

## A new species of *Rhopalomutilla* André, 1901 (Hymenoptera: Mutillidae) from South Vietnam

### Новый вид *Rhopalomutilla* André, 1901 (Hymenoptera: Mutillidae) из Южного Вьетнама

A.S. Lelej  
А.С. Лелей

Institute of Biology and Soil Science, Vladivostok. 690022, Russia. E-mail: lelej@biosoil.ru  
Биолого-почвенный институт ДВО РАН, Владивосток, 690022, Россия.

KEY WORDS: Mutillidae, mutillid wasps, *Rhopalomutilla*, new species, South Vietnam.

КЛЮЧЕВЫЕ СЛОВА: Mutillidae, осы-немки, *Rhopalomutilla*, новый вид, Южный Вьетнам.

ABSTRACT. *Rhopalomutilla striganovae* Lelej, sp.n. from South Vietnam is described and figured. The key to the females of Oriental species of *Rhopalomutilla* is given.

РЕЗЮМЕ. Описывается *Rhopalomutilla striganovae* Lelej, sp.n. из Южного Вьетнама. Дается определительная таблица по самкам ориентальных видов рода *Rhopalomutilla*.

#### Introduction

The family Mutillidae includes 637 described species in 64 genera in the Oriental region [Lelej, 2005]. Subfamily Rhopalomutillinae has Afrotropical and Oriental distribution and accounts fewer than 50 estimated species in about four genera [Brothers, Finnamore, 1993] (currently described 15 species in one genus [Lelej, 2007]). In the Oriental region this subfamily is represented by genus *Rhopalomutilla* with three species. D.J. Brothers is preparing the revision of the subfamily Rhopalomutillinae with description of new genera and he kindly provided me by the characters of his new taxa. Russian-Vietnamese Research and Technological Tropical Center (Ho Chi Minh, Vietnam) has long-term project for study of Arthropoda in the Cat Tien National Park (Nam Cat Tien sector, Dong Nai Province, South Vietnam). The fauna of this area belongs to Malayan subregion of Oriental region [Zryanin, 2010].

#### Material and Methods

This paper is based on the small material on Mutillidae collected by the staff of Russian-Vietnamese Research and Technological Tropical Center in the Cat Tien National Park (Nam Cat Tien sector, Dong Nai Province, South Vietnam). Among this material

there is one female from the genus *Rhopalomutilla* which are the new species described below. The collections of Oriental Mutillidae is housed in Institute of Biology and Soil Science, Vladivostok and Zoological Institute, St. Petersburg as valuable comparative material on Rhopalomutillinae donated by D.J. Brothers (University of KwaZulu-Natal, Pietermaritzburg, South Africa) were used for identification of the material.

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

#### Systematic Account

##### Subfamily Rhopalomutillinae Schuster, 1949

Rhopalomutillinae Schuster, 1949: 119; Brothers, 1975: 623; Brothers, Finnamore, 1993: 191, 195, figs 61, 62 (♂, ♀); Lelej, 2005: 105; 2007: 107.

##### Genus *Rhopalomutilla* André, 1901

*Rhopalomutilla* (as subgenus of *Mutilla* Linnaeus, 1758) André, 1901: 323 (♂, ♀). Type species: *Mutilla* (*Rhopalomutilla*) *clavicornis* André, 1901 (♂, ♀), by monotypy.

*Rhopalomutilla*: André, 1902: 23 (♂, ♀); 1904: 425 (♂, ♀); Bischoff, 1920: 176 (♂, ♀); 1921: 733; Mickel, 1935: 197 (♂, ♀); Pagden, 1938: 213, (♂, ♀); Lelej, 2005: 105 (♂, ♀); 2007: 91.

There are three described Oriental species of this genus: *Rhopalomutilla japhia* (Cameron, 1902) described in male from «Deesa» (India: Gujarat) [Cameron, 1902] and later recorded from Myanmar [André, 1904], *Rh. oceanica* Mickel, 1935 described in both sexes from «Bettotan near Sandakan» (Malaysia: Sabah) [Mickel, 1935] and *Rh. javana* Pagden, 1938 described in both sexes from «Wadjak» (Indonesia: Java) [Pagden, 1938].

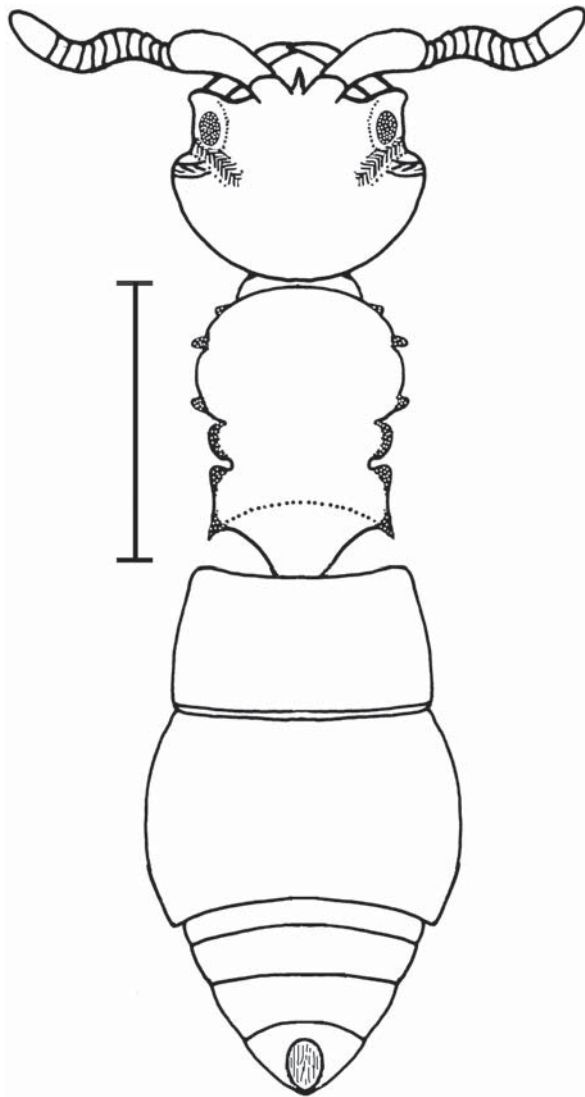


Fig. 1. *Rhopalomutilla striganovae* sp.n., female, holotype, habitus, dorsal view. Scale bar: 1 mm.

Рис. 1. *Rhopalomutilla striganovae* sp.n., самка, голотип, внешний вид, сверху. Масштабная линейка 1 мм.

KEY TO THE SPECIES FROM ORIENTAL REGION (FEMALES, UNKNOWN IN *RH. JAPHIA*)

1. Head anterolaterally with strong emarginations for the antenna (eyes located in this emarginations also). South Vietnam ..... *Rh. striganovae* Lelej, sp.n.
- Head anterolaterally without strong emarginations ..... 2
2. Body with bronze reflection. T2 with close confluent punctures. Malaysia (Sabah) ..... *Rh. oceanica* Mickel
- Body without bronze reflection. T2 with small separated punctures. Indonesia (Java) ..... *Rh. javana* Pagden

*Rhopalomutilla striganovae* Lelej, sp.n.

Fig. 1.

TYPE MATERIAL: Holotype, ♀, SOUTH VIETNAM: Cat Tien [National Park, Nam Cat Tien sector, Dong Nai Province, 11°26'N, 107°26'E], 01–02.2004 [January–February, beginning of dry season], leg. A.E. Anichkin [deposited in Zoological Institute RAS, St. Petersburg].

DESCRIPTION. Female. Body length 3.6 mm. Antennae, legs, mandibles and mesosoma ferruginous, sparsely clothed with pale golden setae. Apex of mandibles piceous. Clypeus with prominent spine between antennae. Pygidial area well defined, longitudinally striate with subappressed golden setae.

Head anterolaterally with strong emarginations for antennae. Maxillary and labial palps minute, concealed. Head dark brown with sparse, erect and subappressed, pale golden setae. Clypeus polished and shining, broadly and shallowly emarginate with strong spine between antennae, anterior border with sublateral tubercle. Mandibles ferruginous, their apices piceous, moderately slender, inner border with weak subbasal tubercle. Antennae ferruginous; scape strongly curved, coarsely, confluent punctate dorsally, more finely punctate beneath, polished, shining and impunctate outside; scape produced distally into small, acute lamella covered base of pedicel; flagellar segments one to nine broader than long, ten twice as long as broad. Eyes minute, located in the deep emarginations. Frons, vertex, and genae coarsely punctate.

Mesosoma dark ferruginous with very sparse, erect and suberect, pale golden setae; coarsely, confluent punctate dorsally, with longitudinal ridges on propodeum. Mesoscutum broadest medially, strongly narrowed posteriorly, posterolaterally denticulate. Metanotum laterally with vertical lamellate carina, without scutellar scale. Propodeum with shallow posterior slope, dorsally longitudinally rugulose, posterolaterally with acute denticle. Propleura and mesopleuron finely strigulate. Metapleuron shining and polished. Lateral sides of propodeum finely punctate.

Metasoma dark brown, T1, S1–2 dark ferruginous. T1 anteriorly with sparse long, erect, pale golden setae, other metasoma with very sparse, erect, and short, sparse, suberect, pale golden setae. T1 dorsally longitudinally striate, anteriorly finely punctate. T2 moderately coarsely, confluent punctate, more sparsely on disc. T3–5 finely and closely punctate. T6 more rugosely punctate and more setose, pygidial area well defined, longitudinally striate, with decumbent, pale golden setae. S2 sparsely punctate, shining and polished on disc, with very sparse, erect, and suberect pale golden setae. S3–5 with small, dense punctures, each with distinct, but thin, apical fringe of pale golden setae. S4–5 laterally with patch of subappressed golden setae curved upwards. Legs ferruginous, closely punctate, with pale golden setae, denser on tarsi.

MALE unknown.

DISTRIBUTION. South Vietnam.

HABITAT. The holotype of this species has been collected in the litter of monsoon semi-deciduous trop-

ical forest dominated by *Lagerstroemia calyculata* Kurz. (Lythraceae) on dark loamy soil.

DIAGNOSIS. The female of new species has not scutellar scale and belongs to the genus *Rhopalomutilla* (females of undescribed rhopalomutilline genera have scutellar scale). The differences between a female of new species with other ones from Oriental region are given in the key above.

ETYMOLOGY. This species is dedicated to Bella Rafailovna Striganova, the authority on fauna and ecology of Arthropoda.

#### ACKNOWLEDGEMENTS

I acknowledge the help of V.A. Zryanin and A.E. Anichkin (Russian-Vietnamese Research and Technological Tropical Center, Ho Chi Minh, Vietnam) for the collecting and sending of material and information about the habitat; D.J. Brothers kindly provided me by the characters of his undescribed new genera of Rhopalomutillinae and donated some specimens. V.M. Loktionov (Institute of Biology and Soil Science, Vladivostok) helped with preparing figure of new species.

#### References

- André E. 1901. Matériaux pour servir à la connaissance des Mutillides d'Afrique // Zeitschrift für Systematische Hymenopterologie und Dipterologie. Bd.1. S.279–288, 305–352.
- André E. (1903) 1902. Fam. Mutillidae // Wytzman P. (ed.). Genera Insectorum. Fasc.11. Bruxelles. 77 pp. + 3 pls.
- André E. 1904. Mutillides nouveaux ou imparfaitement connus de divers pays // Annales de la Société Entomologique de France. T.72. P.417–459.
- Bischoff H. 1920–1921. Monographie der Mutilliden Afrikas // Archiv für Naturgeschichte. Bd.86A (1920). H.1–3. S.1–480; Bd.86A (1921). H.4. S.481–830 + pl. 1–7.
- Brothers D.J. 1975. Phylogeny and classification of the aculeate Hymenoptera, with special reference to Mutillidae // The University of Kansas Science Bulletin. Vol.50. No.11. P.483–648.
- Brothers D.J., Finnamore A.T. 1993. Superfamily Vespoidea // Goulet H., Huber J.T. (eds.). Hymenoptera of the World: An identification guide to families. Ottawa. P.161–278 + Figs 46–92. [Mutillidae: p.187–201 + Figs 57–68].
- Cameron P. 1902. Descriptions of new genera and species of Hymenoptera collected by Major C.S.(!) Nurse at Deesa, Simla, and Ferozepore, Part I // The Journal of the Bombay Natural History Society. Vol.14. P.267–293, pl. 9; P.419–449. [Mutillidae: p. 267–272, pl. 9, Fig. 8].
- Lelej A.S. 2005. Catalogue of the Mutillidae (Hymenoptera) of the Oriental Region. Vladivostok: Dalnauka. 252 pp.
- Lelej A.S. 2007. [Biogeography of mutillid wasps (Hymenoptera, Mutillidae)] // Rasnitsyn A.P., Gokhman V.E. (eds). Issledovaniya po pereponchatokrylym. Moscow: KMK Scientific Press Ltd. P.82–111 [in Russian].
- Mickel C.E. 1935. The mutillid wasps of the islands of the Pacific Ocean (Hymenoptera: Mutillidae) // Transactions of the Royal Entomological Society of London. Vol.83. No.2. P.177–312.
- Pagden H.T. 1938. On a new species of *Rhopalomutilla* (Hym. Mutillidae) from Java // Journal of the Federated Malay States Museums. Vol.18. Pt.2. P.213–217.
- Schuster R.M. 1949. Contribution towards a monograph of the Mutillidae of the Neotropical region. III. A key to the subfamilies represented and descriptions of several new genera (Hymenoptera) // Entomologica Americana, N.S. Vol.29. No.3–4. P.59–140.
- Zryanin V.A. 2010. [Analysis of local ant fauna (Hymenoptera, Formicidae) in South Vietnam] // Zoologicheskii Zhurnal. Vol.89. No.12. P.1477–1490 [in Russian].