



Entomofauna

ZEITSCHRIFT FÜR ENTOMOLOGIE

Band 30, Heft 27: 465-472

ISSN 0250-4413

Ansfelden, 16. Oktober 2009

Notes on Vespidae (Hymenoptera) of Mauritius

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Abstract

Records of six species of the subfamily Eumeninae, of which two are not established, and one species of the subfamilie Polistinae are dealt with. *Delta esuriens esuriens* (FABRICIUS 1787) is new to the fauna of Mauritius. *Subancistrocerus tristis* GIORDANI SOIKA 1992 is a junior synonym of *S. sichelii* (de SAUSSURE, 1855). A new combination is proposed: *Knemodynerus seychellensis* (von DALLA TORRE 1904).

Key words: Hymenoptera, Vespidae, Mauritius, taxonomy, distribution.

Zusammenfassung

Über Vespidae von Mauritius (Insecta: Hymenoptera) – Die Funddaten von sechs Arten der Unterfamilie Eumeninae, von denen zwei Arten nur im 19. Jahrhundert nachgewiesen worden sind, und eine Art der Unterfamilie Polistine werden mitgeteilt. *Delta esuriens esuriens* (FABRICIUS 1787) ist neu für die Fauna von Mauritius. *Subancistrocerus tristis* GIORDANI SOIKA 1992 ist ein Synonym von *S. sichelii* (de SAUSSURE 1855). Eine neue Kombination wird vorgeschlagen: *Knemodynerus seychellensis* (von DALLA TORRE 1904).

Introduction

In Mauritius a lot of studies concerning Hymenoptera have been carried out in applied entomology, but research in taxonomy and faunistics has been neglected. Consequently only the Hymenoptera of economic importance have been catalogued by GANESHAN & WILLIAMS (2001). Hitherto five species of the family Vespidae have been recorded from the Mascarenes (La Réunion, Mauritius, Rodrigues), all of them also from Mauritius.

The paper is mainly based on the material housed in the collections of the Division of Entomology (Ministry of Agriculture) and the Department of Entomology (MSIRI) both in Réduit. A great part of the material has been collected by John Rys Williams, formerly entomologist of the Division of Entomology (Ministry of Agriculture) and Mauritius Sugar Industry Research Institute. The examined material contains four species, of which *Delta esuriens esuriens* (FABRICIUS 1787) is new to the fauna of Mauritius. In the collection of the Natural History Museum in Vienna representatives of two not established species have been found.

Abbreviations

BMNH	.....	Natural History Museum London, Great Britain
CKL	.....	Sammlung A. Kofler, Lienz, Austria
DEMA	.....	Division of Entomology, Ministry of Agriculture Réduit, Mauritius
MSIRI	.....	Mauritius Sugar Industry Research Institute Réduit, Mauritius
NHMW	.....	Naturhistorisches Museum Wien, Austria

Acknowledgements

We are indebted to Seelavarn Ganeshan (MSIRI), Shradanand Permalloo (DEMA), Susan Ryder (BMNH), Manuela Vizek (NHMW) and John R. Williams (Curepipe, Mauritius) for their support in our study.

Faunistics

Subfamily E u m e n i n a e

Antepipona silaos (de SAUSSURE 1853) not established

Odynerus silaensis de SAUSSURE 1856: de SAUSSURE 1890: 161 (key), 172 (tax., descr. ♂ ♀, distr.).

E x a m i n e d m a t e r i a l : without locality 1 ♀ leg. W. Boier (NHMW).

Known from the Ethiopian Region. In the Malagasy Subregion *A. silaos* has been recorded from Mayotte, Madagascar (Nosy Be) and Réunion, but it is not established in the region. The Mauritian record is from the 19th century.

***Delta esuriens esuriens* (FABRICIUS 1787)**

Examined material: Pamplemousses, Royal Botanical Gardens 1 ♀ December 1958, 1 ♂ January 1959 leg. Hardy (MSIRI); 2 ♂ ♂ 2 ♀ ♀ 17.1.1959 leg. A. Rajabalee (MSIRI) – Petite Rivière 2 ♂ ♂ 14.12.1981 leg. Williams (MSIRI) – Tamarin 1 ♀ 21.10.1985, 3 ♀ ♀ 1.11.1985 leg. J.R. Williams (MSIRI) – without locality 1 ♂ 10.8.1938 (DEMA) – without locality 1 ♀ (DEMA).

Known from the Oriental Region. First record from the Malagasy Subregion. A second subspecies, *Delta esuriens gracile* (de SAUSSURE 1854), is recorded from Aldabra (Seychelles).

***Euodynerus trilobus* (FABRICIUS 1787)**

Odynerus trilobus (FABRICIUS 1787): LEPELETIER de SAINT-FARGEAU 1841: 635 (tax., descr. ♂ ♀, distr.).

Odynerus (Leionotus) trilobus (FABRICIUS 1787): de SAUSSURE 1853a: 154 (key), 155 (key), 186 (tax., distr.).

Odynerus trilobus (FABRICIUS 1787): SMITH 1857: 66 (Mauritius, cat.).

Odynerus trilobus (FABRICIUS 1804): de SAUSSURE 1890: 161 (key), 164 (tax., descr. ♂ ♀, distr), pl. 4 (figs 15, 15a).

Odynerus trilobus (FABRICIUS 1787): de DALLA TORRE 1894: 102 (cat.).

Odynerus (Leionotus) trilobus (FABRICIUS 1787): von DALLA TORRE 1904: 56 (cat.).

Odynerus trilobus (FABRICIUS 1787): ZAVATTARI 1911: 6 (distr.).

Odynerus trilobus (FABRICIUS 1787): BEQUAERT 1918: 313 (cat.).

Odynerus trilobus (FABRICIUS 1787): GIORDANI SOIKA 1941: 169 (cat.).

Pseudepipona (Euodynerus) triloba (FABRICIUS 1787): GIORDANI SOIKA 1958: 68 (fig. above left), 70 (tax., fig. C: map).

Euodynerus trilobus (FABRICIUS 1787): GIORDANI SOIKA 1974a: 70 (cat.).

**Odynerus chagosensis* CAMERON 1907: WILLIAMS 1958: 122 (distr.).

Examined material: Flat Island 1 ♀ November 1949 leg. J.R. Williams (DEMA) – Gros Bois 1 ♀ November 1939 leg. Dumeé (DEMA) – Henrietta 1 ♀ 4.5.1989 leg. J.R. Williams (MSIRI) – Macabé 1 ♀ 22.1.1987 leg. J.R. Williams (MSIRI) – Palmyre 2 ♀ ♀ February 1951 leg. J.R. Williams (DEMA) – Petit Verger 1 ♀ 6.5.1949 leg. J.R. Williams (DEMA) – Réduit 2 ♀ ♀ 19.1.1950 (DEMA), 2 ♀ ♀ leg. J.R. Williams (MSIRI); 1 ♀ November 1939 leg. Dumeé (DEMA) – Vacoas 1 ♀ February 1951, 1 ♀ March 1953 leg. J.R. Williams (DEMA) – without locality 7 ♀ ♀ 1858 leg. I. Pfeiffer (NHMW) – without locality 1 ♀ leg. Winthem (NHMW) – without locality 1 ♂ 2 ♀ ♀ leg. S. Koenig (MSIRI).

Known from the Oriental Region. In the Malagasy Subregion recorded from Réunion and Agalega (PARNAUDEAU & MADL in press).

***Knemodynerus seychellensis* (von DALLA TORRE 1904) new combination**

Odynerus seychellensis von DALLA TORRE 1904: MEADE-WALDO 1912: 43 (distr.).

Odynerus cylindricus PEREZ 1895: WILLIAMS 1958: 122 (distr.).

Examined material: Palmyre 3 ♀♀ 2.1951 leg. J.R. Williams (DEMA) – without locality 3 ♀♀ leg. S. Koenig (MSIRI).

Knemodynerus seychellensis, an endemic species of the Inner Seychelles or Seychelles proper, is also known from the Amirantes and Agalega (PARNAUDEAU & MADL in press).

***Subancistrocerus sichelii* (de SAUSSURE 1855)**

Subancistrocerus tristis n. sp.: GIORDANI SOIKA 1992: 50 (descr. ♀, distr.). **new synonym**

Subancistrocerus tristis GIORDANI SOIKA 1992: BORSATO & RATTI 1999: 98 (cat.).

Examined material: Pamplemousses, Royal Botanical Gardens 1 ♂ 17 ♀♀ 1968 leg.

J.R. Williams (MSIRI) – Réduit 2 ♀♀ 14.1.1982, 1 ♀ 24.1.1982, 1 ♀ 28.1.1982, 1 ♀

17.4.1983, 1 ♀ 28.1.1984, 1 ♀ 19.2.1984 leg. J.R. Williams (MSIRI).

Known from the Oriental Region. In the Malagasy Subregion recorded from Seychelles (Inner Seychelles). As the examined material fits the description of *Subancistrocerus tristis*, it was not necessary to study the types.

***Xenorhynchium nitidulum* (FABRICIUS 1798) not established**

Examined material: without locality 2 ♀♀ leg. Boier (NHMW).

Known from the Oriental Region. The record is from the 19th century.

Subfamily Polistinae

***Polistes olivaceus* (DEGEER 1773)**

Polistes olivaceus (DEGEER 1773): BEQUAERT 1938: 132 (key), 145 (tax., distr.).

**Polistes hebraeus* (FABRICIUS 1787): LEPELETIER de SAINT-FARGEAU 1836: 525 (descr. ♀, distr.).

Polistes hebraeus (FABRICIUS 1787): de SAUSSURE 1853b: 53 (tax., distr.), pl. 7 (fig. 1).

Polistes hebraeus (FABRICIUS 1787): SMITH 1857: 102 (distr., cat.).

Polistes hebraeus (FABRICIUS 1804): de SAUSSURE 1890: 143 (descr. nest, fig. D: nest, Madagascar), 144 (key, tax., descr. ♂ ♀, distr.).

Polistes hebraeus (FABRICIUS 1787): de DALLA TORRE 1894: 130 (cat.).

Polistes hebraeus (FABRICIUS 1787): von DALLA TORRE 1904: 70 (cat.).

Polistes hebraeus (FABRICIUS 1787): SCHULZ 1905: 490 (descr. nest, distr.).

Polistes hebraeus (FABRICIUS 1787): CAMERON 1907: 69, 71 (tax., distr.).

Polistes hebraeus (FABRICIUS 1787): EDWARDS 1925: 382 (tax., biol., distr.).

Polistes hebraeus (FABRICIUS 1787): VINSON 1925: 416 (biol., distr.).

Polistes hebraeus (FABRICIUS 1787): MOUTIA & VINSON 1945: 29 (biol., distr.).

Polistes hebraeus (FABRICIUS 1804): MOUTIA & MAMET 1947: 32 (cat., distr.).

Polistes hebraeus (FABRICIUS 1804): WILLIAMS 1951: 461 (biol., distr.).

Polistes hebraeus (FABRICIUS 1804): WILLIAMS & MAMET 1954: 6 (cat., distr.).

Polistes hebraeus (FABRICIUS 1804): WILLIAMS 1958: 122 (Mauritius).

Polistes hebraeus (FABRICIUS 1804): ANONYMUS 1975: 48 (biol. (as cane pest), distr.).

Polistes hebraeus (FABRICIUS 1804): WILLIAMS 1978: 9 (cat., distr.).

Polistes hebraeus (FABRICIUS 1804): MAMET & WEBB-GEBERT 1980: 68 (biol., distr.).

Polistes hebraeus (FABRICIUS 1804): HANSEN et al. 2007: 536 (fig. 1f), 538 (biol., distr.), 539 (fig. 2).

**Polistes* sp.: WESTWOOD 1836: 174 (distr.).

E x a m i n e d m a t e r i a l : Flat Island 2 ♀♀ November 1949 leg. J.R. Williams (DEMA) – Port Louis 1 ♀ 1887, 1 ♀ 1889 leg. Dr. Paulay (NHMW) – Réduit 10 ♀♀ April 1951 leg. J.R. Williams (DEMA) – Round Island: Cave Mare aux Jonques 2 ♀♀ 20.7.1978 leg. Duck (BMNH) – without data 1 ♀ (NHMW) – without locality 1 ♀ August 1987 leg. B. Kofler (CKL).

Known from the Palearctic (China, Japan), Ethiopian, Oriental and Australian Region. In the Malagasy Subregion recorded from Seychelles (Inner Seychelles, Amirantes), Madagascar, Réunion and Rodrigues.

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Druck, Eigentümer, Herausgeber, Verleger und für den Inhalt verantwortlich:

Maximilian SCHWARZ, Konsulent f. Wissenschaft der Oberösterreichischen Landesregierung, Eibenweg 6, A-4052 Ansfelden, E-Mail: maximilian.schwarz@liwest.at.

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Zeitschrift/Journal: [Entomofauna](#)

Jahr/Year: 2009

Band/Volume: [0030](#)

Autor(en)/Author(s): Gusenleitner Josef Alois, Madl Michael

Artikel/Article: [Notes on Vespidae \(Hymenoptera\) of Mauritius. 465-472](#)