

Koleopterologische Rundschau	85	81–102	Wien, September 2015
------------------------------	----	--------	----------------------

On the Staphylinidae of the Greek island Samos (Coleoptera: Staphylinidae)

V. ASSING

Abstract

A recent field trip to the Greek island Samos yielded 1322 specimens belonging to at least 117 species of Staphylinidae. Three species are described and illustrated: *Geostiba (Tropogastrosipalia) plicipennis* sp.n. (Oros Ambelos) and *Oxypoda (Bessopora) kerkisica* sp.n. (Oros Kerkis) of the Aleocharinae, and *Sunius ambelosicus* sp.n. (Oros Ambelos) of the Paederinae. *Geostiba plicipennis* is the first representative of the speciose subgenus *Tropogastrosipalia* SCHEERPELTZ, 1951 to be recorded from an island. Including the Pselaphinae and Scydmaeninae collected by Volker Brachat and Heinrich Meybohm in 2003, as well as previous literature records, at least 136 species of Staphylinidae are currently known from Samos, 103 of them named and positively identified, 15 undescribed (five of the Pselaphinae and ten of the Scydmaeninae), eight tentatively identified, and at least ten unidentified. Six species are reported from Greece for the first time. The remarkably diverse staphylinid fauna of Samos includes as many as 18 species that have been recorded exclusively from this island and are most likely island-endemic, some of them even locally endemic. However, only seven of these species have been named; the remainder is pending description. *Xantholinus chiosicus* ASSING, 2015, a species previously hypothesized to be endemic to Chios, is recorded also from Samos. The diversity of the staphylinid fauna of Samos is evidently greater than that of other North Aegean islands; it appears to be even greater than that of the much larger island Rhodes, an observation that may be explained with the geography, geology, and ecological characteristics of Samos. A comprehensive list of the named and unnamed species currently known from Samos is provided.

Key words: Coleoptera, Staphylinidae, Palaearctic Region, East Mediterranean, Greece, Aegean Islands, Samos, taxonomy, new species, diversity, endemism, myrmecophily, new records, species list.

Introduction

With an area of nearly 480 km², Samos is one of the larger North Aegean islands. It is separated from Turkey (Aydın) by a distance of only 1.6 km. The closest major North Aegean islands are Ikaria (approximately 19 km to the west) and Chios (approximately 67 km to the northwest). The highest elevations are Oros Kerkis in the west and Oros Ambelos (or Ampelos) in the centre of Samos at 1443 m and 1153 m, respectively.

According to recent studies on the staphylinid faunas of several major East Mediterranean islands (Crete, Cyprus, Rhodes, Lesbos, Chios), these islands host 67 (Crete), 26 (Cyprus), nine (Rhodes), four (Lesbos), and one (Chios) named endemic species, respectively (ASSING 2005b, 2013a, c, 2015a, b, ASSING & WUNDERLE 2001). In addition, a considerable number of undescribed endemic species of Pselaphinae and Scydmaeninae has been discovered in these islands (Brachat & Meybohm, pers. comm.).

The Staphylinidae of Samos have never been subject to a comprehensive faunistic study specifically dealing with the fauna of this island. However, records of several species can be found in the literature, mostly in papers treating taxa with a broader geographic scope (see Tab. 1 below). Four named island endemics have been recorded from Samos, two of the Paederinae (*Leptobium samium* ASSING, 2009, *Sunius geiseri* ASSING, 2009) and two of the Pselaphinae (*Namunia cavernicola* BESUCHET, 1978, *Tychobythinus brachati* BESUCHET, 2008) (ASSING

2009a, BESUCHET 1978, 2008). One species originally described from Samos (*Leptusa samia* ASSING, 2004) was subsequently recorded also from western Anatolia (ASSING 2004a, 2007a).

During a recent field trip to Samos conducted by Thomas Forcke (Birkenfeld), a specialist of Carabidae, and the author, 1322 specimens of Staphylinidae were collected. The material not only included several records of zoogeographic interest, but also at least ten undescribed species. Volker Brachat (Geretsried) and Heinrich Meybohm (Großhansdorf) provided additional records of Pselaphinae and Scydmaeninae, respectively, collected during a field trip to Samos in 2003.

Material and methods

The material treated in this study is deposited in the following collections:

cAss	author's private collection
cBra	private collection Volker Brachat, Geretsried
cMey	private collection Heinrich Meybohm, Großhansdorf
MNHUB	Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch, J. Willers)

The Pselaphinae and Scydmaeninae are all deposited in cBra and cMey, respectively. Reference material of the remaining species is deposited in MNHUB and cAss.

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). The images were created using a digital camera (Nikon Coolpix 995) and a photographing device constructed by Arved Lompe (Nienburg) and CombineZ software. The maps were created using MapCreator 2.0 (primap) software.

Body length was measured from the anterior margin of the mandibles (in resting position) to the abdominal apex, the length of the forebody from the anterior margin of the mandibles (in resting position) to the posterior margin of the elytra, head length along the middle from the anterior margin of the clypeus (without ante-clypeus) to the posterior constriction of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of (the median lobe of) the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

Results

General results

During the 2014 field trip various habitats across most of the island were sampled (Fig. 1). In all, 1322 specimens belonging to at least 117 species were collected (Tab. 1). Including the Pselaphinae and Scydmaeninae collected in 2003 and communicated to me by Volker Brachat and Heinrich Meybohm, respectively, as well as previous literature records, the currently known staphylinid fauna of Samos is composed of at least 136 species, 100 of them previously described and positively identified, three newly described (two species of the Aleocharinae and one of the Paederinae, all of them island-endemic and most likely locally endemic), 15 undescribed, eight tentatively named, and ten unidentified (Tab. 1). The tentatively named and the unidentified species include taxa that are represented only by females or that belong to



Fig. 1: Geographic position of Samos (above) and sample plots of the 2014 field trip (below). Plots where no Staphylinidae were found are omitted. The numbers correspond to the sample numbers in Tab. 1.

unrevised species groups. The undescribed species all belong to the Pselaphinae (five species) and the Scydmaeninae (ten species). Six of the positively identified species are reported from Greece for the first time.

Despite its relatively small size, Samos hosts a remarkable diversity of both endemic and more widespread species. Based on currently available evidence, 18 species are endemic to Samos or even to either of the two major mountains of the island. Seven of these endemics have been named (three of them in the present paper), two of the Aleocharinae, three of the Paederinae, and two of the Pselaphinae. The remainder, five species of the Pselaphinae and six of the Scydmaeninae, are pending description. The presence of one locally endemic *Sunius* species on Oros Kerkis and another on Oros Ambelos suggests that other species such as *Oxypoda kerkisica* and *Geostiba plicipennis* may be locally endemic, too. The non-endemic fauna is composed of species that are widespread in the East Mediterranean, in Southeast Europe, Turkey, or in large parts of the West Palearctic Region, as well as of species that have more restricted distributions. Several species are confined to the Aegean Region; they are known from some North Aegean islands and West Anatolia, the distributions of some of them extending northwards to Bulgaria, e.g., *Leptusa samia*, *Myrmecopora convexula* (a myrmecophile associated with *Messor* sp.), *Medon lydicus*, and *Rugilus lesbius*. Some species are more or less widespread in southern Anatolia and have their western distribution limit in Samos, e.g. *Oxypoda acutissima* (recently recorded also from Chios), *O. scheerpeltziana*, *Medon subfuscus*, and *Quedius rugosipennis*. The known distribution of five species of Scydmaeninae (*Euconnus* (s.str.) sp.n., *Euconnus* (*Tetramelus*) sp.n. 1, *Scydmorephes* sp.n., *Stenichnus* sp.n., *Stenichnus* sp. 3) is confined to Samos and the Dilek Dağı on the adjacent Turkish mainland (Meybohm, pers. comm.). Of particular zoogeographic interest is the currently known distribution of *Xantholinus chiosicus*, a micropterous species previously hypothesized to be endemic to Chios (ASSING 2015b), but now also known from Samos. Strangely, this species seems to be absent from the adjacent Turkish mainland.

The staphylinid fauna of Samos is remarkably diverse both regarding its endemic and its non-endemic species, significantly more so than those of the distinctly larger North Aegean islands Lesbos and Chios (ASSING 2005b, 2015b). Surprisingly, the number of named endemic species nearly equals that of Rhodes, an island nearly three times the size of Samos; including the undescribed species, the number is even greater. Also regarding its total diversity, Samos outnumbers Rhodes, although the latter has been studied more often and more intensely (ASSING 2013c). Conditions explaining the enormously rich fauna of Samos are the vicinity to southwestern Anatolia, the presence of two (rather than one) major mountains (both of them hosting locally endemic species), the presence of old forests, and the general habitat diversity of the island, including also several streams, lakes, and saline swamps. Considering that Samos has been subject to only two field trips with a special focus on the Staphylinidae, one of them even with a special focus on only two subfamilies, it can be concluded that numerous additional species remain to be discovered, possibly also additional endemic species. For instance, it does not seem unlikely that the Oros Kerkis hosts a locally endemic *Geostiba* species, too.

Tab. 1: Staphylinidae recorded from Samos. The material collected in spring 2014 and the Pselaphinae collected by Volker Brachat and Heinrich Meybohm in spring 2003 are listed in the samples column; the number of specimens is given in parentheses behind the sample number. In the previous records column, only articles containing primary records are listed, except for some species of Pselaphinae which are listed for Samos in the Palearctic Catalogue (SCHÜLKE & SMETANA 2015), although primary records with specified localities were never published. The species are listed by subfamily and sorted alphabetically within subfamilies. Species that have been recorded exclusively from Samos and are most likely endemic to the island are marked with an asterisk (*).

Sample data (2014): 1: SW Karlovasi, Oros Kerkis: NE-slope, 37°45'N, 26°40'E, 780 m, N-slope with grass, under stones, 27.III.2014, leg. Assing & Forcke; 2: SW Karlovasi, Oros Kerkis: NE-slope, 37°44'N, 26°39'E, 670 m, litter of pine and *Quercus ilex*, and grass sifted, 27.III.2014, leg. Assing; 2a: same data, but under stones, on stream bank, and under bark of old pine tree, leg. Assing & Forcke; 3: Karlovasi, 37°47'N, 26°42'E, 25 m, river bank, treaded from mud and vegetation, and under stones on road margin, 27.III.2014, leg. Assing & Forcke; 4: Kambos, 37°42'N, 26°40'E, 5 m, beach, debris sifted, 28.III.2014, leg. Assing; 5: Oros Kerkis: NW-slope, E Kalitheia, 37°44'N 26°36'E, 550 m, grassy margin of forest trail, under stones, 28.III.2014, leg. Assing & Forcke; 6: SW Karlovasi, S Leka, 37°46'N, 26°41'E, 250 m, mixed forest with *Alnus*, *Pinus*, and *Platanus*, stream bank, 29.III.2014, leg. Forcke; 7: W Pythagorio, 37°42'N, 26°56'E, 50 m, saline swamp, 29.III.2014, leg. Assing & Forcke; 8: SE Samos, 37°42'N, 27°01'E, 15 m, laguna, sifted under bushes and hand-collected from ground, 29.III.2014, leg. Assing & Forcke; 9: Oros Kerkis: Profitis Ilias, 37°43'N, 26°38'E, 1210 m, calcareous N-slope, under stones, 30.III.2014, leg. Assing; 9a: same data, but litter, grass, and herb roots near cushion plants sifted; 10: Oros Kerkis: NE-slope, 37°44'N, 26°39–40'E, 800–950 m, under stones, 30.III.2014, leg. Forcke; 11: Oros Kerkis: NE-slope, 37°44'N, 26°39'E, 840 m, N-slope with stand of small pine trees, litter and grass sifted, 30.III.2014, leg. Assing; 12: SW Karlovasi, S Leka, 37°46'N, 26°41'E, 250 m, mixed forest with *Alnus*, *Pinus*, and *Platanus* near stream, litter sifted and hand-collected, 31.III.2014, leg. Assing & Forcke; 13: Oros Ambelos, NE Pirgos, Profitis Ilias, 37°44'N, 26°50'E, 900 m, road margin, under stones and at puddle margin, 1.IV.2014, leg. Assing & Forcke; 14: Oros Ambelos, NE Pirgos, Profitis Ilias, 37°45'N, 26°51'E, 920 m, calcareous grassland, under stones, 1.IV.2014, leg. Assing; 15: Oros Ambelos, NE Pirgos, Profitis Ilias, 37°45'N, 26°50'E, 1000 m, calcareous N-slope, *Quercus ilex* litter and roots of grass and herbs sifted, 1.IV.2014, leg. Assing; 16: Oros Kerkis: NW-slope, E Kalitheia, pista to Agios Dimitrios, 37°45'N, 26°37'E, 580 m, stream valley with very old *Platanus orientalis* and old *Pinus*, litter mostly near *Platanus* trunks sifted, 2.IV.2014, leg. Assing; 16a: same data, but stream margin, leg. Forcke; 16b: same data, but under pine bark, leg. Assing; 17: SE Agios Konstantinos, 37°48'N, 26°50'E, 50 m, stream bank, debris sifted, 2.IV.2014, leg. Assing; 18: SE Agios Konstantinos, 37°47'N, 26°49'E, 410 m, *Platanus* litter near stream sifted, 2.IV.2014, leg. Assing & Forcke; 19: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°47'N, 26°49'E, 790 m, rocky N-slope with *Quercus ilex* and old *Platanus orientalis*, litter sifted, 2.IV.2014, leg. Assing; 20: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°47'N, 26°48'E, 930 m, old pine forest with *Quercus ilex* undergrowth, litter sifted, 2.IV.2014, leg. Assing; 21: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°47'N, 26°49'E, 950 m, grassy N-slope, under stones, 2.IV.2014, leg. Assing & Forcke; 22: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°45'N, 26°51'E, 880 m, grassy slope, under stones, 2.IV.2014, leg. Assing & Forcke; 23: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°46'N, 26°51'E, 510 m, rocky calcareous pasture, under stones, 2.IV.2014, leg. Forcke; 24: E Agios Konstantinos, 37°48'N, 26°51'E, 10 m, margin of flooded arable land near beach, under stones, 2.IV.2014, leg. Assing & Forcke; 25: Oros Kerkis: NE-slope, 37°44'N, 26°39'E, 930 m, calcareous N-slope, under stone, *Messor* nest, 3.IV.2014, leg. Assing; 26: Oros Kerkis: NE-slope, 37°44'N, 26°39'E, 1000 m, under stones, 3.IV.2014, leg. Assing; 27: Oros Kerkis: NE-slope, 37°44'N, 26°38'E, 1060 m, steep calcareous N-slope with rocks, grass, moss, and litter beneath *Quercus ilex* sifted, 3.IV.2014, leg. Assing; 28: Oros Kerkis: Profitis Ilias, 37°43'N, 26°38'E, 1210 m, calcareous N-slope, under stones, 3.IV.2014, leg. Assing; 28a: same data, but litter, grass, and herb roots near cushion plants sifted; 29: Oros Kerkis: NE-slope, ca. 37°44'N, 26°39'E, 800–1000 m, under stones and near small temporary stream, 3.IV.2014, leg. Forcke; 30: Oros Ambelos, NE Profitis Ilias, 37°45'N, 26°50'E, 1130 m, *Quercus ilex* shrubs on calcareous rocks and gravel, litter and grass sifted, 4.IV.2014, leg. Assing; 31: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°45'N, 26°51'E, 910 m, N-slope with old pine, litter and grass sifted, 4.IV.2014, leg. Assing; 32: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°46'N, 26°49'E, 930 m, grassy clearing, under stones, 4.IV.2014, leg. Assing & Forcke; 33: SE Agios Konstantinos, Oros Ambelos: N-slope, 37°47'N, 26°49'E, 940 m, grassy clearing with *Quercus ilex* and scattered old pine trees, under stones, 4.IV.2014, leg. Assing & Forcke; 33a: same data, but 5.IV.2014, leg. Assing; 33b: same data, but litter near old pine tree sifted, 5.IV.2014, leg. Assing; 34: S Karlovasi, river bank, 37°47'N, 26°42'E, 50 m, hand-collected from debris and gravel, 5.IV.2014, leg. Forcke; 35: E Agios Konstantinos, 37°48'N, 26°51'E, 10 m, flooded arable land near beach, 6.IV.2014, leg. Forcke.

Sample data 2003 (only Pselaphinae; all leg. Brachet & Meybohm): 36: Aghios Konstantinos, 37°47'N, 26°50'E, 60–160 m, 21.–29.IV.2003; 37: below Manolates, 37°47'N, 26°50'E, ca. 300 m, 29.IV.2003; 38: Psili Amos env., 37°43'N, 27°00'E, 0 m, 20.IV.2003; 39: Psili Amos, 37°43'N, 26°59'E, 0–10 m, 17.–25.IV.2003; 40: W Karlovasi, valley near Potami, 37°47'N, 26°40'E, 10–30 m, 22.IV.2003; 41: Kosmadei env., Panaghia Kakoperata cave, 37°45'N, 26°39'E, ca. 640 m, 30.IV.2003; 42: SW Kosmadei, 37°45'N, 26°40'E, 560 m, 30.IV.2003; 43: Kosmadei env., Panaghia Kakoperata, 37°45'N, 26°39'E, ca. 600 m, 30.IV.2003; 44: Samos (town), 37°44'N, 26°58'E, ca. 100 m, 20.IV.2003; 45: Avlakia env., 37°48'N, 26°51'E, ca. 100 m, 28.IV.2003.

Previous records: articles are abbreviated as follows: A04a = ASSING (2004a); A04b = ASSING (2004b); A04c = ASSING (2004c); A04d = ASSING (2004d); A05a = ASSING (2005a); A05c = ASSING (2005c); A06d = ASSING (2006d); A08 = ASSING (2008); A09a = ASSING (2009a); A09b = ASSING (2009b); A09c = ASSING (2009c); A14 = ASSING (2014); B78 = BESUCHET (1978); B08 = BESUCHET (2008); K05 = KAPP (2005); P08 = PUTZH (2008); PC =

Palearctic Catalogue (SCHÜLKE & SMETANA 2015). Mup = unpublished records of Scydmaeninae (17.IV.–1.V.2003, leg. Brachet & Meybohm; reference specimens all in cMey) communicated by Heinrich Meybohm.

Footnotes: 1) possibly conspecific with *Leptomastax simonis* STUSSINER, 1880; 2) possibly conspecific with *Stenichnus angulimanus* (REITTER, 1884).

Species	Sample numbers (specimen numbers)	Previous records
O maliinae		
<i>Boreaphilus velox</i> (HEER, 1839)	28a(1)	
<i>Philorinum sordidum</i> (STEPHENS, 1834)	30(1)	
Proteininae		
<i>Metopsia assingi</i> ZERCHE, 1998	2(3)	A09b
<i>Proteinus utrarius</i> ASSING, 2004	2(7), 11(1), 15(40), 16(5), 19(8), 20(6), 27(3)	
Micropeplinae		
<i>Micropeplus fulvus</i> ERICHSON, 1840	2(27), 11(2), 15(23), 16(5), 19(22), 27(1), 33b(30)	
<i>Micropeplus staphylinoides</i> (MARSHAM, 1802)	2(13), 11(19), 16(1)	
Pselaphinae		
<i>Biblopectus parvulus</i> BESUCHET, 1975		PC
<i>Brachygluta spinicoxis fuchsii</i> (PAGANETTI- HUMMLER, 1899)	17(2)	
<i>Bryaxis anatolicus</i> (SAULCY, 1878)	16(31), 19(13), 42(9), 43(15)	
<i>Bryaxis pumilus</i> BEKCHIEV & BRACHAT, in press	12(7), 36(3), 39(3), 40(1), 44(6), 45(2)	
<i>Bryaxis</i> sp. (♀ ♀)	2(1), 31(1)	
* <i>Bythinus</i> sp.n.	16(11), 19(5), 36(3), 41(2), 42(1)	
* <i>Claviger</i> sp.n.	36(8)	
* <i>Euplectus</i> sp.n.	37(1)	
<i>Faronus distinctus</i> BESUCHET, 1999	2(4), 3(3)	PC
* <i>Namunia cavernicola</i> BESUCHET, 1978	41(3)	B78
* <i>Paramaurops</i> sp.n.	40(2)	
* <i>Paratychnus</i> sp.n.	2(1)	
<i>Tribatus creticus</i> REITTER, 1884	33a(6)	PC
<i>Trimium caucasicum</i> KOLENATI, 1846	12(1), 19(3), 36(3)	PC
* <i>Tychobythinus brachati</i> BESUCHET, 2008	41(1)	B08
<i>Tychus anatolicus</i> BESUCHET, 1964	38(2)	
Phloeocharinae		
<i>Phloeocharis longipennis</i> FAUVEL, 1875		A04c
Tachyporinae		
<i>Bryoporus multipunctus</i> HAMPE, 1867	6(1), 12(2)	
<i>Lordithon bimaculatus</i> (SCHRANK, 1798)	12(1), 15(2), 20(1), 30(1)	
<i>Mycetoporus</i> cf. <i>confinis</i> REY, 1883 (♀)	33(1)	
<i>Mycetoporus ignidorsum</i> EPPELSHEIM, 1880	26(1)	
<i>Mycetoporus imperialis</i> BERNHAUER, 1902	2(2), 11(1), 30(1)	
<i>Mycetoporus monticola</i> FOWLER, 1888	9a(1)	
<i>Mycetoporus reichei</i> (PANDELLÉ, 1869)	12(1)	
<i>Mycetoporus</i> sp. (<i>baudueri</i> group) (♀)	27(1)	
<i>Mycetoporus</i> cf. <i>simillimus</i> FAGEL, 1965	2(4), 9a(16), 10(1), 11(4), 15(11), 20(2), 27(7), 28a(10), 29(3), 30(2), 31(3), 33b(2)	
<i>Sepedophilus immaculatus</i> (STEPHENS, 1832)	19(1), 33b(1)	
<i>Sepedophilus obtusus</i> (LUZE, 1902)	2(3), 8(4), 9a(1), 19(1), 22(1), 34(3)	

Species	Sample numbers (specimen numbers)	Previous records
<i>Sepedophilus testaceus</i> (FABRICIUS, 1792)	2a(2), 16(1)	
<i>Tachyporus abner</i> SAULCY, 1865	10(1)	
<i>Tachyporus caucasicus</i> KOLENATI, 1846	34(1)	
<i>Tachyporus nitidulus</i> (FABRICIUS, 1781)	13(1), 15(3), 20(1), 27(1), 28a(2), 33b(1)	
Habrocerinae		
<i>Habrocerus pisidicus</i> KORGE, 1971	9a(1), 12(13), 18(1), 19(1)	A08
Aleocharinae		
<i>Aleochara</i> cf. <i>conviva</i> EPPELSHEIM, 1878 (♀)	9a(1)	
<i>Aleochara hamulata</i> ASSING, 2009	25(1)	
<i>Alevonota rufotestacea</i> (KRAATZ, 1856)	2(1)	
<i>Aloconota</i> sp. 1	2a(1)	
<i>Aloconota</i> sp. 2	34(2)	
<i>Atheta aeneicollis</i> (SHARP, 1869)	2(1), 12(1), 13(1), 15(3), 16b(2), 18(4), 20(1), 31(1), 34(1)	
<i>Atheta speculum</i> (KRAATZ, 1856)	9a(2), 28(3)	
<i>Atheta</i> (<i>Mocyta</i>) spp.	1(1), 12(1), 30(1), 34(1)	
<i>Brundinia meridionalis</i> (MULSANT & REY, 1853)	8(4)	
<i>Cypha</i> cf. <i>tarsalis</i> (LUZE, 1902) (♀)	2(1), 11(1)	
<i>Geostiba maxiana</i> (TIKHOMIROVA, 1973)	2(1), 9a(9), 10(1), 11(3), 20(1), 25(1), 27(1), 28(3), 28a(3), 33(2), 33a(5), 33b(2)	
<i>Geostiba oertzeni</i> (EPPELSHEIM, 1888)	9(1), 9a(3), 15(2), 16(23), 19(2), 20(1), 28(5)	
* <i>Geostiba plicipennis</i> sp.n.	33a(3), 33b(4)	
<i>Ischnoglossa turcica</i> WUNDERLE, 1992		A09b
<i>Leptusa samia</i> ASSING, 2004	12(1)	A04a
<i>Liogluta longiuscula</i> (GRAVENHORST, 1802)	1(1), 2(1), 27(1), 31(24)	
<i>Maurachelia roubali</i> (LOHSE, 1970)	33(1), 33a(1)	
<i>Myllaena intermedia</i> ERICHSON, 1837	6(1), 12(1),	
<i>Myrmecopora convexula</i> ASSING, 1997	5(5), 10(3), 25(5)	
<i>Oligota pumilio</i> KIESENWETTER, 1858	11(1)	
<i>Oxypoda acutissima</i> ASSING, 2006	9a(1)	
<i>Oxypoda flavicornis</i> KRAATZ, 1856	33b(1)	
* <i>Oxypoda kerkisica</i> sp.n.	9a(3), 28a(2)	
<i>Oxypoda lurida</i> WOLLASTON, 1857	9a(2), 28a(1)	
<i>Oxypoda</i> cf. <i>nova</i> BERNHAUER, 1902	2(1), 16(9), 19(18), 20(10), 33b(39)	
<i>Oxypoda scheerpeltziana</i> (FAGEL, 1968)	2(4), 26(1)	
<i>Oxypoda</i> cf. <i>vicina</i> KRAATZ, 1858	33b(6)	
<i>Pseudosemiris kaufmanni</i> (EPPELSHEIM, 1887)	18(1)	A04b
<i>Taxicera moczarskii</i> (BERNHAEUER, 1914)		K05
Oxytelinae		
<i>Anotylus inustus</i> (GRAVENHORST, 1806)	3(1), 10(4), 14(1)	
<i>Bledius frisius</i> LOHSE, 1978	8(68)	
<i>Bledius furcatus</i> (OLIVIER, 1811)	8(65)	
<i>Bledius unicornis</i> (GERMAR, 1825)	8(66)	
<i>Carpelimus</i> sp. (♀)	8(1)	
<i>Platystethus spinosus</i> ERICHSON, 1840	34(1)	
Steninae		
<i>Stenus aceris</i> STEPHENS, 1833	2(3), 7(3), 10(2)	
<i>Stenus brunripes</i> STEPHENS, 1833	34(1)	

Species	Sample numbers (specimen numbers)	Previous records
<i>Stenus glacialis</i> HEER, 1839	28a(1)	P08
<i>Stenus</i> cf. <i>hospes</i> ERICHSON, 1840	25(1)	
<i>Stenus maculiger</i> WEISE, 1875	3(1), 12(1), 13(2), 16a(1), 34(2)	A06d
<i>Stenus parciior</i> BERNHAUER, 1929	34(1)	
<i>Stenus turbulentus</i> BONDROIT, 1912	2(10), 11(3), 12(8), 15(1), 16b(1), 20(3), 33b(1)	
<i>Stenus turcicus</i> BERNHAUER, 1912	3(1)	
<i>Stenus</i> cf. <i>turcicus</i> BERNHAUER, 1912	33a(2)	
Scydmaeninae		
* <i>Cephennium</i> (<i>Phennecium</i>) sp.n. 1		Mup
* <i>Cephennium</i> (<i>Phennecium</i>) sp.n. 2		Mup
<i>Chevrolatia</i> sp. (♀)		Mup
<i>Euconnus</i> (<i>Euconnus</i>) sp.n.	16(1), 27(2)	Mup
<i>Euconnus</i> (<i>Psomophus</i>) <i>intrusus</i> (SCHAUM, 1844)		Mup
<i>Euconnus</i> (<i>Tetramelus</i>) sp.n. 1	2(1), 16(7), 28(1)	Mup
* <i>Euconnus</i> (<i>Tetramelus</i>) sp.n. 2	15(1), 19(3)	Mup
* <i>Euconnus</i> (<i>Tetramelus</i>) sp.n. 3		Mup
* <i>Euconnus</i> (<i>Tetramelus</i>) sp.n. 4	16(3)	
<i>Eutheia</i> sp.		Mup
<i>Leptomastax</i> sp. ¹⁾		Mup
<i>Scydmorephes</i> sp.n.	16(2)	Mup
<i>Stenichnus</i> sp.n. 1		Mup
* <i>Stenichnus</i> sp.n. 2		Mup
<i>Stenichnus</i> sp. 3 ²⁾	16(1)	
Pseudopsinae		
<i>Pseudopsis sulcata</i> NEWMAN, 1834	33b(2)	
Paederinae		
<i>Astenus bimaculatus</i> (ERICHSON, 1840)	35(1)	
<i>Astenus procerus</i> (GRAVENHORST, 1806)	3(1), 9(1), 28(2), 33(2), 33a(18), 34(1)	
<i>Astenus thoracicus</i> (BAUDI DI SELVE, 1857)	10(4), 13(1), 23(1), 33(1), 33a(4)	
<i>Domene stilicina</i> (ERICHSON, 1840)	34(2)	
<i>Leptobium gracile</i> (GRAVENHORST, 1802)		A05a
* <i>Leptobium samium</i> ASSING, 2009	3(2), 5(2), (2), 10(3), 21(3), 22(1), 26(3), 29(2), 32(2), 33(3), 33a(12)	A09a
<i>Lobrathium rugipenne</i> (HOCHHUTH, 1851)	5(1), 12(3), 13(3), 16a(1), 34(5)	
<i>Medon dilutus pythionissa</i> (SAULCY, 1865)	2(1), 15(3), 30(1), 33b(1)	A04d
<i>Medon fuscus</i> (MANNERHEIM, 1830)	2(1), 12(4), 14(1), 15(1),	
<i>Medon lydicus</i> BORDONI, 1980	2(9), 12(11), 16a(1), 18(2), 19(4), 33b(5)	A04d, A09c
<i>Medon maronitus</i> (SAULCY, 1865)	12(1)	A04d
<i>Medon semiobscurus</i> (FAUVEL, 1875)	2(6), 12(2), 15(2), 16(1), 18(3), 19(6), 33b(1)	A04d, A09c
<i>Medon subfuscus</i> FAGEL, 1969	19(1), 20(1)	
<i>Ochtheophilum brevipenne</i> (MULSANT & REY, 1861)	7(3), 8(6)	
<i>Paederus littoralis</i> GRAVENHORST, 1802	3(1), 7(3), 24(7), 34(1), 35(16)	
<i>Rugilus lesbis</i> ASSING, 2005	12(1), 16a(1)	A14
<i>Scopaeus haemusensis</i> FRISCH, 1997 (♀)	33(1)	
* <i>Sunius ambelosicus</i> sp.n.	33(3), 33a(5)	
* <i>Sunius geiseri</i> ASSING, 2009	9(2), 9a(4), 28(3), 28a(2), 29(1)	A09a

Species	Sample numbers (specimen numbers)	Previous records
<i>Staphylininae</i>		
<i>Astrapaes ulmi</i> (ROSSI, 1790)	10(1)	
<i>Erichsonius subopacus</i> (HOCHHUTH, 1851)	12(2)	
<i>Gabrius astutoides</i> (STRAND, 1946)	12(2)	
<i>Gabrius nigrutilus</i> (GRAVENHORST, 1802) (♀)	29(1)	
<i>Heterothops minutus</i> WOLLASTON, 1860	8(2)	
<i>Ocypus mus</i> (BRULLE, 1832)	32(1), 33a(1)	
<i>Orthidus cribratus cribratus</i> (ERICHSON, 1840)	7(5), 8(2)	
<i>Othius lapidicola</i> MÄRKEL & KIESENWETTER, 1848	8(1), 9a(1), 15(4), 20(1), 28a(1)	A05c
<i>Philonthus concinnus</i> (GRAVENHORST, 1802)	2a(2)	
<i>Quedius nemoralis</i> BAUDI DI SELVE, 1848	20(1), 33b(2)	
<i>Quedius nivicola</i> KIESENWETTER, 1858 (♀)	31(2)	
<i>Quedius pseudonigriceps</i> REITTER, 1909	19(7), 20(2), 27(3), 28a(1), 33b(4)	
<i>Quedius rugosipennis</i> FAGEL, 1969	7(4)	
<i>Quedius scintillans</i> (GRAVENHORST, 1806)	4(2)	
<i>Quedius semiaeneus</i> (STEPHENS, 1833)	35(1)	
<i>Quedius umbrinus</i> ERICHSON, 1839	16a(4), 29(7)	
<i>Xantholinus chiosicus</i> ASSING, 2015	9(1), 20(1), 27(1), 33(1), 33a(2)	
<i>Xantholinus rufipennis</i> ERICHSON, 1839	35(1)	
<i>Xantholinus varnensis</i> COIFFAIT, 1972 (♀)	3(1), 17(1)	

Notes on some species

Bryaxis anatolicus (SAULCY, 1878)

COMMENT: This species was previously known only from Turkey (SCHÜLKE & SMETANA 2015).

Mycetoporus monticola FOWLER, 1888

COMMENT: According to SCHÜLKE (2009), who revised this species, *M. monticola* is widespread in the West Palaearctic Region. In Greece, it was previously known only from the mainland. The record from Samos suggests that it may be distributed also in Turkey.

Aleochara (*Ceranota*) cf. *conviva* EPPELSHEIM, 1878

COMMENT: The confirmed distribution of *A. conviva* is confined to Georgia and northern Turkey (Bolu) (ASSING 2009d). The external characters of the female listed in Tab. 1 are similar to those of *A. conviva*, but a male would be required to confirm the presence of this species in Samos and Greece.

Aloconota spp.

COMMENT: Both species listed in Tab. 1 most likely represent undescribed species. Unfortunately, neither of them is represented by both sexes, so that they remain unnamed for the time being.

Atheta (*Microdota*) *speculum* (KRAATZ, 1856)

COMMENT: This species has been recorded from scattered localities in Azerbaijan, Turkey, and Greece, including the nearby Greek island Chios (ASSING 2007b, 2015b, SCHÜLKE & SMETANA 2015).

***Geostiba maxiana* (TIKHOMIROVA, 1973)**

ADDITIONAL MATERIAL EXAMINED: **SAMOS:** 1 ♂, Platanakia, 37°47'N, 26°50'E, 100 m, 29.IV.2003, leg. Meybohm & Brachat (cAss); 1 ♂, Psili Amos, 37°42'N, 27°00'E, 1–10 m, 25.IV.2003, leg. Meybohm & Brachat (cAss); 3 ♂♂, 8 ♀♀ [partly teneral], W Psili Amos, 37°42'N, 26°59'E, 10 m, 17.&20.IV.2003, leg. Meybohm & Brachat (cAss); 1 ♂, 1 ♀, Manolates, 37°47'N, 26°49'E, 300 m, litter of shrubs, 29.IV.2003, leg. Meybohm & Brachat (cAss).

COMMENT: This widespread wing-dimorphic species is common also in Chios (ASSING 2015b).

***Geostiba oertzeni* (EPPELSHEIM, 1888)**

ADDITIONAL MATERIAL EXAMINED: **SAMOS:** 1 ♀, Platanakia, 37°47'N, 26°50'E, 100 m, 29.IV.2003, leg. Meybohm & Brachat (cAss); 2 ♂♂, 1 ♀, Kosmadei, 37°45'N, 26°39'E, 560 m, pine forest, 30.IV.2003, leg. Meybohm & Brachat (cAss); 2 ♂♂, 5 ♀♀ [partly teneral], Kosmadei, 37°45'N, 26°38'E, 640 m, *Crataegus* litter, 1.V.2003, leg. Meybohm & Brachat (cAss); 4 ♂♂, 6 ♀♀ [partly teneral], Potami, 37°47'N, 26°40'N, 10–30 m, 22.IV.2003, leg. Meybohm & Brachat (cAss); 5 ♂♂, 9 ♀♀, Manolates, 37°47'N, 26°49'E, 300 m, litter of shrubs, 29.IV.2003, leg. Meybohm & Brachat (cAss); 2 ♂♂, 4 ♀♀, Avlakia, 37°47'N, 26°51'E, 100 m, 28.IV.2003, leg. Meybohm & Brachat (cAss); 1 ♀, Psili Amos, 37°43'N, 26°59'E, 0–10 m, 17.–25.IV.2003, leg. Meybohm & Brachat (cAss).

COMMENT: Like *G. maxiana*, *G. oertzeni* is widespread and wing-dimorphic. All the examined specimens from Samos are micropterous.

***Maurachelia roubali* (LOHSE, 1970)**

COMMENT: This rarely found species has been recorded from Austria, Slovakia, Hungary, Greece, and Turkey (SCHÜLKE & SMETANA 2015). For previous records from Greece and Turkey see ASSING (2004e, 2013b).

***Myrmecopora convexula* ASSING, 1997**

COMMENT: *Myrmecopora convexula* is a myrmecophile associated with ants of the genus *Messor* FOREL, 1890. It was originally described based on material from Izmir (western Turkey) and Bulgaria and subsequently reported also from Manisa (western Turkey), Lesbos, and Chios (ASSING 1997, 2005b, 2007b, 2015b).

***Oxypoda (Thliboptera) acutissima* ASSING, 2006**

COMMENT: This species had been known only from Turkey (Antalya, Aydın, Bitlis, Sivas, Ardahan) (ASSING 2006a, 2007c, 2009b) until very recently, when it was recorded from Chios and Greece for the first time (ASSING 2015b).

***Oxypoda (Thliboptera) scheerpeltziana* (FAGEL, 1968)**

COMMENT: The previously known distribution was confined to Lebanon and Turkey (Antalya, Mersin, Adana) (ASSING 2006a, 2007c, 2009b). The specimens from Samos represent the first records from Greece.

***Stenus hospes* ERICHSON, 1840 and *S. turcicus* BERNHAUER, 1912**

COMMENT: These two species require revision. Based on the literature, both of them are widespread in the Mediterranean (SCHÜLKE & SMETANA 2015). In Samos, two species (*S. cf. hospes* and *S. cf. turcicus* in Tab. 1) were found associated with different species (of different species groups) of harvester ants (*Messor* spp.). They are similar to *S. hospes* and *S. turcicus*, respectively, both in external and the male sexual characters, but distinguished by slight differences in the shape of the aedeagus. On the other hand, the aedeagi and external characters of both *S. hospes* and *S. turcicus* are subject to pronounced intraspecific variation. More material

and, if possible, also molecular data would be required to clarify whether the specimens collected with ants represent distinct species or if *S. hospes* and *S. turcicus*, which are otherwise found in moist and/or ruderal habitats, are facultative myrmecophiles. The latter hypothesis would seem somewhat implausible, particularly since these *Stenus* species are found exclusively with certain species of *Messor*, never with other ants.

***Leptobium samium* ASSING, 2009**

COMMENT: Previously, only the holotype and two female paratypes of this recently described island endemic were known (ASSING 2009a). The new records (Tab. 1) reveal that *L. samium* is widespread and rather common in Samos.

***Medon subfuscus* FAGEL, 1969**

COMMENT: *Medon subfuscus* is widespread in southern Anatolia and was once recorded also from the Greek island Kos (ASSING 2004d, 2009c). The specimens collected in Samos (Tab. 1) represent the second record from Greece.

***Ochtheophilum brevipenne* (MULSANT & REY, 1861)**

COMMENT: *Ochtheophilum brevipenne* has a Holo-Mediterranean distribution ranging from Northwest Africa to northern Italy and the coast of the Black Sea (Bulgaria, Ukraine). For a map illustrating the previously known distribution see ASSING (2009e). In Greece, the species had been recorded only from the central and northern mainland. The records from Samos considerably expand the known distribution towards the southeast and suggest that *O. brevipenne* may be present also in Turkey.

***Sunius geiseri* ASSING, 2009
(Figs. 19, 25–27)**

COMMENT: The original description of this recently described island endemic is based on a male holotype from Oros Kerkis and a female paratype from the environs of Pírgos (ASSING 2009a). The discovery of a second, apparently locally endemic species in the Oros Ambelos (see description of *Sunius ambelosicus* below) suggests that *S. geiseri* is endemic to the Oros Kerkis and that the paratype of *S. geiseri* in fact belongs to *S. ambelosicus*. The sexual characters of a non-type male and the locality where most of the specimens listed in Tab. 1 were collected are illustrated in Figs. 25–27 and Fig. 19, respectively.

***Heterothops minutus* WOLLASTON, 1860**

COMMENT: According to SCHÜLKE & SMETANA (2015), *H. minutus* is widespread in Europe, North Africa, and the Atlantic Islands, but was previously unknown from Greece.

***Orthidus cribratus cribratus* (ERICHSON, 1840)**

ADDITIONAL MATERIAL EXAMINED: GREECE: 1 ex., NW-Pelopónnisos, Kalogria, 38°10'N, 21°24'E, coastal swamp, 27.III.1986, leg. Assing (cAss).

COMMENT: *Orthidus cribratus* is generally found in – usually saline – wetlands along the coasts of the Atlantic Ocean, the Mediterranean Sea, and the Black Sea, but had not been recorded from Greece (SCHÜLKE & SMETANA 2015). Thus, the material from Samos and the above specimen from the Pelopónnisos represent new country records.

***Othius lapidicola* MÄRKEL & KIESENWETTER, 1848**

COMMENT: This species is apparently much less common in Samos than in Chios (see ASSING 2015b). With one exception, all the specimens listed in Tab. 1 are infested with Laboulbeniales.

***Quedius rugosipennis* FAGEL, 1969**

COMMENT: The specimens from Samos are distinguished from material examined from Turkey and Cyprus by a somewhat paler coloration, particularly paler legs. The aedeagus, however, is practically identical, suggesting that the populations from Samos, Turkey, and Cyprus are conspecific and that the species is subject to some intraspecific variation. The material from Samos represents the first record of *Q. rugosipennis* from Greece.

***Xantholinus chiosicus* ASSING, 2015**

(Fig. 2)

COMMENT: The aedeagus of the material from Samos (Fig. 2) is identical to that of the males from Chios, suggesting that both populations are conspecific. Thus, my earlier hypothesis that *X. chiosicus* is endemic to Chios (ASSING 2015b) must be rejected. Nevertheless, considering that the species is micropterous, the currently known distribution is somewhat mystifying.

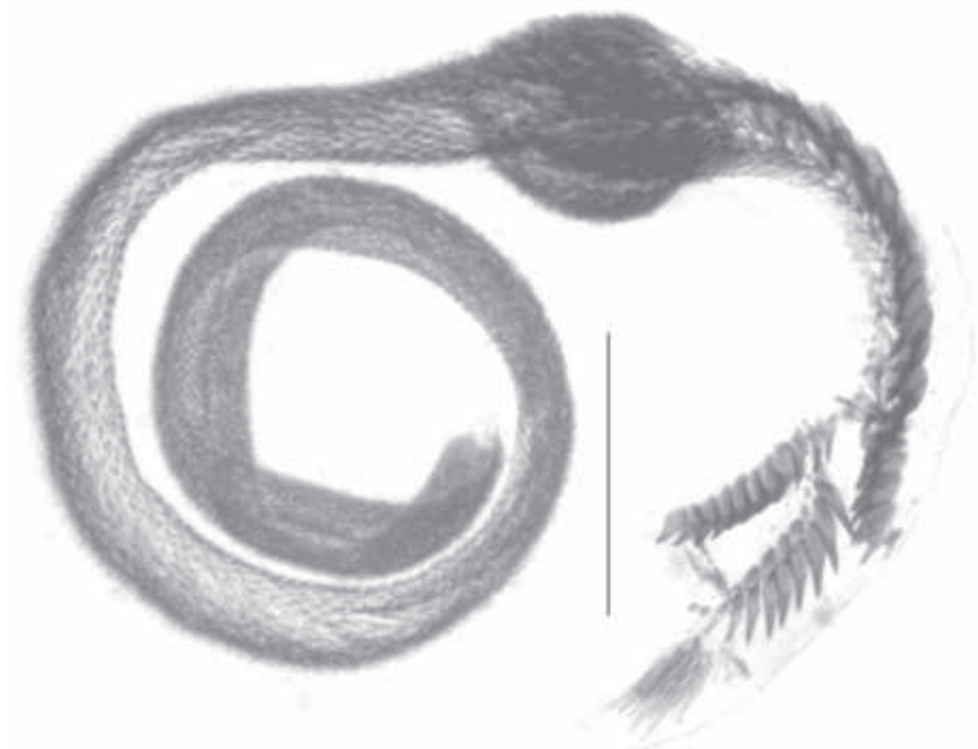


Fig. 2: *Xantholinus chiosicus* from Samos: internal structures of aedeagus in squeeze preparation. Scale bar: 0.5 mm.

Descriptions of new species

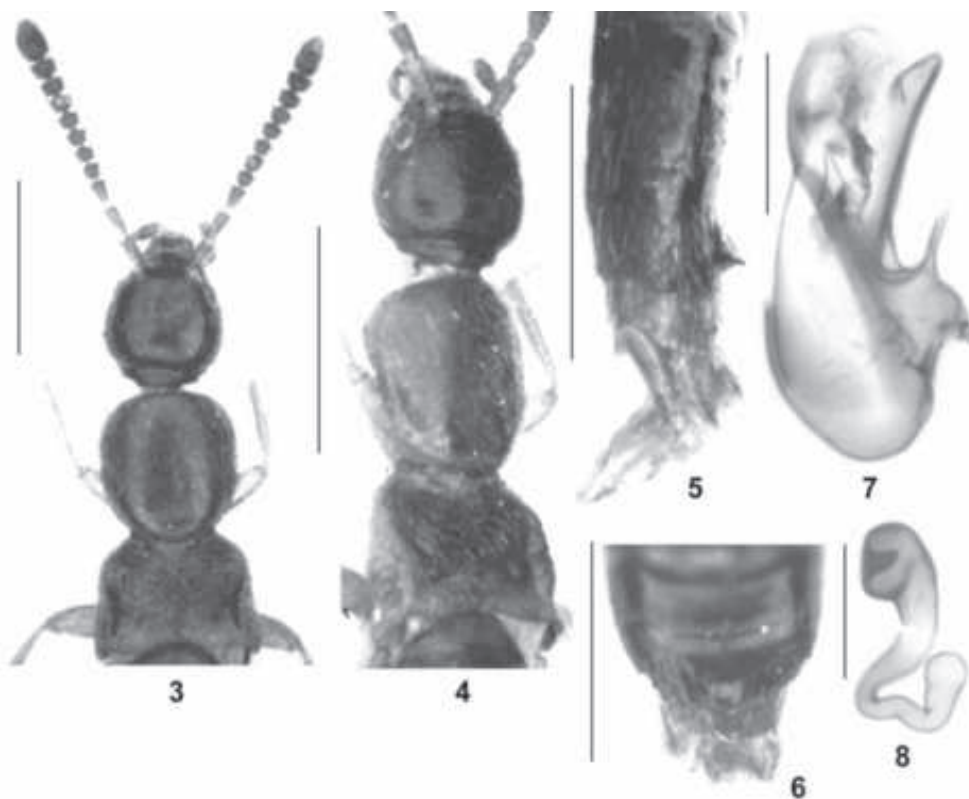
Geostiba (Tropogastrosipalia) plicipennis sp.n.

(Figs. 3–8, 28)

TYPE MATERIAL: **Holotype** ♂: “Greece: Samos [33b+1], Or. Ambelos: N-slope, 37°46'33"N 26°48'39"E, 940 m, pine litter sifted, 5.IV.2014, V. Assing / Holotypus ♂ *Geostiba plicipennis* sp. n. det. V. Assing 2015” (cAss). **Paratypes**: 2 ♂♂, 1 ♀: same data as holotype (cAss); 3 ♀♀: “Greece: Samos [33a+1], Or. Ambelos: N-slope, 37°46'33"N 26°48'39"E, 940 m, under stones, 5.IV.2014, V. Assing” (cAss).

ETYMOLOGY: The specific epithet is an adjective composed of the Latin noun plica (fold) and the adjective pennis (-winged). It alludes to the pronounced lateral carinae on the male elytra.

DESCRIPTION: Body length 2.3–3.0 mm; length of forebody 1.0–1.2 mm. Coloration: head dark-brown to blackish-brown; pronotum reddish-brown to dark-brown; elytra pale-brown; abdomen blackish-brown, with the anterior segments sometimes slightly paler; legs yellowish; antennae brown to dark-brown, with the basal two antennomeres slightly paler.



Figs. 3–8: *Geostiba plicipennis*: 3) male forebody in dorsal view; 4) male forebody in dorso-lateral view; 5) apical portion of male abdomen in lateral view; 6) apical portion of male abdomen in antero-dorsal view; 7) median lobe of aedeagus in lateral view; 8) spermatheca. Scale bars: 3–6: 0.5 mm; 7–8: 0.1 mm.

Head (Figs. 3–4) approximately as broad as long, dilated behind eyes; punctuation extremely fine, barely noticeable; interstices with shallow microreticulation. Eyes small, approximately half as long as postocular region in dorsal view.

Pronotum (Figs. 3–4) with moderately pronounced sexual dimorphism, approximately 1.2 times as broad as head; punctuation and microsculpture similar to those of head.

Elytra (Figs. 3–4) with pronounced sexual dimorphism, 0.50–0.53 times as long as pronotum; punctuation more distinct than that of head and pronotum; interstices with distinct microsculpture. Hind wings completely reduced.

Abdomen broader than elytra; anterior segments without sexual dimorphism; punctuation very fine, moderately dense on anterior and rather sparse on posterior tergites; interstices with shallow microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII convex, without evident sexual dimorphism.

Large ♂: pronotum (Figs. 3–4) approximately 1.08 times as long as broad, posterior margin strongly convex; elytra (Figs. 3–4) each with a pronounced and somewhat sinuate lateral fold, this fold increasing in height posteriad, but not reaching posterior margin of elytra, elytral disc between the folds distinctly flattened; elytral punctuation coarse and somewhat granulose; abdominal tergite VII (Figs. 5–6) with rather short and stout postero-median process; median lobe of aedeagus (Fig. 7) approximately 0.25 mm long and with fine, needle-shaped cristal process.

♀: pronotum approximately as broad as long; each elytron usually with a shallow lateral impression and with fine, non-granulose punctuation; spermatheca as in Fig. 8.

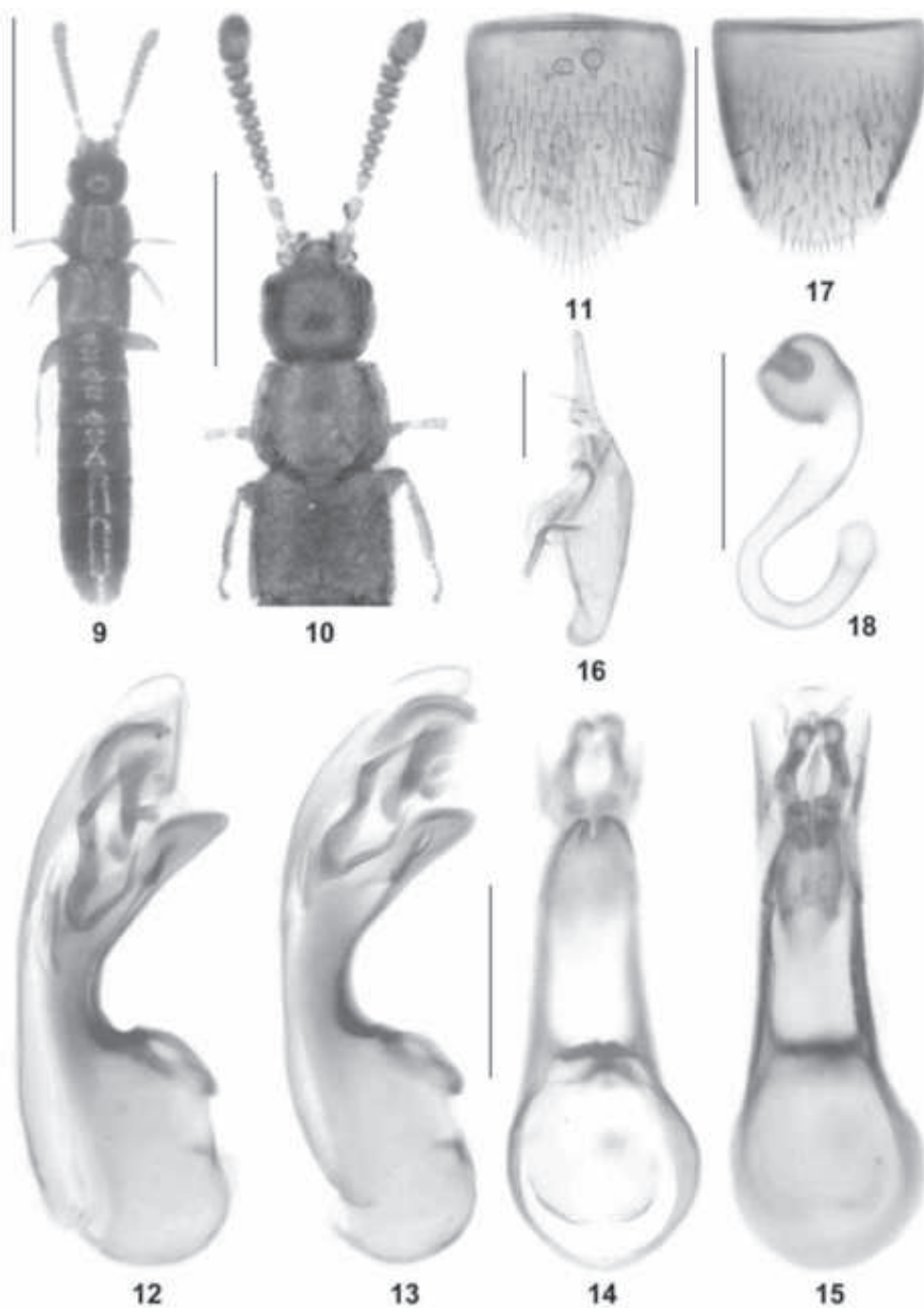
COMPARATIVE NOTES: Using the key in ASSING (2009f), *G. plicipennis* would key out at couplet 71, together with *G. siculifera* ASSING, 1999 and *G. falakroensis* ASSING, 1999 (both from the northeast of the Greek mainland), from which the new species is readily distinguished by the pronounced lateral folds and the absence of sutural carinae or tubercles alone. Among the Turkish *Geostiba* species, *G. plicipennis* is most similar to *G. renneri* ASSING, 2006 (female unknown) from the environs of Muğla (southwestern Anatolia), which too is characterized by the presence of lateral folds on the elytra, but which differs from *G. plicipennis* by the less pronounced microsculpture of the forebody, the less pronounced lateral folds, the shape of the male pronotum (approximately as broad as long), the less erect postero-median process of the male abdominal tergite VII, and by the much stouter cristal process of the aedeagus. For illustrations of *G. renneri* see ASSING (2006b).

DISTRIBUTION AND NATURAL HISTORY: *Geostiba plicipennis* is most likely endemic to Oros Ambelos, central Samos. Remarkably, it is the first species of *Tropogastrosipalia* SCHEERPELTZ, 1951 to be recorded from an island. The speciose subgenus is represented in mainland Greece (including the Pelopónnisos) and in mainland Turkey by numerous locally endemic species (ASSING 2009f).

The specimens were collected in the same locality as *Sunius ambelosicus* (Fig. 28), partly by turning stones and partly by sifting litter and grass beneath an old pine tree.

***Oxypoda (Bessopora) kerkisica* sp.n.**
(Figs. 8–19)

TYPE MATERIAL: **Holotype** ♂: “Greece: Samos [28a+1], Oros Kerkis: Prof. Ilias, 37°43'28"N 26°38'02"E, 1210 m, sifted, 3.IV.2014, V. Assing / Holotypus ♂ *Oxypoda kerkisica* sp. n. det. V. Assing 2015” (cAss). **Paratypes**: 1 ♂: same data as holotype (cAss); 3 ♀♀: “Greece: Samos [9a+1], Oros Kerkis: Prof. Ilias, 37°43'28"N, 26°38'02"E, 1210 m, sifted, 30.III.2014, V. Assing” (cAss).



Figs. 9–18: *Oxypoda kerkisica*: 9) habitus; 10) forebody; 11) male sternite VIII; 12–13) median lobe of aedeagus in lateral view; 14–15) median lobe of aedeagus in ventral view; 16) paramere; 17) female sternite VIII; 18) spermatheca. Scale bars: 9: 1.0 mm; 10: 0.5 mm; 11, 17: 0.2 mm; 12–16, 18: 0.1 mm.



Fig. 19: Type locality of *Oxypoda kerkisica* (sample numbers 9 and 28) in Oros Kerkis.

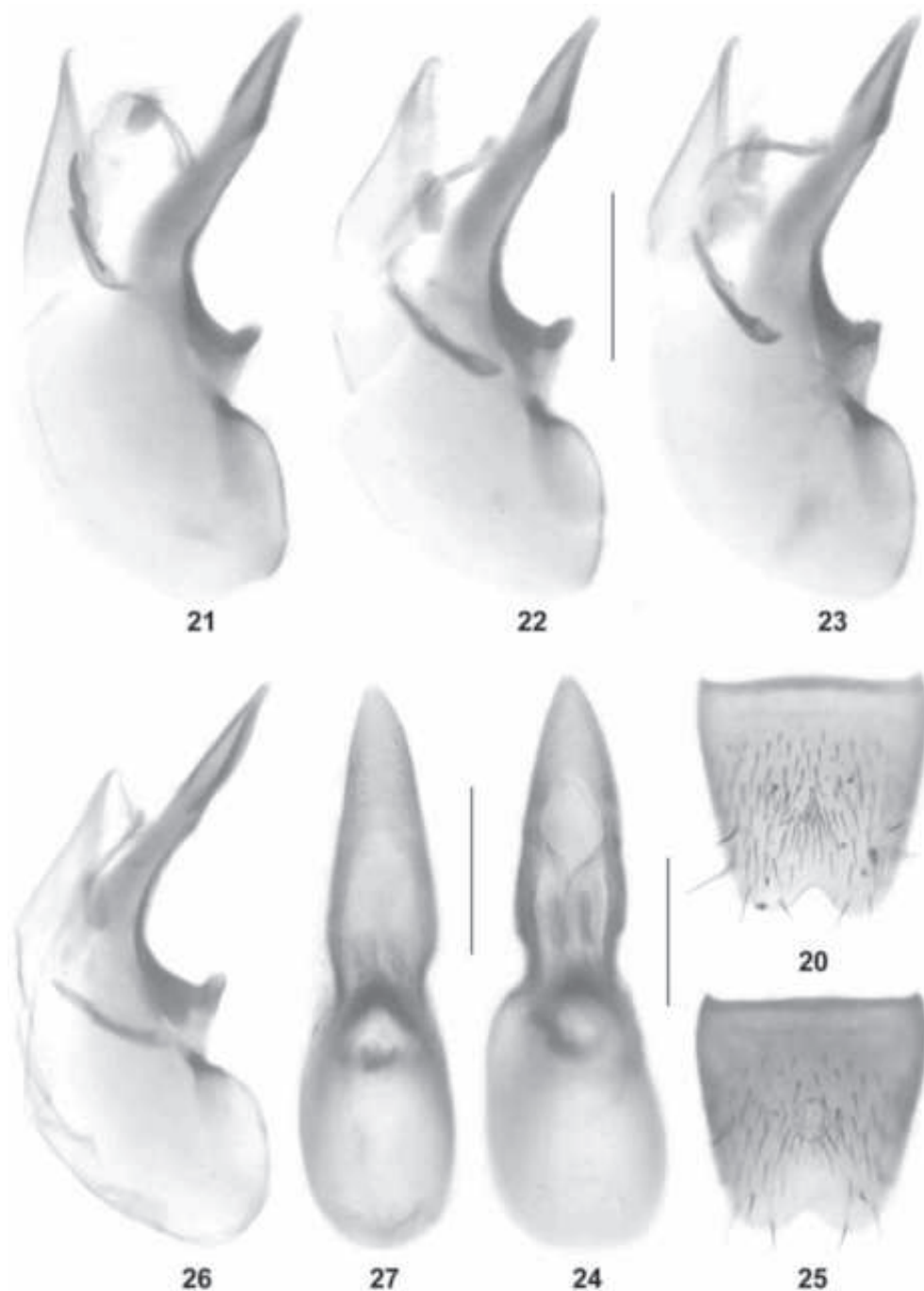
ETYMOLOGY: The specific epithet is an adjective derived from Oros Kerkis, the mountain where this species is probably endemic.

DESCRIPTION: Very small and slender species; body length 2.0–2.2 mm; length of forebody 0.8–0.9 mm. Habitus as in Fig. 9. Coloration: head pale-brown to brown; pronotum and elytra reddish-yellow; abdomen reddish-yellow, with segments VI, the anterior three-fourths of segment VII, and sometimes also the middle of tergite V infuscate; legs pale-yellowish; antennae dark-yellowish to yellowish-brown with the basal antennomeres pale-yellowish.

Head (Fig. 10) of subcircular shape, approximately as broad as long or very weakly transverse; punctation distinct and very dense; interstices narrower than diameter of punctures and with shallow microreticulation. Eyes small and weakly convex, slightly more than half as long as distance from posterior margin of head to posterior margin of head in dorsal view. Antenna 0.6 mm long, distinctly incrassate apically; antennomeres IV–X strongly transverse, at least twice as broad as long, and gradually increasing in width; antennomere XI large, approximately as long as the combined length of antennomeres VIII–X.

Pronotum (Fig. 10) small in relation to head, weakly transverse, approximately 1.2 times as broad as long and 1.15–1.20 times as broad as head; punctation dense and distinct, but finer than that of head; interstices with distinct microreticulation.

Elytra (Fig. 10) approximately 0.8 times as long as pronotum; posterior margin distinctly sinuate near postero-lateral angles; punctation dense and distinct; interstices with microreticulation. Hind wings completely reduced. Legs short; metatarsomere I slightly longer than the combined length of II and III.



Figs. 20–27: *Sunius ambelosicus* (20–24) and *S. geiseri* (25–27): 20, 25) male sternite VIII; 21–23, 26) aedeagus in lateral view; 24, 27) aedeagus in ventral view. Scale bars: 20, 25: 0.2 mm; 21–24, 26–27: 0.1 mm.

Abdomen slightly narrower than, or as broad as, elytra; segments III–VII of subequal width; tergites III–V with shallow anterior impressions; punctuation fine, rather dense on anterior and somewhat less dense on posterior tergites; interstices with shallow microreticulation; posterior margin of tergite VII without palisade fringe.

♂: sternite VIII (Fig. 11) approximately as long as broad, posterior margin obtusely angled in the middle; median lobe of aedeagus (Figs. 12–15) 0.23–0.24 mm long; ventral process apically bifid in ventral view; paramere (Fig. 16) 0.38 mm long, with rather long, slender, and basally dilated apical lobe.

♀: sternite VIII (Fig. 17) approximately as long as broad, shorter than that of male, and with convex posterior margin; spermatheca 0.15 mm long and shaped as in Fig. 18.

COMPARATIVE NOTES: *Oxypoda kerkisica* is most similar and, based on the similar morphology of the aedeagus (ventral process apically bifid; shapes of internal structures), also closely related to *O. afimbriata* ASSING, 2006 (Pelopónnisos: Oros Erimanthos), but distinguished by distinctly smaller body size, darker coloration, shorter antennae with much more transverse antennomeres, less coarse and dense punctuation of the whole body, a less transverse pronotum, the completely reduced hind wings (*O. afimbriata*: hind wings of reduced length, but stubs present and extending slightly beyond posterior margin of the elytra), the less curved ventral process of the aedeagus, and the shorter, less slender spermathecal capsule. For illustrations of *O. afimbriata* see ASSING (2006c).

DISTRIBUTION AND NATURAL HISTORY: *Oxypoda kerkisica* is probably endemic to Oros Kerkis, a mountain in the west of Samos. The specimens were sifted from litter and grass near and between cushion plants on a north slope at an altitude of approximately 1200 m. The type locality is illustrated in Fig. 19.

***Sunius ambelosicus* sp.n. (Figs. 20–24, 28)**

TYPE MATERIAL: **Holotype** ♂: “Greece: Samos [33a+1], Or. Ambelos: N-slope, 37°46'33"N 26°48'39"E, 940 m, under stones, 5.IV.2014, V. Assing / Holotypus ♂ *Sunius ambelosicus* sp.n. det. V. Assing 2015” (cAss).

Paratypes: 4 ♀♀: same data as holotype (cAss); 2 ♂♂, 1 ♀: “Greece: Samos [33+1], Or. Ambelos: N-slope, 37°46'33"N 26°48'39"E, 940 m, u. stones, 4.IV.2014, Assing & Forcke” (cAss).

ETYMOLOGY: The specific epithet (adjective) is derived from Oros Ambelos, the name of the mountain where the species is presumably endemic.

DESCRIPTION: Body length 2.8–3.0 mm; length of forebody 1.3–1.4 mm. Coloration: forebody yellowish-red; abdomen brown to blackish-brown; legs and antennae yellowish. External characters as in *S. geiseri* and many other species of the *S. seminiger* group.

♂: sternite VII unmodified; sternite VIII (Fig. 20) weakly transverse, in the middle weakly elevated and with denser pubescence, posterior excision approximately 0.15 times as deep as length of sternite; aedeagus 0.33–0.36 mm long and shaped as in Figs. 21–24; internal sac with two small and slender sclerotized spines.

COMPARATIVE NOTES: Based on external and the male sexual characters, *S. ambelosicus* belongs to the *S. seminiger* group, which comprises numerous locally endemic species distributed in the Mediterranean Region (ASSING 2011). Among the species of this group, the aedeagus (particularly the internal structures) and the male secondary sexual characters are most similar to those of *S. geiseri*, a species evidently endemic to Oros Kerkis in the west of Samos. The new species is distinguished from *S. geiseri* by the slightly deeper posterior excision of the male sternite VIII and by the shape of the ventral process of the aedeagus in lateral and in ventral view (*S. geiseri*: ventral process more slender, not distinctly dentate, with longer apical portion,

and more strongly pointing ventrad). For illustrations of *S. geiseri* see Figs. 25–27 and ASSING (2009a).

COMMENT: The female paratype of *S. geiseri* from the environs of Pirkos most likely belongs to *S. ambelosicus*.

DISTRIBUTION AND NATURAL HISTORY: *Sunius ambelosicus* is most likely endemic to Oros Ambelos, a mountain in the centre of Samos. The specimens were all collected from under stones in a grassy clearing with *Quercus ilex* and scattered old pine trees (Fig. 28).



Fig. 28: Type locality of *Sunius ambelosicus* and *Geostiba plicipennis* (sample number 33) in Oros Ambelos.

Zusammenfassung

Eine Untersuchung von 1322 Staphylinidae von der griechischen Insel Samos ergab mindestens 117 Arten. Drei Arten werden beschrieben und abgebildet: *Geostiba (Tropogastrosipalia) plicipennis* sp.n. (Oros Ambelos) und *Oxypoda (Bessopora) kerkisica* sp.n. (Oros Kerkis) aus der Unterfamilie Aleocharinae sowie *Sunius ambelosicus* sp.n. (Oros Ambelos) aus der Unterfamilie Paederinae. *Geostiba plicipennis* ist die erste inselendemische Art der artenreichen Untergattung *Tropogastrosipalia* SCHEERPELTZ, 1951. Einschließlich der von Volker Brachat und Heinrich Meybohm im Jahr 2003 nachgewiesenen Pselaphinae und Scydmaeninae sowie früherer Literaturnachweise sind derzeit mindestens 136 Staphylinidenarten von Samos bekannt, 103 davon beschrieben und sicher determiniert, 15 unbeschrieben (fünf Pselaphinen- und zehn

Scydmaeninenarten), acht nicht sicher identifiziert und mindestens zehn nicht determiniert. Sechs Arten werden erstmals aus Griechenland nachgewiesen. Zur bemerkenswert artenreichen Staphylinidenfauna von Samos gehören 18 Arten, die ausschließlich von dieser Insel bekannt und sehr wahrscheinlich inselendemisch, teilweise sogar lokalendemisch sind. Allerdings sind derzeit nur sieben dieser Arten beschrieben. *Xantholinus chiosicus* ASSING, 2015, eine flugunfähige, bisher als Inselendemit von Chios eingestufte Art, ist auch auf Samos vertreten. Nach derzeitigem Kenntnisstand übertrifft die Diversität der Staphylinidenfauna von Samos diejenige anderer, Samos an Größe übertreffender Inseln der nördlichen Ägäis und offenbar sogar die der um fast das Dreifache größeren Insel Rhodos. Diese Beobachtung wird mit der geographischen Lage, der Geologie und den ökologischen Besonderheiten von Samos erklärt. Eine Gesamtliste der derzeit von Samos bekannten beschriebenen und unbeschriebenen Arten wird erstellt.

Acknowledgements

My thanks are due to Thomas Forcke (Birkenfeld) for the generous gift of the Staphylinidae collected by him in Samos. The following taxa were identified by other specialists: Pselaphinae (Volker Brachat, Geretsried), Scydmaeninae (Heinrich Meybohm, Großhansdorf), *Mycetoporus monticola*, *M. ignidorsum*, *Tachyporus abner* (Michael Schülke, Berlin), *Scopaeus haemusensis* (Johannes Frisch, MNHUB). Volker Brachat and Heinrich Meybohm kindly communicated additional data on Pselaphinae and Scydmaeninae, respectively, from a field trip to Samos in 2003 and provided additional information on the distributions of the individual species of these subfamilies. Volker Puthz (Schlitz) examined the material of *Stenus hospes* and *S. turcicus*, and made helpful suggestions. Benedikt Feldmann (Münster) proof-read the manuscript.

References

- ASSING, V. 1997: A revision of the Western Palaearctic species of *Myrmecopora* Saulcy, 1864, sensu lato and *Eccoptoglossa* Luze, 1904 (Coleoptera, Staphylinidae, Aleocharinae, Falagriini). – Beiträge zur Entomologie, Berlin 47 (1): 69–151.
- ASSING, V. 2004a: On some species of *Leptusa* Kraatz, primarily from Spain (Coleoptera: Staphylinidae, Aleocharinae). – Linzer biologische Beiträge 36 (1): 61–75.
- ASSING, V. 2004b: A revision of *Callicerus* Gravenhorst, *Pseudosemiris* Machulka, and related genera. III. A new genus and species from China, and additional records (Insecta: Coleoptera: Staphylinidae: Aleocharinae). – Zootaxa 767: 1–8.
- ASSING, V. 2004c: New species and records of Staphylinidae from Turkey III (Insecta: Coleoptera). – Linzer biologische Beiträge 36 (2): 669–733.
- ASSING, V. 2004d: A revision of the *Medon* species of the Eastern Mediterranean and adjacent regions (Insecta: Coleoptera: Staphylinidae: Paederinae). – Bonner Zoologische Beiträge 52 (1–2): 33–82.
- ASSING, V. 2004e: New species and records of Staphylinidae from Greece (Insecta: Coleoptera). – Linzer biologische Beiträge 36 (2): 593–613.
- ASSING, V. 2005a: A revision of the genus *Leptobium* Casey (Coleoptera: Staphylinidae: Paederinae). – Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie), Nr. 673: 1–182.
- ASSING, V. 2005b: Two new species and new records of Staphylinidae from the Greek island Lesbos (Insecta: Coleoptera). – Linzer biologische Beiträge 37 (2): 1035–1046.
- ASSING, V. 2005c: A revision of Othiini. XIV. New species, new synonyms, and new records (Insecta: Coleoptera: Staphylinidae). – Entomological Problems 35 (1): 51–67.

- ASSING, V. 2006a: On some species of *Oxypoda* Mannerheim from Turkey and adjacent regions (Insecta: Coleoptera: Staphylinidae, Aleocharinae). – Linzer biologische Beiträge 38 (1): 277–331.
- ASSING, V. 2006b: Thirteen new species and additional records of Eastern Mediterranean *Geostiba* Thomson (Coleoptera: Staphylinidae, Aleocharinae). – Linzer biologische Beiträge 38 (2): 1179–1215.
- ASSING, V. 2006c: New species and records of Staphylinidae from Greece, with two new synonymies (Insecta: Coleoptera). – Linzer biologische Beiträge 38 (1): 333–379.
- ASSING, V. 2006d: On the taxonomy and biogeography of *Stenus* (s. str.) *erythrocnemus* Eppelsheim and related species (Insecta: Coleoptera: Staphylinidae). – Bonner Zoologische Beiträge 53 (3–4) (2004): 303–310.
- ASSING, V. 2007a: Three new species, three new synonyms, and additional records of *Leptusa* from Turkey (Insecta: Coleoptera: Staphylinidae: Aleocharinae). – Entomological Problems 37 (1–2): 7–19.
- ASSING, V. 2007b: New species and additional records of Staphylinidae from Turkey V (Coleoptera). – Stuttgarter Beiträge zur Naturkunde Serie A (Biologie) 700: 1–64.
- ASSING, V. 2007c: On the *Oxypoda* species of Turkey and adjacent regions. II. Three new species, additional records, and a checklist (Coleoptera: Staphylinidae, Aleocharinae). – Zootaxa 1411: 1–24.
- ASSING, V. 2008: A revision of the Habrocerinae of the world. IV. A new species of *Habrocerus* from China and additional records (Coleoptera: Staphylinidae). – Beiträge zur Entomologie, Keltern 58 (1): 135–144.
- ASSING, V. 2009a: Two new species of Paederinae from the Greek island Samos (Coleoptera: Staphylinidae). – Linzer biologische Beiträge 41 (1): 437–443.
- ASSING, V. 2009b: On the Staphylinidae of Turkey. VI. Thirteen new species and additional records (Coleoptera). – Koleopterologische Rundschau 79: 117–172.
- ASSING, V. 2009c: A revision of Western Palearctic *Medon*. VII. A new species from southern Turkey and additional records (Coleoptera: Staphylinidae: Paederinae). – Linzer biologische Beiträge 41 (2): 1253–1268.
- ASSING, V. 2009d: A revision of *Ceranota* Stephens, subgenus of *Aleochara* Gravenhorst (Coleoptera: Staphylinidae: Aleocharinae). – Beiträge zur Entomologie, Keltern 59 (2): 355–422.
- ASSING, V. 2009e: On the Western Palearctic and Middle Asian species of *Ochtheophilum* Stephens, with notes on *Cryptobium koltzei* Eppelsheim (Coleoptera: Staphylinidae: Paederinae: Cryptobiina). – Linzer biologische Beiträge 41 (1): 397–426.
- ASSING, V. 2009f: A revision of *Geostiba* of the Western Palearctic region. XIX. New species from Turkey and Iran and additional records, with an updated key and catalogue of the species of the Eastern Mediterranean, the Caucasus, and adjacent regions (Coleoptera: Staphylinidae: Aleocharinae). – Linzer biologische Beiträge 41 (2): 1191–1246.
- ASSING, V. 2011: The *Sunius* species of the Palearctic region (Coleoptera: Staphylinidae: Paederinae). – Linzer biologische Beiträge 43 (1): 151–193.
- ASSING, V. 2013a: On the Staphylinidae (Coleoptera) of Crete. – Stuttgarter Beiträge zur Naturkunde A, Neue Serie 6: 83–102.
- ASSING, V. 2013b: On the Staphylinidae (Coleoptera) of Turkey IX. Five new species, a new synonymy, and additional records. – Stuttgarter Beiträge zur Naturkunde A, Neue Serie 6: 103–125.
- ASSING, V. 2013c: On the Staphylinidae of Rhodes, Greece (Insecta: Coleoptera). – Linzer biologische Beiträge 45 (2): 1587–1613.

- ASSING, V. 2014: A revision of Palaearctic and Oriental *Rugilus*. IV. Three new species from Nepal and additional records (Coleoptera: Staphylinidae: Paederinae). – Linzer biologische Beiträge 45 (1): 449–459.
- ASSING, V. 2015a: On the Staphylinidae (Coleoptera) of Crete II. Seven new species, a new synonymy, and additional records. – Stuttgarter Beiträge zur Naturkunde A, Neue Serie 8: 95–112.
- ASSING, V. 2015b: On the Staphylinidae of the Greek island Chios (Insecta: Coleoptera). – Linzer biologische Beiträge 47 (1): 43–55.
- ASSING, V. & WUNDERLE, P. 2001: On the Staphylinidae of Cyprus (Coleoptera). – Entomologische Zeitschrift 111 (2): 34–41.
- BESUCHET, C. 1978: Le genre *Namunia* Reitt. (Coleoptera, Pselaphidae). – Revue Suisse de Zoologie 85 (1): 127–133.
- BESUCHET, C. 2008: Two new cavernicolous Bythinini from Greece (Coleoptera, Staphylinidae, Pselaphinae). – In Pavičević, D. & Perreau, M. (eds.): Advances in the studies of the fauna of the Balkan Peninsula. – Papers dedicated to the memory of Guido Nonveiller: 245–248.
- KAPP, A. 2005: Die paläarktischen Arten der Gattungen *Taxicera* Mulsant & Rey 1873 und *Discerota* Mulsant & Rey 1873 (Staphylinidae, Aleocharinae, Subtribus Taxicerina). – Linzer biologische Beiträge 37 (2): 1277–1323.
- PUTHZ, V. 2008: *Stenus* Latreille und die segenreiche Himmelstochter (Coleoptera, Staphylinidae). – Linzer biologische Beiträge 40 (1): 137–230.
- SCHÜLKE, M. 2009: Über *Mycetoporus monticola* Fowler und ähnliche mitteleuropäische Arten (Coleoptera, Staphylinidae, Tachyporinae). – Entomologische Blätter 105: 1–18.
- SCHÜLKE, M. & SMETANA, A. 2015: Staphylinidae, pp. 304–1134. – In Löbl, I. & Löbl, D. (eds.): Catalogue of Palaearctic Coleoptera. Vol. 2. Hydrophiloidea – Staphylinoidea. Revised and updated edition. – Leiden: Brill, xxvi + 1702 pp.

Dr. Volker ASSING

Gabelsbergerstr. 2, D – 30163 Hannover, Germany (vassing.hann@t-online.de)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 2015

Band/Volume: [85_2015](#)

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

Artikel/Article: [On the Staphylinidae of the Greek island Samos \(Coleoptera: Staphylinidae\) 81-102](#)