

Linzer biol. Beitr.

37/2

1035-1046

16.12.2005

Two new species and new records of Staphylinidae from the Greek island Lesbos (Insecta: Coleoptera)

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A b s t r a c t : Based on an examination of recently collected material, more than 70 species of Staphylinidae are reported from Lesbos island (Greece), among them four first records from Greece. *Rugilus lesbius* sp.n. and *Oxypoda lesbia* sp.n. are described, illustrated, and distinguished from similar congeners.

K e y w o r d s : Coleoptera, Staphylinidae, Palaearctic region, Greece, Lesbos, taxonomy, new species, new records, endemism.

Introduction

In the recent past, the taxonomy and zoogeography of the staphylinid fauna of the Greek mainland, the Pelopónnisos, and some islands, especially Crete, have been addressed in a series of papers, including taxonomic revisions of various genera (e. g. ASSING 1997, 1999, 2000, 2002, 2003, 2004a, 2005a, 2005c; ASSING & WUNDERLE 1999, 2001; ZERCHE 2002). Next to nothing, however, is known about the Staphylinidae of some - if not most - of the islands. This is also true of some of the larger islands such as Lesbos in the Aegean Sea. In March 2005, Arved Lompe (Nienburg) and Heinrich Meybohm (Stelle) organised a short-term entomological visit to this island. Aside from Carabidae and Scydmaenidae, their respective target beetle families, they also brought home other beetles, among them 334 specimens of Staphylinidae (exclusive of Pselaphinae), which were subsequently made available to me. In view of the near absence of staphylinid records from this island and the fact that the material was remarkable both from a taxonomic and a zoogeographic point of view, the results of the excursion are here presented. Several species groups and genera, especially in the Aleocharinae, still require taxonomic clarification, so that the identification of some of the species proved difficult. The reference material is deposited in the author's collection (cAss), if not indicated otherwise.

***Phloeocharis longipennis* FAUVEL**

The species is widespread in Turkey. In Greece, it was previously known only from Samos island (ASSING 2004b).

***Proteinus utrarius* ASSING**

Proteinus utrarius was described only very recently, but is widespread and rather common in Greece and Turkey (ASSING 2004a).

***Medon semiobscurus* (FAUVEL)**

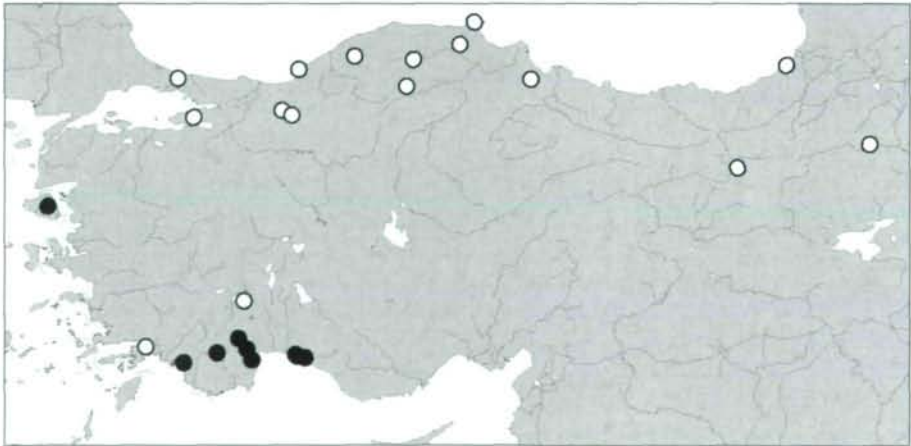
In Greece, this widespread and variable species was previously known only from Rhódos. Its distribution is mapped by ASSING (2004c). The specimens from Lesbos represent the westernmost record of the species.

***Medon rufiventris* (NORDMANN)**

Medon rufiventris, a Ponto-Mediterranean element, is widespread, but recorded only rarely. Its distribution is mapped by ASSING (2004c, in press).

***Medon lydicus* BORDONI**

The distribution of this species ranges from Rhódos in the south to the Bulgarian Black Sea coast in the north and includes western Anatolia (ASSING 2004c). In Greece, it was previously known from the islands Rhódos and Nikariá (Dhodhekánisos).



Map 1: Known distributions of *Sunius anatolicus* ASSING (filled circles) and *S. melanocephalus* (FABRICIUS) (open circles) in Turkey and adjacent Greek islands.

***Sunius anaticus* ASSING**

The previously known distribution of *S. anaticus* was restricted to southwestern Anatolia (ASSING 2005b). The specimens from Lesbos - which are rather large, have broad and long elytra, and fully developed hind wings - represent the first record from Greece. The new locality is a remarkably long distance away from the Anatolian range and situated in a region where one would have expected to find its adelphotaxon, *S. melanocephalus* (FABRICIUS) (Map 1).

***Sunius* sp. n.**

The single specimen is a female, so that a description is here refrained from. It evidently belongs to a species group currently comprising several described species with very restricted distributions from the Taurus range in southern Anatolia.

***Rugilus lesbius* sp.n. (Figs. 1-6, 10-12)**

Holotype ♂: GR - Lesbos [10], 790 m, 39°04'11N, 26°20'58E, Olymbos, 20.III.2005, leg. Lompe & Meybohm / Holotypus ♂ *Rugilus lesbius* sp. n. det. V. Assing 2005 (cAss).

Description: Measurements (in mm) and ratios (holotype): head length from anterior margin of clypeus (HL): 1.15; head width across eyes (HW): 1.21; length of pronotum (PL): 1.06; width of pronotum (PW): 1.03; length of elytra at suture from apex of scutellum to posterior margin (EL): 1.13; combined width of elytra (EW): 1.31; length of metatibia: 1.06; length of metatarsus: 0.85; length of aedeagus from apex of ventral process to base: 1.12; total length: 7.3; HW/HL: 1.05; HW/PW: 1.18; PL/PW: 1.03; EL/PL: 1.07; EW/PW: 1.28; EW/EL: 1.16.

Habitus as in Fig. 1. Coloration of body blackish; legs blackish brown with the tarsi and parts (esp. the external sides) of the tibiae dark reddish brown; antennae brown to dark brown, with the bases of most antennomeres somewhat rufous; maxillary palpus reddish brown, with the preapical joint partly somewhat infusate.

Head slightly transverse, 1.05 times as wide as long, and almost 1.2 times as wide as pronotum; puncturation coarse, dense, and umbilicate; eyes large, longer than postocular region in dorsal view (Fig. 2); antennae as in *R. rufipes*.

Pronotum indistinctly longer than wide; puncturation similar to that of head; along mid-line partly impunctate and shiny (Fig. 2).

Elytra large, almost 1.3 times as wide as pronotum and 1.16 times as wide as long; puncturation finer posteriorly than anteriorly, much finer and sparser than that of head and pronotum; hind wings fully developed.

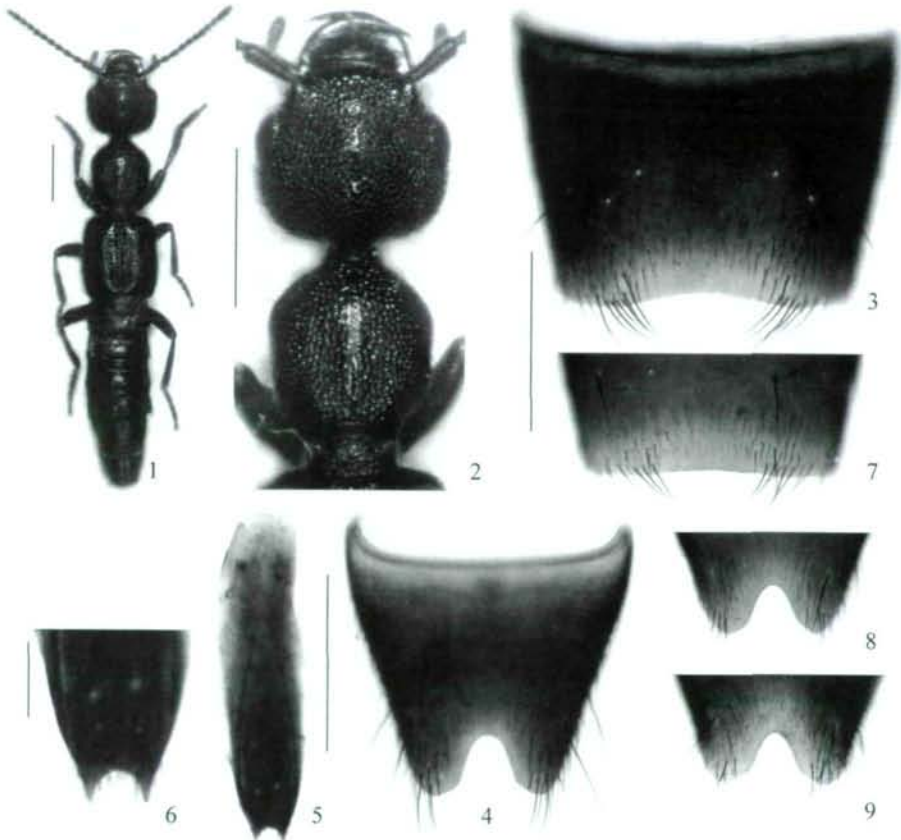
Abdomen with subdued shine due to distinct microsculpture; puncturation fine and dense; posterior margin of tergite VII with distinct palisade fringe.

♂: posterior margin of sternite VII weakly concave and with cluster of long black on either side (Fig. 3); sternite VIII posteriorly with deep emargination and long black setae (Fig. 4); sternite IX long and slender, posteriorly with deep U-shaped emargination (Figs. 5-6); aedeagus with distinctive ventral process (Figs. 10-12).

♀: unknown.

E t y m o l o g y: The name (Latin, adjective) is derived from Lesbos where the species may be endemic.

Comparative notes and systematics: From the similar *R. rufipes* GERMAR, *R. lesbius* is distinguished by the darker coloration (especially of the legs), larger eyes (Fig. 2); larger and more transverse elytra (EW/EL in *R. rufipes*: 1.12-1.15), longer and darker setae at the posterior margins of the male sternites VII and VIII, the deeper emargination of the male sternite IX, and especially by the different morphology of the aedeagus. In *R. lesbius*, the latter is larger, has an apically longer and more slender ventral process, and stouter and longer internal structures. From the similar *R. tauricus* (ROUGEMONT), the new species is reliably distinguished only by the morphology of the aedeagus. For illustrations of the male genitalia of *R. rufipes* and *R. tauricus* see COIFFAIT (1984) and ROUGEMONT (1988).

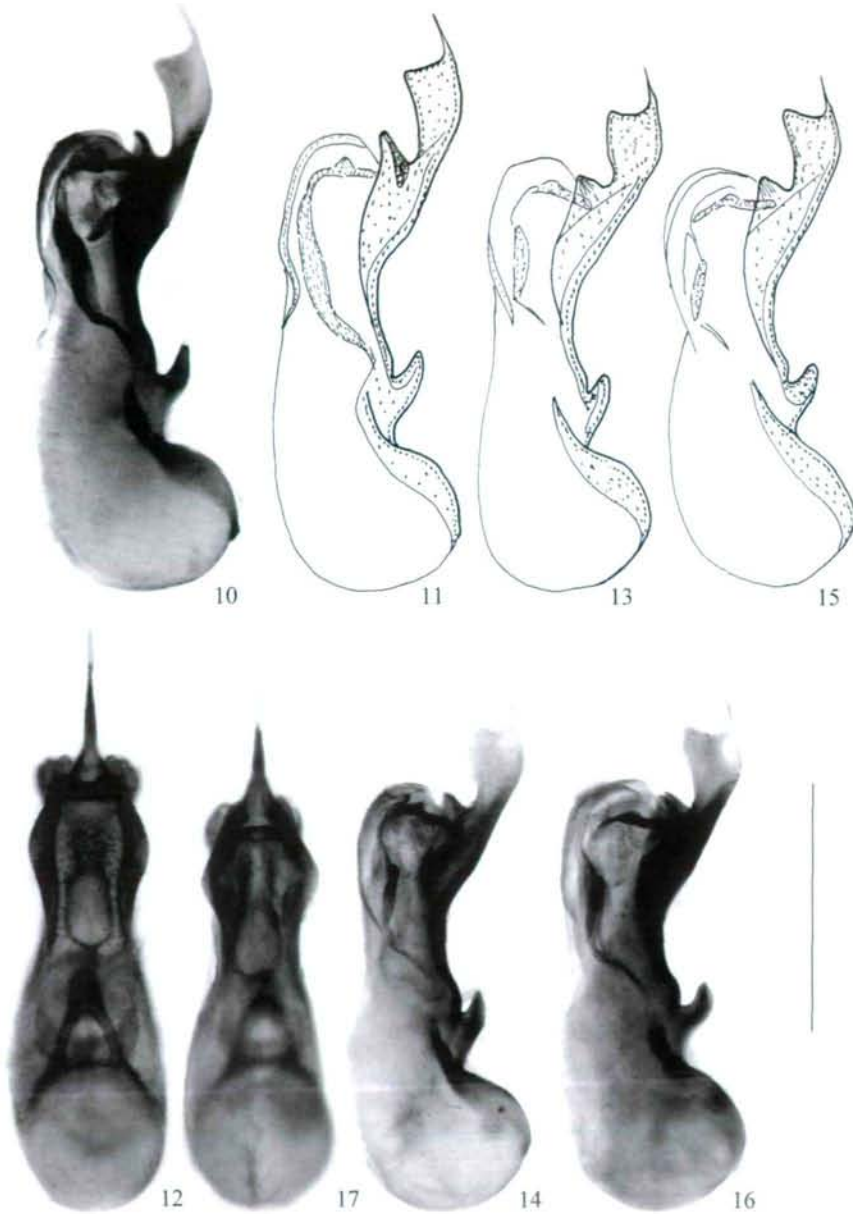


Figs. 1-9: *Rugilus lesbius* sp. n. (1-6) and *R. rufipes* GERMAR (7-9) from Austria (9) and Western Anatolia (7-8). habitus (1); head and pronotum (2); ♂ sternite VII (3); ♂ sternite VIII (4); ♂ sternite IX (5); posterior part of ♂ sternite IX (6); posterior part of ♂ sternite VII (7); posterior part of ♂ sternite VIII (8, 9). Scale bars: 1-2: 1.0 mm; 3-5, 7-9: 0.5 mm; 6: 0.1 mm.

Discussion: Despite the similarity of the aedeagi of *R. lesbius* and *R. rufipes*, the former is here considered a distinct species for the following reasons:

1) Character divergence is generally low in the *rufipes* group (e. g. *R. rufipes*, *R. tauricus*, *R. rossii* (ZANETTI), *R. arabs* (SAULCY)), not only regarding external morphology, but also in the male sexual characters.

2) A comparative study of the male sexual characters of *R. rufipes* from various parts of its distribution, including western Anatolia, revealed that the morphology of the aedeagus is constant.



Figs. 10-17: *Rugilus lesbius* sp. n. (10-12) and *R. rufipes* GERMAR (13-17) from Austria (13-14) and Western Anatolia (15-17). Aedeagus in lateral view (10-11, 13-16); aedeagus in ventral view (12, 17). Scale bar: 1.0 mm.

3) The sexual characters of examined males of *R. rufipes* from western Anatolia are exactly like those of material from other regions (Figs. 7-8, 15-17), e. g. Central Europe (Figs. 9, 13-14), so that clinal variation seems most unlikely.

Distribution and bionomics: *Rugilus rufipes* may be endemic to Lesbos. The holotype was sifted from *Platanus* leaf litter near a stream.

***Quedius fissus* GRIDELLI**

The known distribution of this species is confined to Lesbos, Rhódos, western and southern Anatolia (COIFFAIT 1978).

***Cordalia anatolica* ASSING**

This recently described species was previously known only from southern Anatolia (ASSING 2001a). It is here recorded from Greece for the first time.

***Myrmecopora convexula* ASSING**

This myrmecophile was described and previously known only from the surroundings of Izmir (ASSING 1997). This is the first record from Greece.

***Amischa filum* (MULSANT & REY)**

SMETANA (2004) does not indicate this species for Greece, so that the specimen from Lesbos appears to represent the first Greek record.

***Geostiba oertzeni* (EPPELSHEIM)**

Geostiba oertzeni is one of the most widespread species of the genus; for a map illustrating its distribution see ASSING (2004d). While the vast majority of *Geostiba* species is brachypterous and has restricted distributions, *G. oertzeni* was known to be represented by at least two wing morphs, one with completely reduced hind wings and one with fully developed wings (ASSING 1999). The latter morph had become known from the Greek island Skyros. Remarkably, the material from Lesbos is distinctly darker than specimens seen from other localities, the coloration of the body ranging from dark brown to blackish brown. Moreover, at least three morphs can be distinguished, one with fully developed hind wings, one with hind wings of reduced length, and one with completely reduced hind wings.

***Geostiba euboica* PACE**

This species, too, is widespread in the Eastern Mediterranean, though somewhat less so than *G. oertzeni*. The previously known distribution ranges from Albania to Kárpáthos and includes various other Greek islands (e. g. Zákynthos, Levkás, Kefallinía); for a map see ASSING (2001b). The record from Lesbos considerably expands the area of distribution to the northeast and makes it appear rather likely that *G. euboica* is also present in western Anatolia. So far, fully winged specimens have not become known, but judging from the patchy distribution, it would not come as a surprise if the species were wing-dimorphic or wing-polymorphic. The specimens from Lesbos are of dark brown coloration.

***Zoosetha* sp.**

The specimen listed in Tab. 1 may represent an undescribed species. However, it is a female, and a male would be required for an adequate description.

***Oxypoda lesbia* sp.n. (Figs. 18-25)**

Holotype ♂: N39°04'12 E026°21'13, GR Lesbos, 20.3.2005, Olymbos, 860 m, (9), Lompe & Meybohm / Holotypus ♂ *Oxypoda lesbia* sp. n. det. V. Assing 2005 (cAss).

Description: Measurements (in mm) and ratios (holotype): length of antenna: 0.68; head width across eyes (HW): 0.32; length of pronotum (PL): 0.29; width of pronotum (PW): 0.38; length of elytra at suture from apex of scutellum to posterior margin (EL): 0.29; length of metatibia (TiL): 0.26; length of metatarsus (TaL): 0.23; length of median lobe of aedeagus from apex of ventral process to base: 0.27; total length: 2.2; PW/HW: 1.19; PW/PL: 1.32; EL/PL: 1.00; TaL/TiL: 0.86.

Small species (see measurements); habitus as in Fig. 18. Coloration: head dark brown; pronotum, elytra, and abdomen brown, with segments VI-VII infuscate; legs testaceous; antennae light brown.

Head weakly transverse; integument with distinct microsculpture and subdued shine; puncturation very fine, barely noticeable; eyes moderately large, slightly shorter than postocular region in dorsal view (Fig. 19). Antennae distinctly incrassate apically, preapical antennomeres more than twice as wide as long; antennomere XI not distinctly elongated, slightly longer than the combined length of antennomeres IX and X (Fig. 20). Third (preapical) joint of maxillary palpus somewhat dilated, much wider and larger than second joint.

Pronotum conspicuously small in relation to head and elytra; only about 1.2 times as wide as head and 1.3 times as wide as long; maximal width approximately in the middle; posterior angles obtuse, moderately marked; microsculpture and puncturation similar to those of head (Fig. 19).

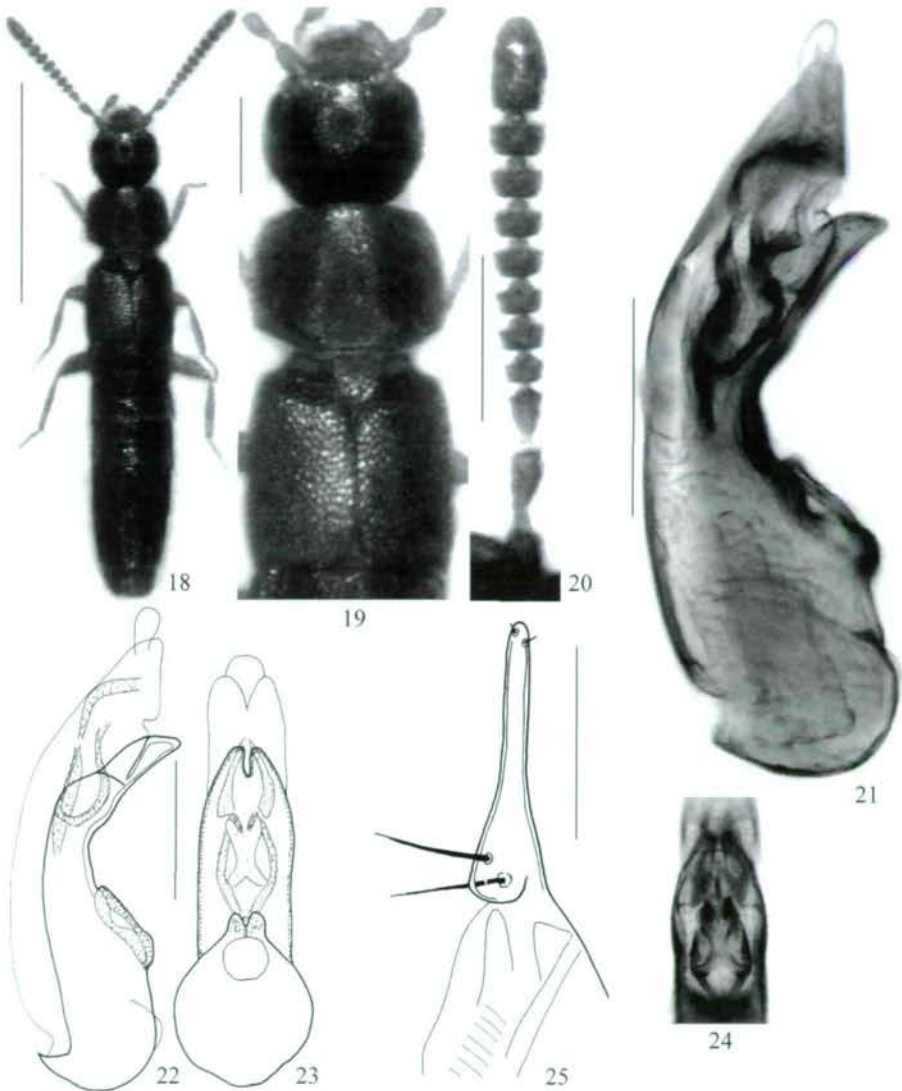
Elytra at suture as long as pronotum and approximately 1.05 times as wide as pronotum; puncturation dense and slightly granulose, much more distinct than that of head and pronotum (Fig. 19). Hind wings reduced. Legs not particularly slender; metatarsus almost as long as metatibia; metatarsomere I longer than the combined length of II-III, but shorter than the combined length of II-IV.

Abdomen about 0.9 times as wide as pronotum; segments III-VII subparallel (Fig. 18); segments III-V with rather shallow anterior impressions; puncturation fine and rather dense, sparser on posterior than on anterior tergites; posterior margin of tergite VII with narrow palisade fringe.

♂: posterior margin of sternite VIII almost triangularly pointed; median lobe of aedeagus as in Figs. 21-24, ventral process apically bifid in ventral view, crista apicalis small; apical lobe of paramere elongated (Fig. 25).

♀: unknown.

Etymology: The name (Latin, adjective) is derived from Lesbos where the type locality is situated.



Figs. 18-25: *Oxyptoda lesbia* sp. n.: habitus (18); forebody (19); antenna (20); median lobe of aedeagus in lateral and in ventral view (21-23); apex of median lobe of aedeagus in ventral view (24); apical lobe of paramere (25). Scale bars: 18: 1.0 mm; 19-20: 0.2 mm; 21-25: 0.1 mm.

Comparative notes and subgeneric affiliations: From all its congeners, the new species is separated by the morphology of the - apically bifid - median lobe of the aedeagus with a very small crista apicalis. In general appearance, *O. lesbia* somewhat resembles *O. brachyptera* (STEPHENS), but is additionally distinguished from this, as well as from most other species especially by smaller size, the apically more strongly incrassate antennae with more transverse preapical antennomeres, and by the conspicuously small pronotum (especially in relation to head).

Based on external characters (e. g. puncturation, antennal morphology, shape of abdomen) and the current subgeneric placement of similar species, *O. lesbia* is attributed to the subgenus *Bessopora* THOMSON. However, the phylogenetics of this, as well as of most other subgenera of *Oxypoda* has not been sufficiently studied, so that the present subgeneric concept can only be considered tentative.

Distribution and bionomics: The reduced hind wings suggest that the species may be endemic to Lesbos. Apart from the altitude (860 m), precise ecological data are not available.

Acknowledgements

My sincere thanks are due to Dr. Arved Lompe and Heinrich Meybohm for the generous gift of their staphylinid by-catches from Lesbos. Michael Schülke (Berlin) identified part of the Tachyporinae. I am also grateful to Benedikt Feldmann, Münster, for proof-reading the manuscript.

Zusammenfassung

Mehr als 70 Staphyliniden-Arten werden von der griechischen Insel Lesbos gemeldet, darunter vier Erstnachweise für Griechenland. *Rugilus lesbius* sp.n. und *Oxypoda lesbia* sp.n. werden beschrieben, abgebildet und von ähnlichen Arten unterschieden.

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Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 2005

Band/Volume: [0037_2](#)

Autor(en)/Author(s): Assing Volker

Artikel/Article: [Two new species and new records of Staphylinidae from the Greek island Lesbos \(Insecta: Coleoptera\) 1035-1046](#)