

## A review of the Mutillidae (Hymenoptera) of Yemen

ARKADY S. LELEJ<sup>1</sup> & ANTONIUS VAN HARTEN<sup>2</sup>

<sup>1</sup>Institute of Biology and Soil Science, Far Eastern Branch of Russian Academy of Sciences, Vladivostok-22, 690022, Russia. E-mail: lelej@ibss.dvo.ru

<sup>2</sup>UAE Insect Project, P.O. Box 63799, Sharjah, United Arab Emirates. E-mail: vanharten@zmail.pt

### Table of contents

Abstract .....	3
Introduction .....	3
Material and methods .....	4
Subfamily Pseudophotopsidinae Bischoff 1920 .....	6
1. Genus <i>Pseudophotopsis</i> André 1896 .....	6
<i>Pseudophotopsis aurea</i> (Klug 1829) .....	7
* <i>Pseudophotopsis mascatiana</i> Invrea 1962 .....	7
* <i>Pseudophotopsis maura</i> Bischoff 1920 .....	9
Subfamily Myrmillinae Bischoff 1920 .....	10
*2. Genus <i>Arnoldtilla</i> Nonveiller 1996, stat. nov. ....	10
<i>Arnoldtilla achterbergi</i> Lelej, sp. nov. ....	10
3. Genus <i>Myrmilla</i> Wesmael 1852 .....	11
* <i>Myrmilla parvula</i> Magretti 1906, stat. nov. ....	12
* <i>Myrmilla rubida</i> Magretti 1906, stat. nov. ....	12
<i>Myrmilla scortecii</i> Invrea 1965 .....	13
*4. Genus <i>Omotilla</i> Invrea 1943 .....	13
<i>Omotilla conjuncta</i> (Klug 1829), comb. nov. ....	14
Subfamily Mutillinae Latreille 1802 .....	15
Tribe Mutillini Latreille 1802 .....	15
*5. Genus <i>Macromyrme</i> Lelej 1984 .....	15
<i>Macromyrme chrysophthalma</i> (Klug 1829), comb. nov. ....	15
*6. Genus <i>Ronisia</i> Costa 1858 .....	16
* <i>Ronisia idonea</i> (André 1901) .....	16
*7. Genus <i>Strangulotilla</i> Nonveiller 1978 .....	16
* <i>Strangulotilla samharica</i> (Magretti 1906) .....	17
*8. Genus <i>Tropidotilla</i> Bischoff 1920 .....	17
* <i>Tropidotilla bellii</i> (Magretti 1906) .....	18

* <i>Tropidotilla carinulifera</i> Bischoff 1920 .....	18
<i>Tropidotilla fimbriata</i> (Klug 1829) .....	19
* <i>Tropidotilla frontalis</i> (Klug 1829) .....	19
* <i>Tropidotilla milmili</i> (Magretti 1898) .....	20
Tribe Smicromyrmini Bischoff 1920 .....	21
*9. Genus <i>Dentilla</i> Lelej in Lelej & Kabakov 1980 .....	22
<i>Dentilla arabica</i> (Hammer 1962), comb. nov. ....	22
<i>Dentilla ehrenbergi</i> Lelej, sp. nov. ....	23
* <i>Dentilla testacea</i> (Klug 1829) .....	24
10. Genus <i>Paglianotilla</i> Lelej, gen. nov. ....	24
<i>Paglianotilla hogenesi</i> Lelej, sp. nov. ....	25
11. Genus <i>Rasnitsynitilla</i> Lelej, gen. n. ....	27
<i>Rasnitsynitilla brachyptera</i> Lelej, sp. nov. ....	28
<i>Rasnitsynitilla invreai</i> Lelej, sp. nov. ....	29
<i>Rasnitsynitilla schmideggeri</i> Lelej, sp. nov. ....	30
Key to the species of <i>Rasnitsynitilla</i> from Yemen (males) .....	31
Tribe Peterseniini Lelej 1996 .....	32
*12. Genus <i>Glossotilla</i> Bischoff 1920 .....	32
* <i>Glossotilla djiboutiensis</i> Bischoff 1920, stat. nov. ....	32
Tribe Trogaspidiini Bischoff 1920 .....	32
*13. Genus <i>Dentotilla</i> Nonveiller 1977 .....	32
* <i>Dentotilla auricoma</i> (Bischoff 1920) .....	33
*14. Genus <i>Spinulomutilla</i> Nonveiller 1994 .....	33
<i>Spinulomutilla yemenita</i> Lelej, sp. nov. ....	33
15. Genus <i>Trispilotilla</i> Bischoff 1920 .....	34
<i>Trispilotilla senegalensis</i> (Guérin-Méneville 1831) .....	35
16. Genus <i>Trogaspidia</i> Ashmead 1899 .....	35
<i>Trogaspidia (Trogaspidia) floralis</i> (Klug 1829) .....	35
<i>Trogaspidia (Trogaspidia) miniaticeps</i> Bischoff 1920 .....	36
<i>Trogaspidia (Acutitropidia) nilotica</i> Bischoff 1920 .....	36
17. Genus <i>Vanhartenidia</i> Lelej, gen. nov. ....	37
<i>Vanhartenidia arabica</i> Lelej, sp. nov. ....	38
<i>Vanhartenidia felix</i> Lelej, sp. nov. ....	39
<i>Vanhartenidia tihama</i> Lelej, sp. nov. ....	41
Key to the species of <i>Vanhartenidia</i> .....	42
Subfamily Dasylabrinae Invrea 1964 .....	43
*18. Genus <i>Dasylabris</i> Radoszkowski 1885 .....	43
* <i>Dasylabris (Inbaltilla) biblica</i> Invrea 1950 .....	43
19. Genus <i>Tricholabiodes</i> Radoszkowski 1885 .....	44
<i>Tricholabiodes arabicus</i> Suárez 1967 .....	44
<i>Tricholabiodes chloroticus</i> (Gribodo 1884) .....	44
* <i>Tricholabiodes niloticus</i> Suárez 1967 .....	45
* <i>Tricholabiodes pedunculatoides</i> Bischoff 1920 .....	45
<i>Tricholabiodes scortecii</i> Invrea 1965 .....	46
* <i>Tricholabiodes sudanensis</i> Suárez 1967 .....	46
Acknowledgements .....	46
References .....	47

## Abstract

Forty species in 19 genera are recorded from Yemen. Three new genera are described: *Paglianotilla* gen. nov. (type species *P. hogenesi* sp. nov.), *Rasnitsynitilla* gen. nov. (type species *R. brachyptera* sp. nov.), and *Vanhartenidia* gen. nov. (type species *V. felix* sp. nov.). Ten new species are described: *Arnoldtilla achterbergi* sp. nov. (Yemen), *Dentilla ehrenbergi* sp. nov. (Yemen, Saudi Arabia), *P. hogenesi* sp. nov. (Yemen), *R. brachyptera* sp. nov. (Yemen), *R. invreai* sp. nov. (Yemen), *R. schmidegeri* sp. nov. (Yemen), *V. arabica* sp. nov. (Yemen), *V. felix* sp. nov. (Yemen), *V. tihama* sp. nov. (Yemen), and *Spinulomutilla yemenita* sp. nov. (Yemen). Hitherto unknown females are recognized for *Arnoldtilla* Nonveiller, *Omotilla* Invrea, and *Tropidotilla milmili* (Magretti). New synonymy is proposed for *Omotilla* Invrea 1943 = *Conjunctotilla* Nonveiller 1996, syn. nov.; *Pseudophotopsis aurea* (Klug 1829) = *Mutilla kassalina* Magretti 1898, syn. nov., *P. continua arabica* Hammer 1962, syn. nov. New status is proposed for *Arnoldtilla* Nonveiller, *Myrmilla rubida* Magretti, *M. parvula* Magretti, *Glossotilla djiboutiensis* Bischoff, *V. kassalana* (Bischoff), *V. pyrrhospilota* (Bischoff). New combination is proposed for: *A. bischoffi* (Arnold), *A. silvestris* (Arnold), *O. conjuncta* (Klug), *O. conjunctoides* (Magretti), *O. grazianii* (Invrea), *Dentilla arabica* (Hammer), *V. dives* (Smith), *V. kassalana* (Bischoff), *V. pyrrhospilota* (Bischoff), *V. tricolor* (Klug), and *V. unguiculata* (Magretti). Eleven genera are recorded for the first time from Yemen: *Arnoldtilla* Nonveiller, *Omotilla* Invrea, *Macromyrme* Lelej, *Ronisia* Costa, *Strangulotilla* Nonveiller, *Tropidotilla* Bischoff, *Dentilla* Lelej, *Glossotilla* Bischoff, *Dentotilla* Nonveiller, *Spinulomutilla* Nonveiller, and *Dasylabris* Radoszkowski. Seventeen species are recorded for the first time from Yemen: *Pseudophotopsis maura* Bischoff, *P. mascatiana* Invrea, *Myrmilla parvula* Magretti, *M. rubida* Magretti, *T. bellii* (Magretti), *T. carinulifera* Bischoff, *T. frontalis* (Klug), *T. milmili* (Magretti), *Strangulotilla samharica* (Magretti), *Ronisia idonea* (André), *Dentilla testacea* (Klug), *Glossotilla djiboutiensis* Bischoff, *Dentotilla auricoma* (Bischoff), *Dasylabris biblica* Invrea, *Tricholabiodes niloticus* Suárez, *T. pedunculatoides* Bischoff, and *T. sudanensis* Suárez. *Dentilla testacea* (Klug) and *Tricholabiodes chloroticus* (Gribodo) are recorded for the first time from Saudi Arabia. *Tricholabiodes sudanensis* Suárez is recorded for the first time from Oman. *Glossotilla djiboutiensis* Bischoff is recorded for the first time from Eritrea. Keys to eight species of *Vanhartenidia* and three species of *Rasnitsynitilla* are given.

**Key words:** Mutillidae, solitary wasps, velvet ants, Arabia, Yemen, Saudi Arabia

## Introduction

Yemen is located in the southwestern part of the Arabian Peninsula south of the Tropic of Cancer between the Red Sea and the Gulf of Aden. The fauna of this country is mainly Afrotropical. The Afrotropical fauna comprises more than 1200 species of Mutillidae (Nonveiller 1980, Lelej 2005). The first mutillids were collected in Yemen by the German naturalist C.G. Ehrenberg during an expedition from 1819 to 1826. Based on this material, Klug (1829) described from "Arabia felici" ("Arabia Felix" — Happy Arabia, currently Yemen) three species: *Mutilla fimbriata* Klug 1829, *M. conjuncta* Klug 1829, and *M. chrysophthalma* Klug 1829. Gribodo (1884) added two species: *M. pedunculata* Klug 1829 (currently *Tricholabiodes arabicus* Suárez 1967), and *M. chlorotica* Gribodo 1884