

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology, Federal
Scientific Center of the East Asia
Terrestrial Biodiversity, Vladivostok

Number 437: 1-5

ISSN 1026-051X (print edition)
ISSN 2713-2196 (online edition)

September 2021

<https://doi.org/10.25221/fee.437.1>

<http://zoobank.org/References/F5BAB989-0D79-40EA-9807-E761BE95998B>

DISCOVERY OF THE GENUS *ODONTOMYRME* LELEJ, 1983 (HYMENOPTERA: MUTILLIDAE) IN NEW GUINEA WITH DESCRIPTION OF A NEW SPECIES

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Summary. *Odontomyrme rasnitsyni* sp. n. is described and illustrated from Papua New Guinea. A new species is similar to *O. addenda* (André, 1901) from Australia (Queensland) but differs by small apicomedial yellowish cuticular spot on metasomal tergum 2 and tergum 3 with black cuticula. The genus *Odontomyrme* Lelej, 1983 is newly recorded from New Guinea Island.

Key words: Hymenoptera, Mutillidae, velvet ant, taxonomy, new species.

А. С. Лелей. Нахождение рода *Odontomyrme* Lelej, 1983 (Hymenoptera: Mutillidae) в Новой Гвинее с описанием нового вида // Дальневосточный энтомолог. 2021. N 437. С. 1-5.

Резюме. Из Папуа Новой Гвинеи описан *Odontomyrme rasnitsyni* sp. n. Новый вид сходен с *O. addenda* (André, 1901) из Австралии (Квинсленд), но отличается небольшим срединновершинным желтоватым пятном на втором метасомальном тергите и черной кутикулой третьего тергита. Род *Odontomyrme* Lelej, 1983 впервые указывается для острова Новая Гвинея.

INTRODUCTION

Mutillid wasps of the Australasian Region are a poorly studied component of the insect fauna. Currently, there are more than 260 Australian species described and

placed in 13 genera: *Odontomutilla* Ashmead, 1899 (4 species), *Trogaspidia* Ashmead, 1899 (5), and *Wallacidia* Lelej & Brothers, 2008 (2) in the subfamily Mutillinae; *Ancistrotilla* Brothers, 2012 (12), *Aglaotilla* Brothers, 2018 (14), *Ascetotilla* Brothers, 1971 (8), *Australotilla* Lelej, 1983 (5), *Bothriomutilla* Ashmead, 1899 (3), *Ephutomorpha* André, 1902 (186), *Eurymutilla* Ashmead, 1899 (11), *Odontomyrme* Lelej, 1983 (6), and *Ponerotilla* Brothers, 1994 (4) in the subfamily Sphaerophthalminae; *Orientilla* Lelej, 1979 (1) in the subfamily Dasylabrinae, and Mutillidae incertae sedis – 4 species (Brothers *et al.*, 2012, Brothers & Lelej, 2017; Pagliano *et al.*, 2020). *Ephutomorpha* represents a portmanteau genus used to house all Australasian sphaerophthalmine species pending their revision, and thus contains a wide morphological diversity (Brothers, 2018).

Recently Sk. Yamane gave me mutillid female collected in Papua New Guinea from the genus *Odontomyrme*. This specimen is described and illustrated here as a new species and the genus *Odontomyrme* is newly recorded from New Guinea. Holotype of new species is deposited in the Federal Scientific Center of the East Asia Terrestrial Biodiversity Vladivostok, Russia (IBSS).

The following abbreviations are used: S1, S2, S3, etc., to denote the first, second, third, etc. metasomal sterna; T1, T2, T3, etc., to denote the first, second, third, etc. metasomal terga.

TAXONOMY

Genus *Odontomyrme* Lelej, 1983

Odontomyrme Lelej, 1983: 613, ♀; Brothers & Lelej, 2017: 59, 94, ♀ ♂; Brothers *et al.*, 2019: 582, ♀ ♂; Pagliano *et al.*, 2020: 75, fig. 103, ♀.

Type-species *Odontomyrme tobiasi* Lelej, 1983 (female), by original designation. The male of the type species has not been recognized; the presumed males of the other species were associated by Brothers & Lelej (2017) based on the specimens collected *in copula*.

DIAGNOSIS (based on Brothers & Lelej, 2017). FEMALE. Head rounded, narrower than mesonotum. Eyes oval, moderately convex with distinct ommatidia. Antennal scrobe with sinuate dorsal carina almost reaching eye. Antenna dorsally broadened medially; flagellomere 1 shorter or slightly longer than pedicel, other flagellomeres shorter than their width. Mesosoma with protruding mesopleuron; mesonotum considerably wider than propodeum. Humeral and propodeal angles usually toothed; scutellar scale lacking. Metasoma sub-cylindrical, segment 1 slightly narrower than second one; T1 with differentiated anterior and dorsal surfaces; T2 long, laterally weakly arcuate, basolaterally with felt line. Pygidial area developed. MALE. Scape with two equally well developed ventral ridges; pedicel about as long as wide and about as long as flagellomere 1. Pro-mesonotal suture abruptly V-shaped (laterally straight, mesally angled). Tegula slightly elongate, posteriorly reaching trans-scutal articulation or slightly beyond; T1 gradually broadened posteriorly, more or equal $0.5 \times$ length T2, apically constricted from T2; lateral felt line on S2 distinct but minute.

SPECIES INCLUDED AND DISTRIBUTION. Includes six Australian species and two subspecies: *O. tobiassi* Lelej, 1983; *O. gilberti* (André, 1898), *O. difficilis* (André, 1901), *O. abjecta* (André, 1901), *O. addenda addenda* (André, 1901), *O. addenda ferrugineipes* (André, 1903), *O. addenda rufocincta* (André, 1903), and *O. sessilis* (André, 1901). One new species from New Guinea described below.

REMARKS. Originally the genus *Odontomyrme* Lelej, 1983 was described in the tribe Odontomutillini Lelej, 1983 of the subfamily Dasylabrinae Invrea, 1964; later (Lelej & Nemkov, 1997) this tribe was placed in the subfamily Ephutinae Ashmead, 1903 but in last classification (Brothers & Lelej, 2017) *Odontomyrme* is placed in the tribe Dasymutillini Brothers et Lelej, 2017 of the subfamily Sphaerophthalminae Schuster, 1949. This genus is required the revision because real number of the species is much more, some of them are still undescribed, another ones are included in the unrevised Australian genus *Ephutomorpha* André, 1902.

***Odontomyrme rasnitsyni* Lelej, sp. n.**

<http://zoobank.org/NomenclaturalActs/AE231BC1-6881-4B02-AE30-6E9435EA7759>

Figs 1–5

TYPE MATERIAL. Holotype – ♀, **Papua New Guinea:** Gumi, 2.II 2004, leg. S. Onoda [IBSS].

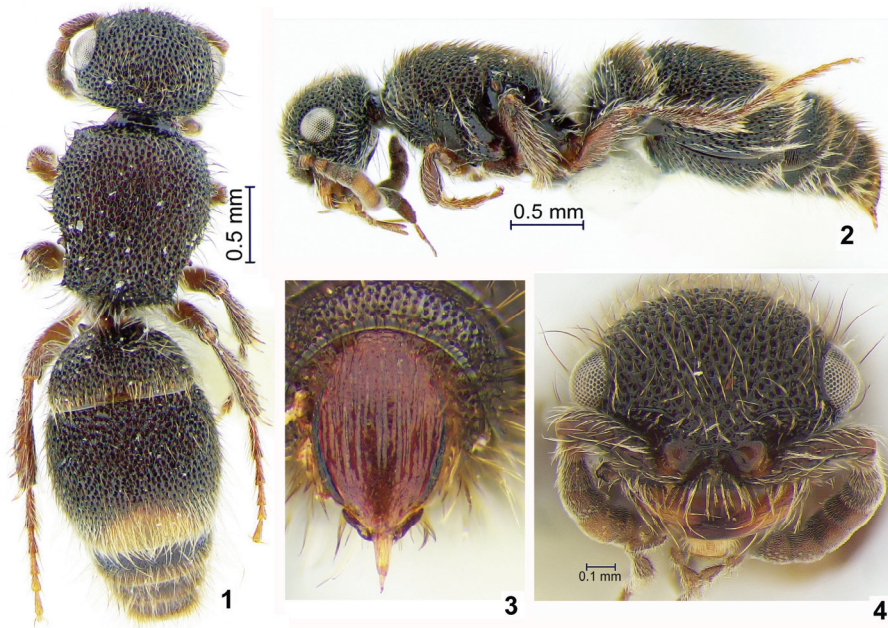
DIAGNOSIS. FEMALE. Genal carina well developed forming on hypostomal carina tubercle. Scutellar scale lacking. Mesopleuron convex, mesonotum wider than pronotum or propodeum, mesopleural vertical carina well developed with long white sub-erect setae. Metasoma black, T2 with apicomedial small yellowish cuticular spot, T6 with elongate pygidium, with lateral carina obliterated apically, with sparse striae (~15 at midpoint), no striae reaching posterior margin, apical quarter smooth shiny.

DESCRIPTION. FEMALE. Body length 4.2 mm. *Coloration and setation.* Head black, mandible except apex brownish-red, flagellomeres ventrally yellowish-brown. Mesosoma black with brownish-red legs. Metasoma black, T2 with apicomedial small yellowish cuticular spot, T6 brownish-red. Sparse fully plumose white setae on clypeus, face below antennal scrobe, vertex, pronotum anterad, posterior propodeal face, T1 anterior face, T2–6 laterally, S2–6. Sub-erect sparse grayish setae on frons, gena, scape. Flagellomeres with dense recumbent microsetae. Mesosoma dorsally with sparse mixed black and grayish sub-erect setae. Legs with rather dense recumbent and sub-erect white setae. T1 dorsally with black sub-erect setae whitish on posterior border. T2 with sparse sub-erect black setae, longer denser yellowish ones posteriorly. T3–5 with same setae as on T2 posteriorly.

Head. Antennal tubercles connected by weak transverse carina. Antennal scrobe with sinuate dorsal carina almost reaching eye. Ratio pedicel and flagellomeres 1–3 20:25:25:30. Genal carina well developed forming on hypostomal carina tubercle. Mandible inner border with one preapical denticle. Scape bicarinate ventrally. Clypeus with arcuate subapical transverse carina. Frons, vertex and gena punctures dense.

Mesosoma. Mesopleuron convex, mesonotum wider than pronotum or propodeum, mesopleural vertical carina well developed with long white sub-erect setae. Posterior propodeal face reticulate with some interspaces reduced, forming apparent striae and tubercles. Lateral and posterior propodeal faces separated by wavy subdentate carina. Mesopleuron, metapleuron and propodeal lateral face mostly smooth. Dorsum of mesosoma with dense punctures, larger and confluent on disc.

Metasoma. T2 basolaterally with short felt line. S1 with simple longitudinal carina. Lateral process of T1 (dorsal view) rectangle. T1 posterior border smooth shiny. T6 with elongate pygidium, with lateral carina obliterated apically, with sparse striae (~15 at midpoint), no striae reaching posterior margin, apical quarter smooth shiny.



Figs 1–4. *Odontomyrme rasnitsyni* sp. n., holotype; 1 – habitus, dorsal view, 2 – habitus, lateral view, 3 – pygidial plate, 4 – head, face view.



Fig. 5. *Odontomyrme rasnitsyni* sp. n., labels of holotype.

MALE unknown.

REMARKS. In Lelej's (1983) key, this species keys to *Odontomyrme addenda* (André, 1901), which is known from Australia (Queensland) and has small apico-medial yellowish cuticular spot on T2, T3 with black cuticula (large apico-medial reddish cuticular spot on T2, T3 with reddish cuticula in *addenda*).

ETYMOLOGY. The specific name is dedicated to Alexandr Pavlovich Rasnitsyn, world authority on Hymenoptera classification and evolution, for his 85 years jubilee. Treat as a noun in genitive.

ACKNOWLEDGMENTS

Valery Loktionov helped me with the photos of new species. Many thanks S. Onoda, who collected the holotype and Sk. Yamane who made this specimen available for this study.

REFERENCES

- André, E. 1898. Contribution a la connaissance des Mutillides de l'Australie. *Mémoires de la Société Zoologique de France*, 11: 256–308.
- André, E. 1901. Nouvelle contribution a la connaissance des Mutillides de l'Australie. *Mémoires de la Société Zoologique de France*, 14: 467–513.
- André, E. 1903. Quatrième contribution à la connaissance des Mutillides de l'Australie. *Mémoires de la Société Zoologique de France*, 15: 240–278.
- Brothers, D.J. 2018. *Aglaotilla*, a new genus of Australian Mutillidae (Hymenoptera) with metallic coloration. *Zootaxa*, 4415(2): 357–368. DOI: <https://doi.org/10.11646/zootaxa.4415.2.6>
- Brothers, D.J. & Lelej, A.S. 2017. Phylogeny and higher classification of Mutillidae (Hymenoptera) based on morphological reanalyses. *Journal of Hymenoptera Research*, 60: 1–97. DOI: <https://doi.org/10.3897/jhr.60.20091>
- Brothers, D.J., Lelej, A.S. & Williams, K.A. 2019. Genus-group names of Mutillidae (Hymenoptera): corrections and updates since 2008. *Zootaxa*, 4651 (3): 578–588. DOI: <https://doi.org/10.11646/zootaxa.4651.3.10>.
- Brothers, D.J., Stringer, D.N., Jennings, J.T. & Austin, A.D. 2012. Australian Faunal Directory: Family Mutillidae. Australian Biological Resources Study. Available from: <https://biodiversity.org.au/afd/taxa/MUTILLIDAE> (accessed 18 January 2018)
- Lelej, A.S. 1983. On the velvet ants (Hymenoptera, Mutillidae) of Australia. *Entomologicheskoe Obozrenie*, 62 (3): 612–619. [In Russian; English translation: *Entomological Review*, 1984, 62 (3): 152–160].
- Lelej, A.S. & Nemkov, P.G. 1997. Phylogeny, evolution and classification of Mutillidae (Hymenoptera). *Far Eastern Entomologist*, 46: 1–24.
- Pagliano, G., Brothers, D.J., Cambra, R., Lelej, A.S., Lo Cascio, P., Matteini Palmerini, M., Scaramozzino, P.L., Williams, K.A. & Romano, M. 2020. Checklist of names in Mutillidae (Hymenoptera), with illustrations of selected species. *Bollettino del Museo Regionale di Scienze Naturali di Torino*, 36(1–2): 5–425.