

Linzer biol. Beitr.	46/1	415-428	31.7.2014
---------------------	------	---------	-----------

On the Staphylinidae of Sardinia, Italy (Insecta: Coleoptera)

V. ASSING

A b s t r a c t : Recently collected material from Sardinia, comprising more than 1200 specimens and more than 70 species, is studied. Two species are described and illustrated: *Astenus (Eurysunius) wunderlei* nov.sp. and *Leptusa (Adexiopisalia) meybohmi* nov.sp. One synonymy is proposed: *Anthobium atrocephalum* (GYLLENHAL 1827) = *A. sardoum* (SCHEERPELTZ 1961) nov.syn. Records of zoogeographic interest are reported for 19 species, among them two new records for Sardinia. The currently known distribution of *Oxyroda islandica* KRAATZ 1857 is mapped.

K e y w o r d s : Coleoptera, Staphylinidae, Palaearctic region, Italy, Sardinia, taxonomy, new species, new synonymy, new records.

Introduction

The study of the diverse staphylinid fauna of Sardinia has had a long tradition. Recent checklists were provided by ANGELINI et al. (1995) and CICERONI et al. (1995). According to these checklists, nearly 490 species had been recorded from Sardinia and the presence of approximately 70 species was doubtful. As many as 107 species and subspecies were categorized as island endemics. According to ZANETTI (2011), more than 500 species are now known from Sardinia. BORDONI et al. (2012) recently described twelve additional endemic species. Even if several of the endemic taxa have been synonymized in the meantime, the figure is still well above 100 (sub-)species, distinctly more than the number of endemics known from East Mediterranean islands such as Crete (67 species), Cyprus (26 species), and Rhodos (10 described and 3 undescribed species) (ASSING 2013a, b).

The present paper is primarily based on material collected during a field trip to Sardinia conducted by Paul Wunderle (Mönchengladbach) and the author in December/January 2012/2013. Additional specimens were provided by Heinrich Meybohm (Großhansdorf) from a field trip in March 2013. An examination of this material yielded two undescribed species and several records of zoogeographic interest, among them two new records for Sardinia.

Material and measurements

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

IZUR Istituto di Zoologia, Università degli Studi di Roma (V. Taglianti)

MNHUB..... Museum für Naturkunde der Humboldt-Universität, Berlin (J. Frisch, J. Willers)

NHMW Naturhistorisches Museum Wien (H. Schillhammer)

cAss..... author's private collection

cWun..... private collection Paul Wunderle, Mönchengladbach

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs. The map was 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 frons (*Astenus*) or from the anterior margin of the clypeus (*Leptusa*) to the posterior margin of the head, head width including eyes, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length 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

Pseudopsis sulcata NEWMAN 1834

Material examined: Italy: Sardinia: 1 ♂, 30 km W Siniscola, 40°32'N, 9°20'E, 810 m, moist oak forest with rocks, litter and grass roots sifted, 23.XII.2012, leg. Assing (cAss); 2 ♀ ♀, Monti del Gennargentu, 10 km SE Fonni, 40°05'N, 9°21'E, 1170 m, oak forest with rocks, litter sifted, 26.XII.2012, leg. Assing (cAss).

Comment: This species is not listed for Sardinia by ZANETTI (1995), but was recorded from there by ZERCHE (1992).

Anthobium atrocephalum (GYLLENHAL 1827)

Lathrimaeum sardoum SCHEERPELTZ 1961: 92 ff.; **nov.syn.**

Material examined: Italy: Sardinia: 2 ♂ ♂, 3 ♀ ♀, Monti del Gennargentu, Bruncu Spina, 40°01'N, 9°18'E, 1540 m, *Alnus* litter near stream, sifted, 25.XII.2012, leg. Assing; 10 ♂ ♂ 4 ♀ ♀, Monti del Gennargentu, Bruncu Spina, 40°03'N, 9°18'E, 1280 m, oak forest, leaf litter near stream and at foot of very old oak trees sifted, 25.XII.2012, leg. Assing; 2 ♀ ♀, Monti del Gennargentu, 6 km S Fonni, 40°04'N, 9°15'E, 1100 m, oak forest, litter sifted, 26.XII.2012, leg. Assing; 5 ♂ ♂, 2 ♀ ♀, Monti del Gennargentu, 10 km SE Fonni, 40°05'N, 9°21'E, 1170 m, oak forest with rocks, litter sifted, 26.XII.2012, leg. Assing (cAss, MNHUB).

Comment: SCHEERPELTZ (1961) described *Anthobium sardoum* based on two "Typen (1 ♂, 1 ♀) und einigen wenigen paratypischen Stücken" collected "im Gebiete des Monte Genargentu [sic]", where the above material was collected, too. ZANETTI (1987)

regarded *A. sardoum* as a subspecies of *A. atrocephalum* distinguished only by smaller size (on average 2.5 mm versus 3.0-3.5 mm for *A. atrocephalum*). However, I have been unable to appreciate any such size difference between the above 28 specimens and material seen from other regions of the distribution of *A. atrocephalum*, suggesting that the sample seen by Scheerpeltz may have been from the lower end of the size range of *A. atrocephalum* and that the type specimens are conspecific with *A. atrocephalum*. According to ZANETTI (1987), *A. atrocephalum* is widespread in all of Italy, including Sicily.

***Stenus cribratus* KIESENWETTER 1850**

Material examined: Italy: Sardinia: 1♂, 30 km ESE Macomer, S Nughedu, 40°05'N, 8°58'E, 580 m, moist pasture, under stones, 27.XII.2012, leg. Assing (cAss).

Comment: The above specimens was collected from a nest of *Messor* sp., once again confirming the myrmecophily of *S. cribratus* (see PUTHZ 2012).

***Astenus (Astenus) lyonessius* (JOY 1908)**

Material examined: Italy: Sardinia: 2♂♂, 2♀♀, 10 km SW Siniscola, NW-slope of Monte Albo, 40°32'N, 9°35'E, 570 m, N-slope, stony pasture, under stones, 24.XII.2012, leg. Assing (cAss, MNHUB); 1♀, 18 km SSW Dorgali, S Genna Silana, 40°06'N, 9°32'E, 740 m, calcareous pasture, under stones, 28.XII.2012, leg. Assing (cAss).

Comment: In CICERONI & ZANETTI (1995), this species is listed as *A. brevelytratus* COIFFAIT 1960.

***Astenus (Astenus) misellus* (MULSANT & REY 1880)**

Material examined: Italy: Sardinia: 1♂, 30 km W Nuoro, 3 km N Bolótana, Catena del Márghine, 40°22'N, 8°57'E, 950 m, stony pasture, under stones, 30.XII.2012, leg. Assing (cAss).

Comment: This species is widespread, but not very common in the West Mediterranean and has already been reported from Sardinia (CICERONI & ZANETTI 1995).

***Astenus (Astenus) melanurus* (KÜSTER 1853)**

Material examined: Italy: Sardinia: 12♂♂, 10♀♀, 10 km SW Siniscola, NW-slope of Monte Albo, 40°32'N, 9°35'E, 570 m, N-slope, stony pasture, under stones, 24.XII.2012, leg. Assing; 1♀, Monte Arci, 12 km ENE Terralba, 39°46'N, 8°48'E, 260 m, pasture, under stones, 27.XII.2012, leg. Assing; 25♂♂, 25♀♀, 18 km SSW Dorgali, S Genna Silana, 40°06'N, 9°32'E, 740 m, calcareous pasture, under stones, 28.XII.2012, leg. Assing; 40♂♂, 39♀♀, 10 km NW Ozieri, N Sant'Antioco di Bisàrcio, 40°39'N, 8°55'E, 270 m, moist pasture, under stones, 29.XII.2012, leg. Assing; 1♂, 1♀, 12 km NW Ozieri, N Sant'Antioco di Bisàrcio, 40°42'N, 8°54'E, 200 m, pasture, under stones, 29.XII.2012, leg. Assing; 14♂♂, 15♀♀, 10 km NW Ozieri, N Sant'Antioco di Bisàrcio, 40°40'N, 8°55'E, 270 m, pasture, under stones, 29.XII.2012, leg. Assing; 12♂♂, 14♀♀, 10 km SW Siniscola, NW-slope of Monte Albo, 40°32'N, 9°35'E, 570 m, N-slope, stony pasture, under stones, 1.I.2013, leg. Assing (cAss, MNHUB).

Comment: This widespread species is apparently the most common representative of the genus in Sardinia.

***Astenus (Eurysunius) curtulus* (ERICHSON 1840)**

Material examined: Italy: Sardinia: 6♂♂, 5♀♀, 10 km SW Siniscola, NW-slope of Monte Albo, 40°32'N, 9°35'E, 570 m, N-slope, stony pasture, under stones, 24.XII.2012, leg. Assing; 1♀, Monte Arci, 10 km NE Terralba 39°47'N, 8°46'E, 620 m, road margin, under stone, 27.XII.2012, leg. Assing; 4♂♂, 1♀, 10 km NW Ozieri, N Sant'Antioco di Bisarcio, 40°39'N, 8°55'E, 270 m, moist pasture, under stones, 29.XII.2012, leg. Assing; 3♀♀, 7 km SE Ozieri, 40°32'N, 9°06'E, 940 m, calcareous pasture, under stones, 29.XII.2012, leg. Assing; (cAss, MNHUB); 7♂♂, 6♀♀, 18 km W Nuoro, N Orotelli, 40°20'N, 9°03'E, 220 m, moist pasture with stones, under stones, 30.XII.2012, leg. Assing; 9♂♂, 5♀♀, 10 km N Nuoro, W Orune, 40°25'N, 9°18'E, 770 m, stony pasture in cork tree forest, under stones, 30.XII.2012, leg. Assing; 20♂♂, 11♀♀, 10 km SW Siniscola, NW-slope of Monte Albo, 40°32'N, 9°35'E, 570 m, N-slope, stony pasture, under stones, 1.I.2013, leg. Assing (cAss, MNHUB).

Comment: The above material was compared with the types. According to COIFFAIT (1984), *A. curtulus* is distributed in Sardinia and Corsica, but personal observations suggest that the species is endemic to Sardinia and previous records from Corsica are based on misidentifications. The specimens collected to the north of Orotelli were collected from nests of *Tetramorium* sp., whereas the remaining material was found under stones without ants, suggesting that this species is a facultative inhabitant of *Tetramorium* nests.

***Astenus (Eurysunius) tristis* (ERICHSON 1840)**

Material examined: Italy: Sardinia: 1♂, 1♀, Monti del Gennargentu, Bruncu Spina, 40°01'N, 9°18'E, 1540 m, N-slope with grass and stones, under stones, 25.XII.2012, leg. Assing; 11♂♂, 18♀♀, Monti del Gennargentu, Bruncu Spina, 40°02'N, 9°18'E, 1540 m, stony N-slope with snowfields, under stones, 25.XII.2012, leg. Assing; 1♂, 2♀♀, Monti del Gennargentu, 12 km SE Fonni, Arcu Correboi, 40°05'N, 9°22'E, 1230 m, N-slope with grass and stones, under stones, 26.XII.2012, leg. Assing; 3♀♀, Monti del Gennargentu, SE Fonni, SE Arcu Correboi, 40°04'N, 9°22'E, 1200 m, grassy N-slope with stones, under stones, 26.XII.2012, leg. Assing; (cAss, MNHUB); 2♂♂, 3♀♀, Monti del Gennargentu, 6 km SE Désulo, 40°01'N, 9°16'E, 1360 m, stony N-slope, under stones, 31.XII.2012, leg. Assing (cAss, MNHUB).

Comment: This Sardinian endemic was found only in the Gennargentu range at altitudes of at least 1200 m.

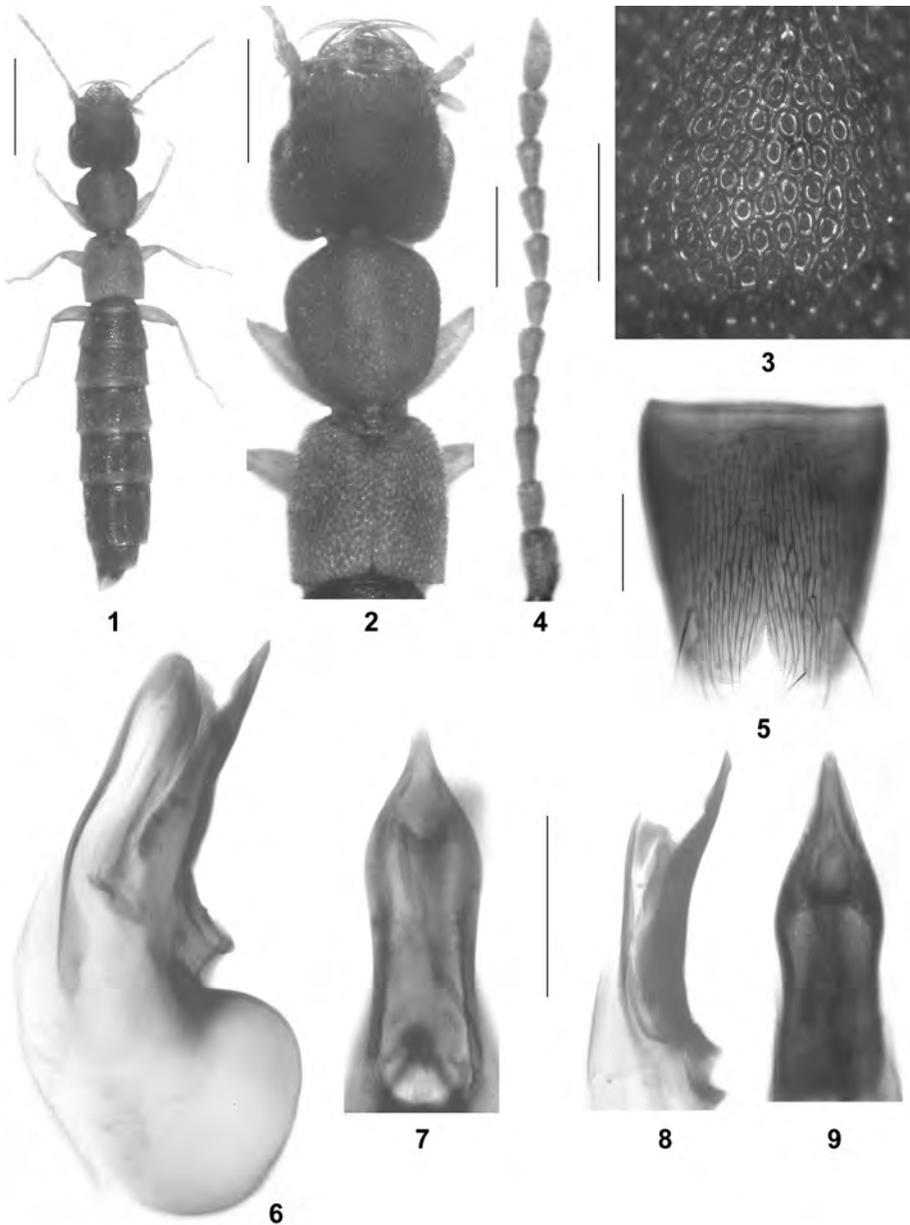
***Astenus (Eurysunius) wunderlei* nov.sp. (Figs 1-7, 10)**

Type material: Holotype ♂: "ITALY: Sardinia [27], 18 km SSW Dorgali, 40°05'53"N, 9°31'48"E, 740 m, pasture, u. stones, 28.XII.2012, P. Wunderle / Holotypus ♂ *Astenus wunderlei* sp. n. det. V. Assing 2013" (cAss). Paratypes: 2♀♀: same data as holotype (cWun); 2♀♀ [one with two workers of *Tetramorium* sp. attached to the pin]: same data, but leg. Assing (cAss).

Etymology: This species is dedicated to Paul Wunderle (Mönchengladbach), who collected the holotype.

Description: Body length 5.0-5.5 mm; length of forebody 2.3-2.4 mm. Habitus as in Fig. 1. Coloration: head blackish-brown to blackish; pronotum dark-reddish, with the area near the anterior angles diffusely and more or less extensively infuscate; elytra yellowish, with the scutellum and sometimes also the adjacent elytral portions somewhat infuscate; abdomen blackish, with the posterior margins of segments III-VI narrowly, and the posterior margins of segments VII-VIII more broadly reddish; legs and antennae yellowish.

Head (Fig. 2) approximately 1.1 times as broad as long; posterior margin strongly concave; punctation shallow, very dense, and umbilicate (Fig. 3); interstices reduced to



Figs 1-9: *Astenus wunderlei* nov.sp. (1-7) and *A. italicus* COIFFAIT, holotype (8-9): (1) habitus; (2) forebody; (3) median dorsal portion of head; (4) antenna; (5) male sternite VIII; (6) aedeagus in lateral view; (7, 9) apical portion of aedeagus in ventral view; (8) apical portion of aedeagus in lateral view. Scale bars: 1: 1.0 mm; 2: 0.5 mm; 4-9: 0.2 mm; 3: 0.1 mm.

narrow ridges. Eyes approximately 0.8 times as long as postocular region. Antenna (Fig. 4) 1.1-1.2 mm long; antennomeres V-IX nearly twice as long as broad.

Pronotum (Fig. 2) 1.10-1.15 times as long as broad and approximately 0.85 times as broad as head, laterally with a shallow impression on either side; lateral margins straight to weakly convex, distinctly converging posteriad; anterior and posterior angles without long setae; posterior margin convexly produced in the middle; punctuation similar to that of head.

Elytra (Fig. 2) 0.65-0.70 times as long as pronotum; humeral angles moderately marked; punctuation distinctly granulose; interstices with subdued shine. Hind wings completely reduced.

Abdomen 1.10-1.15 times as broad as elytra; punctuation very dense on anterior tergites, gradually decreasing in density from tergite III to tergite VIII, moderately dense on tergites VII and VIII; posterior margin of tergite VII with narrow rudiment of a palisade fringe.

♂: sternite VIII shaped as in Fig. 5; aedeagus 0.65 mm long, shaped as in Figs 6-7; ventral process weakly bisinuate in lateral view.

C o m p a r a t i v e n o t e s : According to CICERONI & ZANETTI (1995), nine species of *Astenus* have been recorded, and three additional species have doubtfully been reported from Sardinia. From all of these species, *A. wunderlei* is distinguished by the different coloration and by the morphology of the aedeagus. *Astenus cerrutii* COIFFAIT 1960 (holotype in IZUR examined), whose original description is based on a single female from Su Gologone [approx. 40°17', 9°29'E; close to the type locality of *A. wunderlei*] near Oliena (COIFFAIT 1960), is smaller (body length 4.0 mm; length of forebody 1.95 mm), has a more robust body with a much more transverse head (1.25 times as broad as long), a transverse pronotum (1.05 times as broad as long) with concave lateral margins, distinctly transverse elytra (combined width 1.6 times the length of the suture), a broader abdomen with more transverse segments III-VI, a less defined punctuation of the head and pronotum, blackish-brown elytra with reddish-brown margins, and an aedeagus with a ventral process of different shape (broader and apically more acute in ventral view, not bisinuate and somewhat curved in lateral view, subapically slightly emarginate, dorso-apical carina shorter). The aedeagus of *A. cerrutii* is figured by COIFFAIT (1984). The respective male was looked for, but not found in the Coiffait collection at the Muséum National d'Histoire Naturelle Paris. Based on the illustrations provided by COIFFAIT (1984), the aedeagus of *A. wunderlei* is most similar to that of *A. italicus* COIFFAIT 1960, whose description is based on a single male from Molise. From this species (holotype examined; deposited in IZUR), *A. wunderlei* differs by the much finer and shallower punctuation of the forebody, the coloration of the pronotum and the elytra (*A. italicus*: pronotum black; elytra black with yellowish anterior and posterior margins), and by the different shape of the aedeagus. For illustrations of the aedeagus of *A. italicus* see Figs 8-9.



Fig. 10: Type locality of *Astenus wunderlei* nov.sp.

Distribution and natural history: The type locality is situated to the southwest of Dorgali near the east coast of Sardinia. The specimens were collected from under stones, one of them in a nest of *Tetramorium* sp., in a stony pasture at an altitude of 740 m (Fig. 10).

***Scopaeus didymus* ERICHSON 1840**

Material examined: Italy: Sardinia: 1♂, 30 km WSW Siniscola, NW Biti, 40°30'N, 9°21'E, 740 m, moist pasture, near stream, under stones, 23.XII.2012, leg. Assing (cAss).

Comment: In Italy, this West Mediterranean species is known only from Sardinia (CICERONI & ZANETTI 1995).

***Heterothops minutus* WOLLASTON 1860**

Material examined: Italy: Sardinia: 1♂, 26 km NW Siniscola, 40°40'N, 9°25'E, 470 m, cork tree forest with macchia, N-slope, litter and grass roots sifted, 23.XII.2012, leg. Assing (cAss); 1♀, Monte Arci, 12 km NE Terralba, Genna Spina, 39°48'N, 8°45'E, 710 m, oak forest, litter sifted, 27.XII.2012, leg. Assing (cAss).

Comment: ZANETTI (2011) recently reported *H. minutus* from Sardinia and Italy for the first time and revised the distributions of *H. minutus* and the similar *H. dissimilis* (GRAVENHORST 1802).

***Habrocerus pisidicus* KORGE 1971**

Material examined: Italy: Sardinia: 2♂♂, 2♀♀, 30 km W Siniscola, 40°32'N, 9°20'E, 810 m, moist oak forest with rocks, litter and grass roots sifted, 23.XII.2012, leg. Assing; 3♂♂, 1♀, 17 km SW Siniscola, Mont'Albo, 40°29'N, 9°32'E, 610 m, macchia with *Quercus ilex*, litter and grass roots sifted, 23.XII.2012, leg. Assing; 2♂♂, 3♀♀, Monte Arci, 12 km NE Terralba, Genna Spina, 39°48'N, 8°45'E, 710 m, oak forest, litter sifted, 27.XII.2012, leg. Assing (cAss, MNHUB).

Comment: *Habrocerus pisidicus* was newly recorded from Sardinia very recently (ZANETTI 2011).

***Sepedophilus aestivus* (REY 1882)**

Material examined: Italy: Sardinia: 1♂, 1♀, Monti del Gennargentu, 10 km SE Fonni, 40°05'N, 9°21'E, 1170 m, oak forest with rocks, litter sifted, 26.XII.2012, leg. Assing (cAss).

Comment: A synonym of *S. immaculatus* (STEPHENS 1832) until very recently, *S. aestivus* was recently revalidated by SCHÜLKE (2011), who reported one specimen from Sardinia.

***Leptusa (Lasiopisalia) sulcicollis* BERNHAUER 1932**

Material examined: Italy: Sardinia: 57♂♂, 48♀♀, Monti del Gennargentu, Bruncu Spina, 40°01'N, 9°18'E, 1540 m, *Alnus* litter near stream, sifted, 25.XII.2012, leg. Assing (cAss, MNHUB); 1♂, 3♀♀, Monti del Gennargentu, 10 km SE Fonni, 40°05'N, 9°21'E, 1170 m, oak forest with rocks, litter sifted, 26.XII.2012, leg. Assing (cAss).

Comment: According to PACE (1989), this species is endemic to the Monti del Gennargentu.

***Leptusa (Adexiopisalia) hummleriana* BERNHAUER 1935 (Figs 17-20)**

Leptusa hummleriana BERNHAUER 1935: 129.

Leptusa sardoa BERNHAUER 1935: 129.

Type material examined: *L. hummleriana*: Paralectotypes: 6♂♂, 1♀: "Aritzo, Sardinia / ex coll. Scheerpeltz / Cotypus Leptusa Hummleriana Bernhauer / Paralectotypus Leptusa hummleriana Bernhauer, rev. V. Assing 2013 / Leptusa hummleriana Bernhauer, det. V. Assing 2013" (NHMW); 2♂♂: "Aritzo, Sardinia / ex coll. O. Kaiser / ex coll. Scheerpeltz / Cotypus Leptusa sardoa Bernhauer / Paralectotypus Leptusa hummleriana Bernhauer, rev. V. Assing 2013 / Leptusa hummleriana Bernhauer, det. V. Assing 2013" (NHMW).

L. sardoa: Paralectotypes: 1♂, 4♀♀: "Mte. Aqueri, Sardinia / ex coll. Scheerpeltz / Cotypus Leptusa sardoa Bernhauer / Paralectotypus Leptusa sardoa Bernhauer, rev. V. Assing 2013 / Leptusa hummleriana Bernhauer, det. V. Assing 2013" (NHMW); 1♂, 3♀♀: "Dorgali, Sardinia / ex coll. Scheerpeltz / Cotypus Leptusa sardoa Bernhauer / Paralectotypus Leptusa sardoa Bernhauer, rev. V. Assing 2013 / Leptusa hummleriana Bernhauer, det. V. Assing 2013" (NHMW).

Additional material examined: Italy: Sardinia: 1♀, Monti del Gennargentu, 6 km S Fonni, 40°03'31"N, 9°15'29"E, 1100 m, oak forest, litter sifted, 26.XII.2012, leg. Assing (cAss); 16♂♂, 1♀♀, Monte Arci, 12 km NE Terralba, Genna Spina, 39°48'07"N, 8°44'43"E, 710 m, oak forest, litter sifted, 27.XII.2012, leg. Assing (cAss, MNHUB); 14♂♂, 7♀♀, 30 km W Nuoro, Catena del Márghine, 4 km N Bolótana, 40°21'25"N, 8°55'14"E, 1000 m, oak forest, leaf litter sifted, 30.XII.2012, leg. Assing (cAss, MNHUB); 1♀, Seui, 7.V.1902, leg. Dodero (NHMW); 1♂, Seui, leg. Dodero (NHMW); 1♂, Mte. Gennargentu, Aritzo, leg. Krüger (NHMW).

Comment: The original description is based on several syntypes ("in mehreren Stücken") collected in "Sardinien (Aristo)" by "Gustav Hummler-Paganetti" (BERNHAUER 1935). A lectotype was designated by PACE (1989). The type series of *L. sardoa* is from "Sardinien (Dorgali, Mte. Aqueri)" (BERNHAUER 1935). PACE (1979) synonymized *L. sardoa* with *L. hummleriana* and in referring to the type specimen from the Bernhauer collection as "il tipo" unintentionally designated a lectotype.

In the collections of the NHMW, eleven specimens labelled as cotypes of *L. hummleriana* and seven labelled as cotypes of *L. sardoa* were found. However, some of them had evidently been mislabelled by Scheerpeltz. Four of the specimens labelled as cotypes of *L. hummleriana* are from Dorgali and consequently paralectotypes of *L. sardoa*, and two of the specimens labelled as cotypes of *L. sardoa* are from Aritzo and thus represent paralectotypes of *L. hummleriana*.

Leptusa hummleriana is remarkably widespread in Sardinia and has been reported from various localities both in the north and in the south of the island. For additional records see PACE (1989). The shape of the aedeagus varies slightly between populations, but the observed differences (Figs 17-20) are interpreted as intra- rather than interspecific variation.

***Leptusa (Adexiopisalia) meybohmii* nov.sp.** (Figs 11-16)

Type material: Holotype ♂: "I-Sardinia, Lanusei, Bosco Selene, 900 m, 39°52'N, 9°31'E, 30.III.2013, Meybohm / Holotypus ♂ *Leptusa meybohmii* sp. n. det. V. Assing 2013" (cAss). Paratypes: 26 ♂♂, 19 ♀♀: same data as holotype (cAss, MNHUB); 1 ♂, 1 ♀: "I Sardinien Nuoro, 6 km S Lanusei 340 m, 26.3.2013 l. Meybohm, N39°50'56 E9°32'55" (cAss, MNHUB).

Etymology: This species is dedicated to Heinrich Meybohm (Großhansdorf), who collected all the type specimens.

Description: Size variable; body length 1.8-2.7 mm; length of forebody 0.8-1.1 mm. Habitus as in Fig. 11. Coloration: body reddish to dark-reddish, with abdominal segment VI and sometimes also the anterior portion of segment VII infuscate; legs and antennae yellowish-red to red.

Head (Fig. 12) approximately as broad as long; punctuation fine, shallow, and rather sparse, barely noticeable in the pronounced microreticulation. Eyes approximately half as long as postocular region and composed of 10-15 rather large ommatidia.

Pronotum (Fig. 12) 1.15-1.20 times as broad as long and approximately 1.15 times as broad as head; posterior angles very weakly marked, nearly obsolete; punctuation and microsculpture similar to those of head.

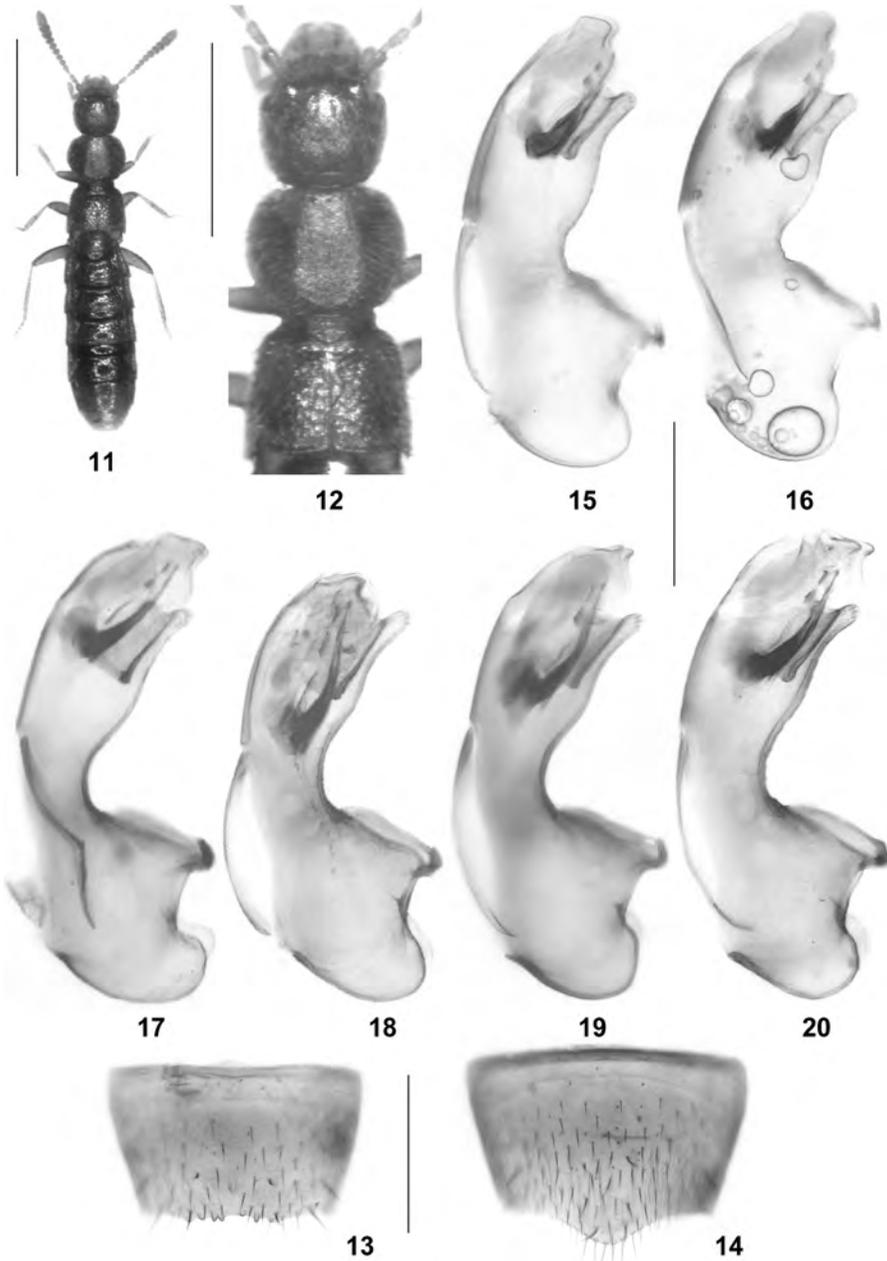
Elytra (Fig. 12) approximately 0.65 times as long as pronotum; humeral angles rather marked; lateral margins often more or less distinctly elevated and more or less sharply marked, particularly near the humeral angles; disc with pronounced microreticulation and matt. Hind wings completely reduced.

Abdomen distinctly broader than elytra; punctuation fine, moderately sparse on anterior tergites, gradually decreasing in density posteriad, and sparse on posterior tergites; tergite VII and VIII with sexual dimorphism; posterior margin of tergite VII without palisade fringe.

♂: tergite VII with glossy oblong median tubercle posteriorly; tergite VIII (Fig. 13) with small oblong median tubercle (sometimes missing particularly in smaller males), posterior margin weakly concave in the middle and serrate; sternite VIII (Fig. 14) transverse, posterior margin distinctly produced in the middle; median lobe of aedeagus 0.23-0.24 mm long, shaped as in Figs 15-16; apical lobe of paramere short.

♀: posterior margin of tergite VIII not serrate; sternite VIII with convex posterior margin; spermatheca not distinctive.

Comparative notes: Three species of endemic *Leptusa* KRAATZ 1856 were previously known from Sardinia: *L. (Adexiopisalia) hummleriana*, *L. (Lasiopisalia) sulcicollis*, and *L. (L.) brigantii* PACE 1979. The new species is readily distinguished from the latter two by the presence of median keels on the male tergites VII and VIII and by the different shapes of the median lobe and of the internal structures of the aedeagus. In external and the sexual characters, it is most similar to *L. hummleriana*, from which it differs by darker coloration (*L. hummleriana*: body yellowish-red to pale-reddish), by the



Figs 11-20: *Leptusa meybohmi* nov.sp. (11-16) and *L. hummleriana* BERNHAUER (17-20; 17: paralectotype of *L. hummleriana*; 18: paralectotype of *L. sardoa* from Dorgali; 19: male from Catena del Márghine; 20: male from Monte Arci): (11) habitus; (12) forebody; (13) male tergite VIII; (14) male sternite VIII; (15-20) median lobe of aedeagus in lateral view. Scale bars: 11: 1.0 mm; 12: 0.5 mm; 13-14: 0.2 mm; 15-20: 0.1 mm.

absence of a distinct sexual dimorphism of the elytra (*L. hummleriana*: male elytra with granulose punctation and usually with pair of elevations anteriorly), and by the slightly smaller and differently shaped median lobe of the aedeagus. For illustrations of *L. sulcicollis* and *L. brigantii* see PACE (1989); the aedeagus of *L. hummleriana* is illustrated in Figs 17-20.

Distribution and natural history: *Leptusa meybohmi* is currently known only from two localities near Lanusei in the northeast of Sardinia. The specimens were sifted from leaf litter in an oak forest and under bushes and *Quercus ilex* at altitudes of 900 and 340 m, respectively (MEYBOHM pers. comm.). The low altitudes suggest that the species may be more widespread in the island.



Map 1: Distribution of *Oxypoda islandica* Kraatz based on examined (filled circles) and selected literature records (open circles).

***Geostiba insularis* (BERNHAEUER 1909)**

M a t e r i a l e x a m i n e d : Italy: S a r d i n i a : 87♂♂, 83♀♀, Monti del Gennargentu, Bruncu Spina, 40°01'N, 9°18'E, 1540 m, *Alnus* litter near stream, sifted, 25.XII.2012, leg. Assing; 1♂, 1♀, Monti del Gennargentu, Bruncu Spina, 40°03'N, 9°18'E, 1280 m, oak forest, leaf litter near stream and at foot of very old oak trees sifted, 25.XII.2012, leg. Assing; 19♂♂, 19♀♀, Monti del Gennargentu, 6 km S Fonni, 40°04'N, 9°15'E, 1100 m, oak forest, litter sifted, 26.XII.2012, leg. Assing; 1♂, Monti del Gennargentu, 10 km SE Fonni, 40°05'N, 9°21'E, 1170 m, oak forest with rocks, litter sifted, 26.XII.2012, leg. Assing (cAss, MNHUB).

C o m m e n t : *Geostiba insularis* is endemic to Sardinia and evidently rather common in the Gennargentu range.

***Geostiba sardoa* PACE 1988**

M a t e r i a l e x a m i n e d : Italy: S a r d i n i a : 32♂♂, 34♀♀, 30 km W Nuoro, Catena del Mârgghine, 4 km N Bolôtana, 40°21'N, 8°55'E, 1000 m, oak forest, leaf litter sifted, 30.XII.2012, leg. Assing (cAss, MNHUB).

C o m m e n t : According to PACE (1988), this Sardinian endemic is widespread in the island.

***Earota reyi* (KIESENWETTER 1850)**

M a t e r i a l e x a m i n e d : Italy: S a r d i n i a : 1♂, 10 km SW Siniscola, NW-slope of Monte Albo, 40°32'N, 9°36'E, 690 m, *Quercus ilex* forest with rocks, litter and moss sifted, 24.XII.2012, leg. Assing (cAss).

C o m m e n t : *Earota reyi* is not listed for Sardinia by ZANETTI (1995).

***Oxypoda islandica* (KRAATZ 1857)**

M a t e r i a l e x a m i n e d : Italy: S a r d i n i a : 1♂, 6♀♀, 30 km W Siniscola, 40°32'N, 9°20'E, 810 m, moist oak forest with rocks, litter and grass roots sifted, 23.XII.2012, leg. Assing; 4♂♂, 4♀♀, Monti del Gennargentu, Bruncu Spina, 40°03'N, 9°18'E, 1280 m, oak forest, leaf litter near stream and at foot of very old oak trees sifted, 25.XII.2012, leg. Assing; 3♀♀, Monti del Gennargentu, 6 km S Fonni, 40°04'N, 9°15'E, 1100 m, oak forest, litter sifted, 26.XII.2012, leg. Assing; 1♂, 1♀, Monti del Gennargentu, 10 km SE Fonni, 40°05'N, 9°21'E, 1170 m, oak forest with rocks, litter sifted, 26.XII.2012, leg. Assing; 2♂♂, 2♀♀, 30 km W Nuoro, Catena del Mârgghine, 4 km N Bolôtana, 40°21'N, 8°55'E, 1000 m, oak forest, leaf litter sifted, 30.XII.2012, leg. Assing (cAss, MNHUB).

C o m m e n t : *Oxypoda islandica* is listed only for the north of mainland Italy by ZANETTI (1995), but was recently reported also from Sicily (ASSING 2008). Since this species is evidently not very rare in Sardinia, it would be interesting to know under what name it was previously reported from this island. The currently known distribution of *O. islandica* is illustrated in Map 1.

***Aleochara cornuta* FAUVEL 1886**

M a t e r i a l e x a m i n e d : Italy: S a r d i n i a : 1♂, Nuraghe, 28.III.2013, leg. Meybohm (cAss).

C o m m e n t : This species was recently recorded from Sardinia and Italy for the first time by ZANETTI (2011).

Acknowledgements

I am indebted to Heinrich Meybohm (Großhansdorf) for the generous gift of his staphylinid by-catches from his field trip to Sardinia, as well as to Paul Wunderle for the generous gift of the holotype of *Astenus wunderlei*. Augusto Vigna Taglianti (IZUR) kindly arranged a loan of the holotypes of *Astenus italicus* and *A. cerrutii*. Adriano Zanetti (Verona) critically reviewed the paper. Benedikt Feldmann (Münster) proof-read the manuscript.

Zusammenfassung

Bei zwei kürzlich auf Sardinien durchgeführten Exkursionen wurden 1200 Staphyliniden in mehr als 70 Arten gefunden. Zwei Arten werden beschrieben und abgebildet: *Astenus (Eurysunius) wunderlei* nov.sp. und *Leptusa (Adexiopisalia) meybohmi* nov.sp. *Anthobium sardoum* (SCHEERPELTZ 1961) nov.syn. wird mit *A. atrocephalum* (GYLLENHAL 1827) synonymisiert. Für 19 Arten werden Nachweise gemeldet, darunter zwei Erstnachweise für Sardinien. Die derzeit bekannte Verbreitung von *Oxyropa islandica* KRAATZ 1857 wird anhand einer Karte illustriert.

References

- ANGELINI F., AUDISIO P., CASTELLINI G., POGGI R., VAILATI D., ZANETTI A. & S. ZOIA (1995): Coleoptera Polyphaga II (Staphylinioidea escl. Staphylinidae). — In: MINELLI A., RUFFO S. & S. LA PLATA (eds), Checklist delle specie della fauna italiana. **47**. Bologna, Calderini: 1-39.
- ASSING V. (2008): Nine new species and additional records of Staphylinidae from southern Spain, with new synonymies (Insecta: Coleoptera). — Linzer Biologische Beiträge **40** (2): 1301-1325.
- ASSING V. (2009): On the taxonomy and zoogeography of some Palaearctic *Aleochara* species of the subgenera *Xenochara* MULSANT & REY and *Rheochara* MULSANT & REY (Coleoptera: Staphylinidae: Aleocharinae). — Beiträge zur Entomologie, Keltern **59** (1): 33-101.
- 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 of Rhodes, Greece (Insecta: Coleoptera). — Linzer Biologische Beiträge **45** (2): 1587-1613.
- BERNHAEUER M. (1935): Neuheiten der paläarktischen Staphylinidenfauna. II. Neue *Leptusa*-Arten. — Koleopterologische Rundschau **21** (3/4): 123-129.
- BORDONI A., FACELLO L. & P. LEO (2012): Revision degli *Scotonomus* della Sardegna e descrizione di dodici specie nuove (Coleoptera Staphylinidae). — Bollettino della Società Entomologica Italiana **144** (2): 51-70.
- CICERONI A., PUTHZ V. & A. ZANETTI (1995): Coleoptera Staphylinidae. — In: MINELLI A., RUFFO S. & S. LA PLATA (eds), Checklist delle specie della fauna italiana. **48**. Bologna, Calderini: 1-65.
- CICERONI A. & A. ZANETTI (1995): Paederinae. — In: CICERONI A., PUTHZ V. & A. ZANETTI (1995): Coleoptera Staphylinidae. — In: MINELLI A., RUFFO S. & S. LA PLATA (eds), Checklist delle specie della fauna italiana. **48**. Bologna, Calderini: 19-24.
- COIFFAIT H. (1960): Les *Astenus* d'Europe et de la région méditerranéenne (Coléoptères, Staphylinidae). — Bulletin de la Société d'Histoire naturelle de Toulouse **95**: 49-99.

- COIFFAIT H. (1984): Coléoptères Staphylinidae de la région paléarctique occidentale. V. Sous famille Paederinae Tribu Paederini 2, Sous famille Euaesthetinae. — Supplement à la Nouvelle Revue d'Entomologie **13** (4): 1-424.
- PACE R. (1979): *Leptusa* KR. nuove o poco note del Museo Civico di Storia Naturale di Genova (Coleoptera Staphylinidae). — Annali del Museo Civico di Storia Naturale "Giacomo Doria" **82** [1978-1979]: 295-322.
- PACE R. (1988): Nuove species italiane del genere *Geostiba* THOMSON (Coleoptera, Staphylinidae). — Annali del Museo Civico di Storia Naturale "Giacomo Doria" **87**: 9-29.
- PACE R. (1989): Monografia del genere *Leptusa* KRAATZ (Coleoptera Staphylinidae). — Memorie del Museo Civico di Storia Naturale di Verona (II^a Serie), Sezione Scienze della Vita (A: Biologica) **8**: 1-307.
- PUTHZ V. (2012): Unterfamilie Steninae; pp. 286-317. — In: ASSING, V. & M. SCHÜLKE (eds), Freude-Harde-Lohse-Klausnitzer – Die Käfer Mitteleuropas. Band 4. Staphylinidae I. Zweite neubearbeitete Auflage. Heidelberg und Berlin: Spektrum Akademischer Verlag: I-XII, 1-560.
- SCHERPPELTZ O. (1961): Neue Arten der Gattung *Lathrimaeum* ER., nebst einer Bestimmungstabelle der bisher bekannt gewordenen palaearktischen Arten dieser Gattung (Col. Staphylinidae). — Mitteilungen der Münchener Entomologischen Gesellschaft **51**: 72-95.
- SCHÜLKE M. (2011): Zur Identität von *Sepedophilus immaculatus* STEPHENS (Coleoptera, Staphylinidae, Tachyporinae). — Linzer Biologische Beiträge **43** (2): 1609-1615.
- ZANETTI A. (1987): Fauna d'Italia XXV. Coleoptera Staphylinidae Omaliinae. — Bologna: Calderini. I-XII, 1-472.
- ZANETTI A. (1995): Pseudopsinae, Aleocharinae. — In: CICERONI A., PUTHZ V. & A. ZANETTI (1995): Coleoptera Staphylinidae. — In: MINELLI A., RUFFO S. & S. LA PLATA (eds), Checklist delle specie della fauna italiana. 48. Bologna, Calderini: 4, 36-58
- ZANETTI A. (2011): Contribution to the knowledge of Staphylinidae from southern Sardinia (Coleoptera). — In: NARDI G., WHITMORE D., BARDIANI M., BIRTELE D., MASON F., SPADA L. & P. CERRETTI (eds), Biodiversity of Marganai and Montimannu (Sardinia). Research in the framework of the ICP Forests network. Conservazione Habitat Invertebrati **5**: 331-352.
- ZERCHE L. (1992): Zur Taxonomie und Verbreitung der Gattung *Pseudopsis* NEWMAN, 1834 (Coleoptera, Staphylinidae, Pseudopsinae). — Beiträge zur Entomologie, Berlin **42** (2): 279-292.

Author's address: Dr. Volker ASSING
 Gabelsbergerstr. 2
 D-30163 Hannover, Germany
 E-mail: vassing.hann@t-online.de