21 – last visible tergite, dorsal; 22 – last visible sternite, ventral; 23 – aedeagus; 24–26: *Macratria wallacei* Champion, 1916 ♂. 24 – last visible tergite, dorsal; 25 – last visible sternite, ventral; 26 – aedeagus.



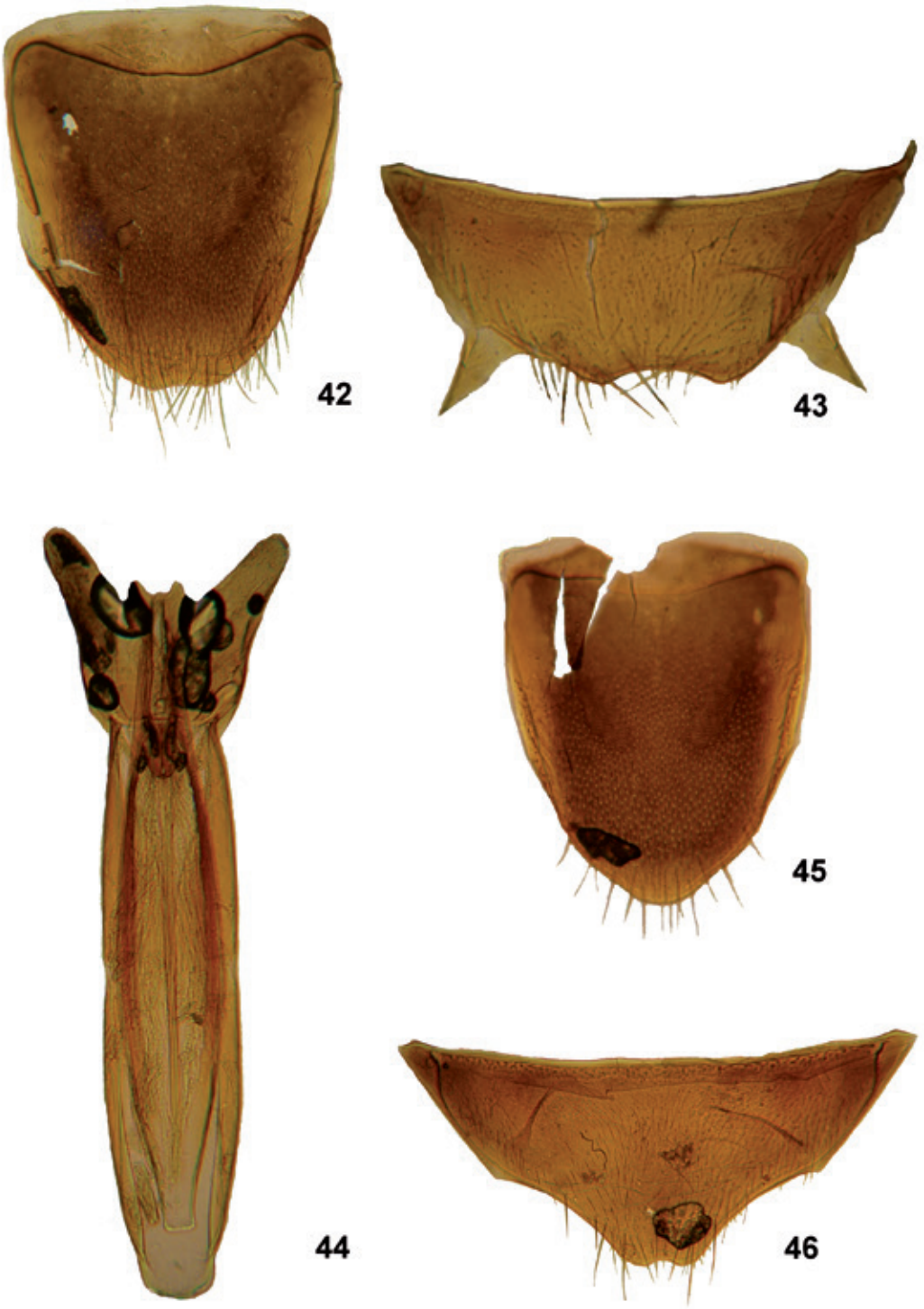
Figures 27–31. *Macratria pluvialis* sp. nov., paratypes ♂ & ♀. 27 – last visible tergite (♂), dorsal; 28 – last visible sternite (♂), ventral; 29A, B & C – aedeagus (different paratypes), different views; 30 – last visible tergite (♀), dorsal; 31 – last visible sternite (♀), ventral.



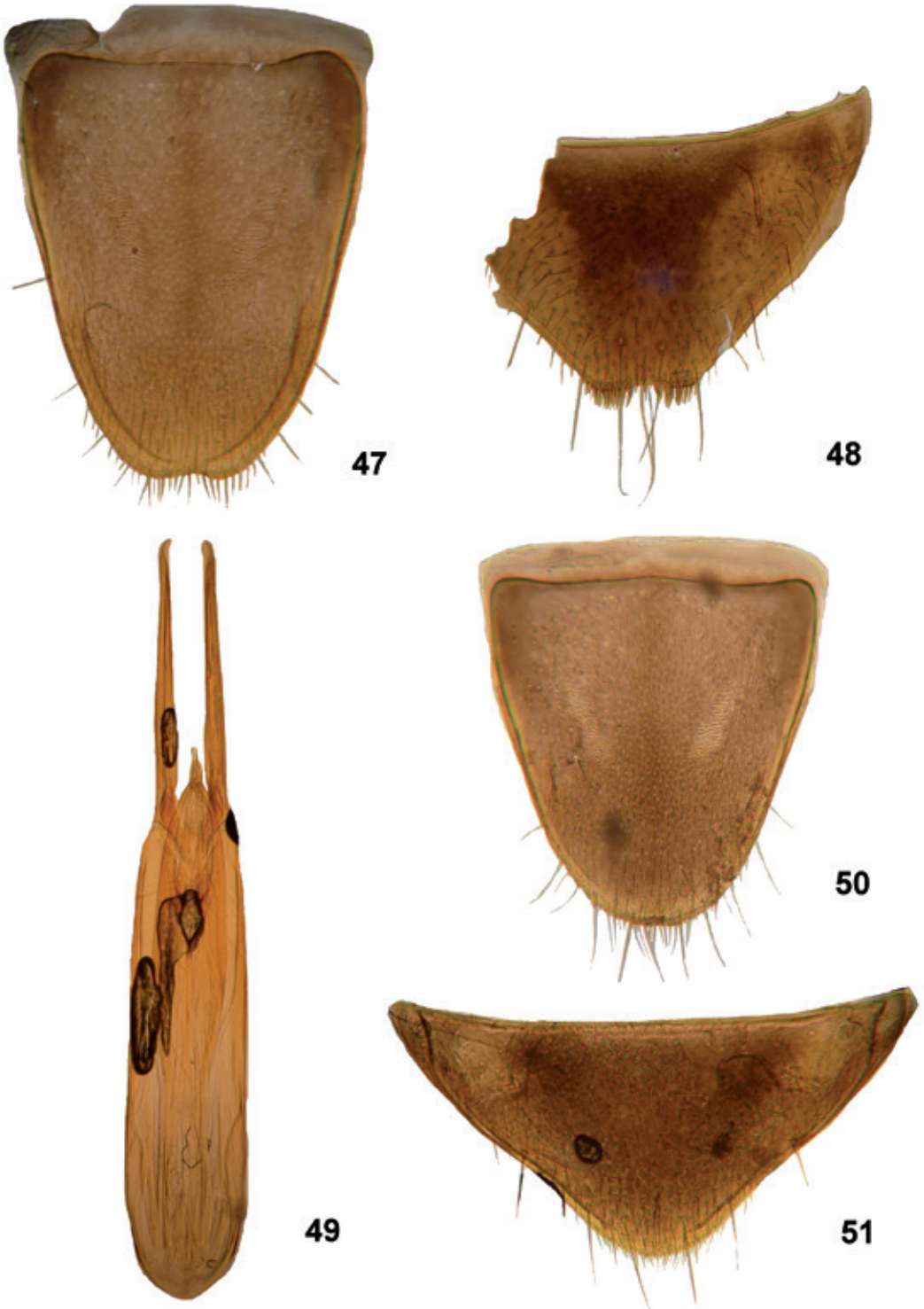
Figures 32–36. *Macratria pseudodensata* sp. nov., paratypes ♂ & ♀. 32 – last visible tergite (♂), dorsal; 33 – last visible sternite (♂), ventral; 34A, B – aedeagus; 35 – last visible tergite (♀), dorsal; 36 – last visible sternite (♀), ventral.



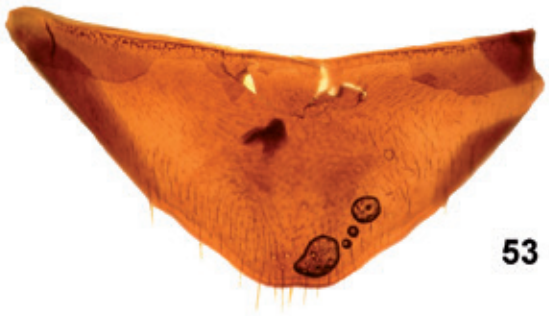
Figures 37–41. *Macratria riparia* sp. nov., paratypes ♂ & ♀. 37 – last visible tergite (♂), dorsal; 38 – last visible sternite (♂), ventral; 39 – aedeagus; 40 – last visible tergite (♀), dorsal; 41 – last visible sternite (♀), ventral.

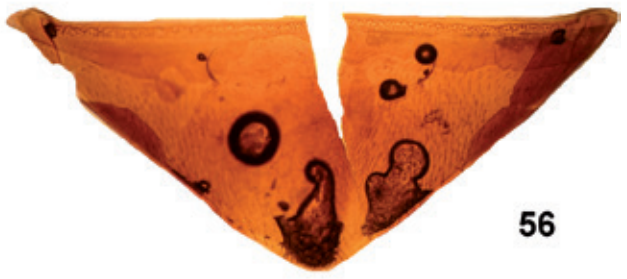


Figures 42–46. *Macratria spathulata* sp. nov., paratypes ♂ & ♀. 42 – last visible tergite (♂), dorsal; 43 – last visible sternite (♂), ventral; 44 – aedeagus; 45 – last visible tergite (♀), dorsal; 46 – last visible sternite (♀), ventral.

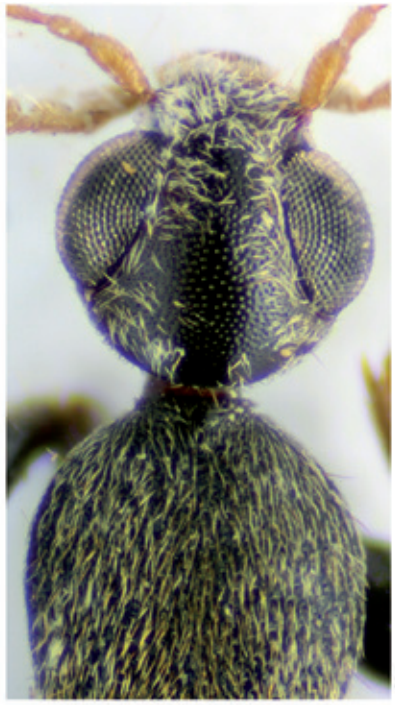


Figures 47–51. *Macratria tamarau* sp. nov., paratypes ♂ & ♀. 47 – last visible tergite (♂), dorsal; 48 – last visible sternite (♂), ventral; 49 – aedeagus; 50 – last visible tergite (♀), dorsal; 51 – last visible sternite (♀), ventral.

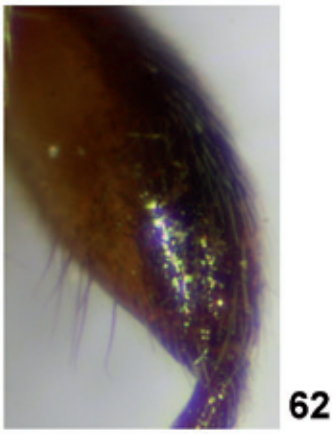




Figures 52–56. *Macratria trimembris* sp. nov., paratypes ♂ & ♀. 52 – last visible tergite (♂), dorsal; 53 – last visible sternite (♂), ventral; 54 – aedeagus; 55 – last visible tergite (♀), dorsal; 56 – last visible sternite (♀), ventral.

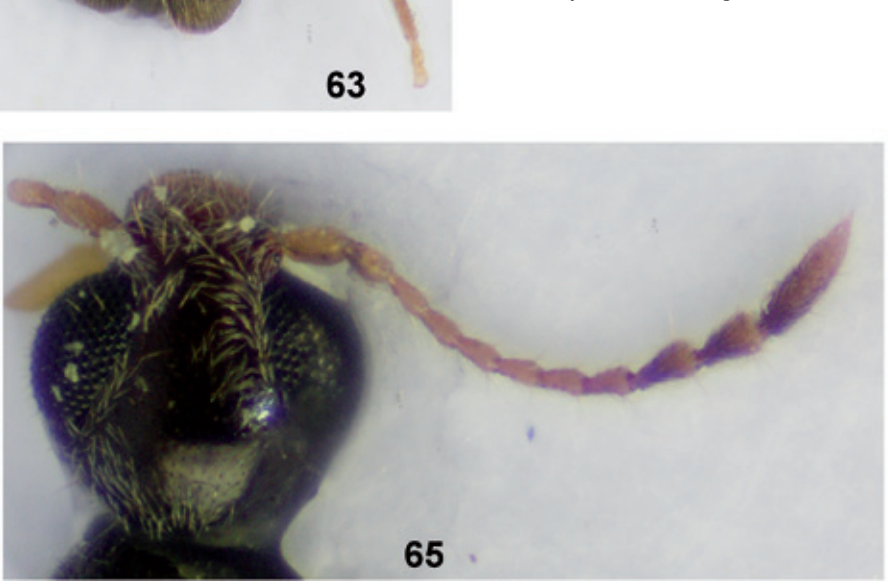


Figures 57–59. *Macratria abun* sp. nov., paratypes ♂ & ♀, dorsal view. 57 – habitus, ♂; 58 – head ♂; 59 – forebody and left antenna, ♀.

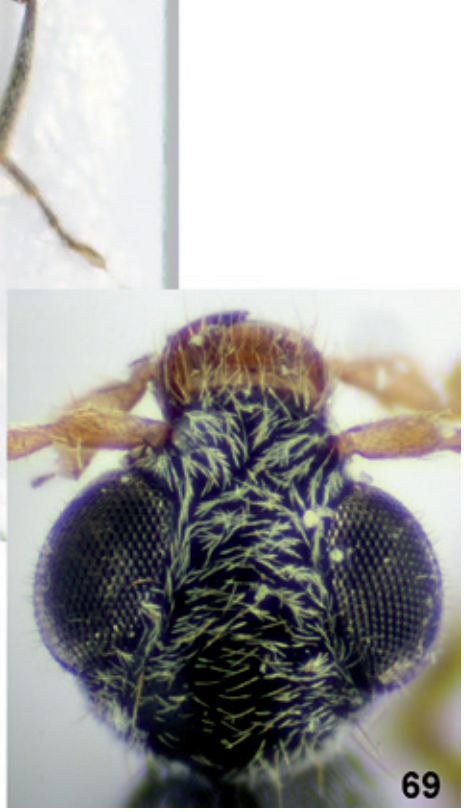


Figures 60–62. *Macratria asmat* sp. nov., holotype ♂, dorsal view. 60 – habitus, ♂; 61 – head; 62 – right metafemur.

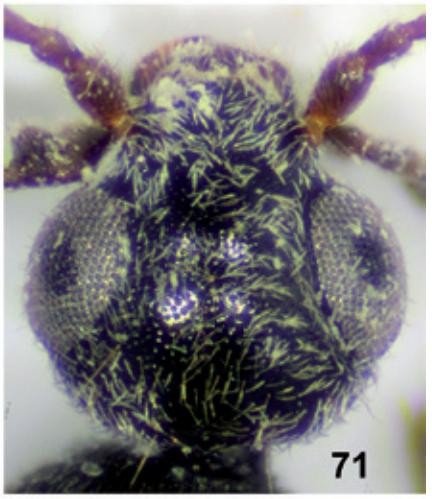
Figures 63–65. *Macratria brazzaensis* sp. nov., paratypes ♂ & ♀, dorsal view. 63 – habitus, ♂; 64 – forebody, ♂; 65 – head and right antenna, ♀.



Figures 66–67. *Macratria cryptica* sp. nov., holotype ♂, dorsal view. 66 – habitus, ♂; 67 – head.

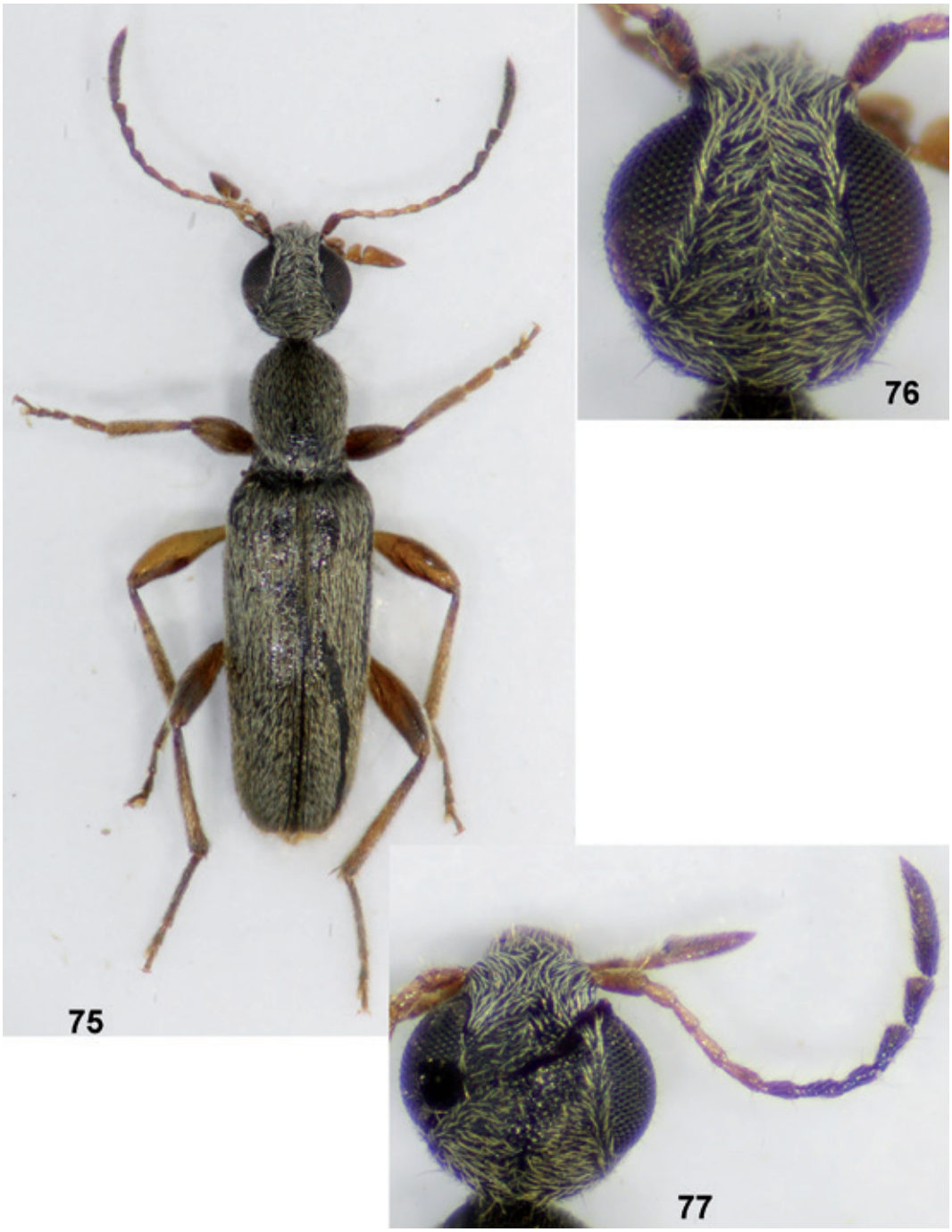


Figures 68–69. *Macratria forficula* sp. nov., holotype ♂, dorsal view. 68 – habitus, ♂; 69 – head.

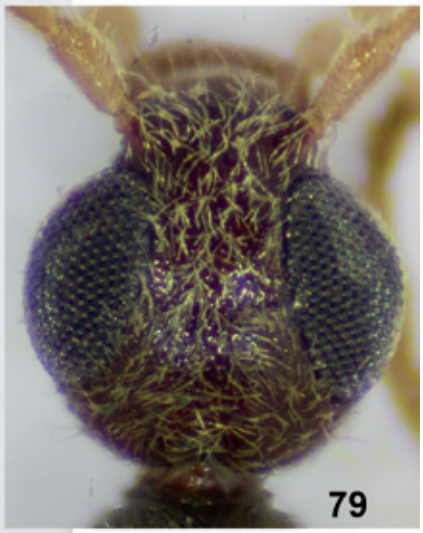


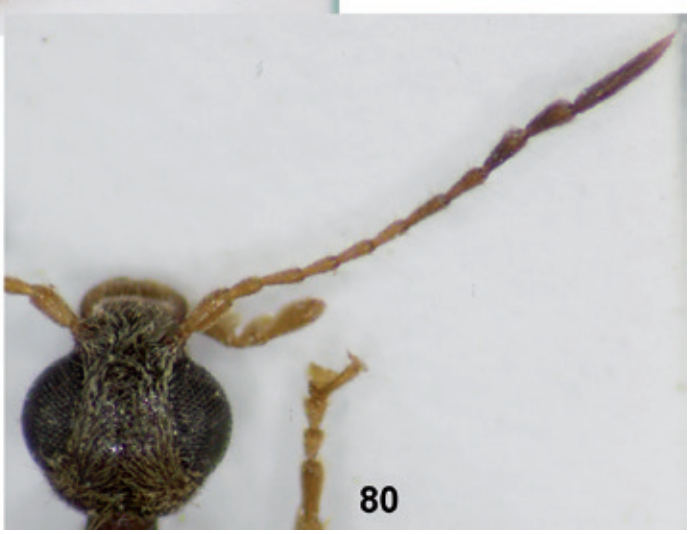
Figures 70–71. *Macratria opaca* sp. nov., holotype ♀, dorsal view. 70 – habitus, ♂; 71 – head.

Figures 72–74. *Macratria pluvialis* sp. nov., paratypes ♂ & ♀, dorsal view. 72 – habitus, ♂; 73 – head, ♂; 74 – head and left antenna, ♀.

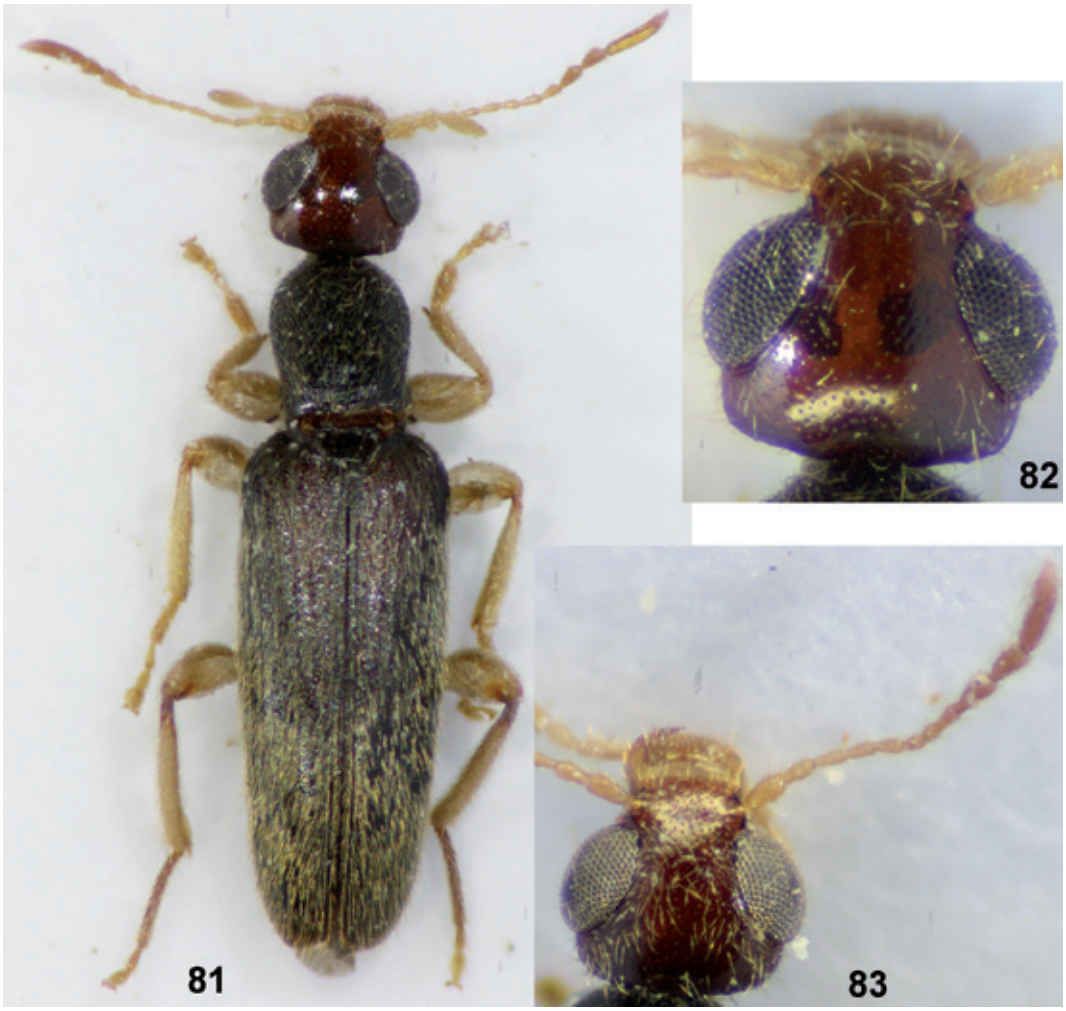


Figures 75–77. *Macratria pseudodensata* sp. nov., ♂ & ♀, dorsal view. 75 – habitus (holotype ♂); 76 – head (holotype ♂); 77 – head and right antenna (paratype ♀).

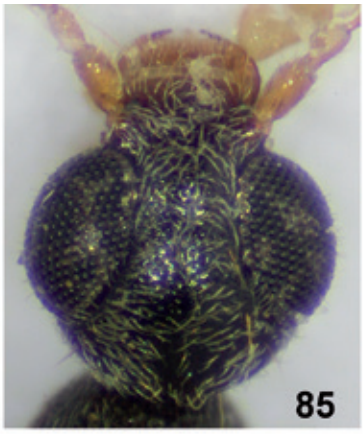




Figures 78–80. *Macratria riparia* sp. nov. paratypes ♂ & ♀, dorsal view. 78 – habitus, ♂; 79 – head, ♂; 80 – head and right antenna, ♀



Figures 81–83. *Macratria spathulata* sp. nov. paratypes ♂ & ♀, dorsal view. 81 – habitus, ♂; 82 – head, ♂; 83 – head and right antenna, ♀.



Figures 84–86. *Macratria tamarau* sp. nov. paratypes ♂ & ♀, dorsal view. 84 – habitus, ♂; 85 – head, ♂; 86 – head and right antenna, ♀.

Figures 87–88. 87 – *Macratria tamarau* sp. nov. paratype (brown form) habitus, dorsal view; 88 – *Macratria wallacei* Champion, ♂ specimen from Waisai env., Waigeo, habitus, dorsal view.

Figures 89–91. *Macratria trimembris* sp. nov. paratypes ♂ & ♀, dorsal view. 89 – habitus, ♂; 90 – head, ♂; 91 – head and right antenna, ♀.

Figures 92–93. Habitats of *Macratria* spp. 92 – riparian vegetation of River Gam, Central Misool – the microhabitat of *M. riparia* sp. nov.; 93 – valley of unnamed river in the Tamarau Mountains – habitat of *M. abun* sp. nov., *M. cryptica* sp. nov., *M. forficula* sp. nov., *M. opaca* sp. nov., *M. spathulata* sp. nov., and *M. tamarau* sp. nov.