

On some western Palaearctic species of the genus *Omalium* Gravenhorst, 1802 (Coleoptera: Omaliinae: Omaliini)

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Abstract

Taxonomic and faunistic notes for 13 species of the genus *Omalium* Gravenhorst, 1802 of the western Palaearctic region are provided. Two species are redescribed and illustrated: North European *O. muensteri* Bernhauer, 1901 and Iberian *O. asturicum* Fauvel, 1900. Two new synonymies are proposed: *O. allardi* Fairmaire & Brisout de Barneville, 1859 = *O. vaulogeri* Fauvel, 1905 **syn. nov.**, and *O. funebre* Fauvel, 1871 = *O. deubeli* Bernhauer, 1915 **syn. nov.** Lectotypes for *O. muensteri* and *O. deubeli* are designated. The habitus of the types of *O. vaulogeri* and *O. deubeli*, and, in addition, the aedeagus of the holotype of *O. vaulogeri* are illustrated. The aedeagus of *O. muensteri* is illustrated for the first time. First records are provided for the following eight species: *O. asturicum* from Badajoz, Málaga and Granada (Spain), *O. funebre* from Moldavia, *O. italicum* Bernhauer, 1902 from Algeria, *O. rugatum* Mulsant & Rey, 1880 from Crimea (Ukraine), and Bolu and Ordu (Turkey), *O. wunderlei* Zanetti, 2002 from Izmir, Bolu, Niğde and Van (Turkey), *O. cinnamomeum* Kraatz, 1857 from Bulgaria, Hatay (Turkey), Lebanon and Syria, *O. falsum* Eppelsheim, 1889 from Tehran (Iran), and *O. rivulare* (Paykull, 1789) from Ordu, Yozgat, Tokat and Van (Turkey).

Key words: rove beetles, taxonomy, redescriptions, lectotypes, fauna, distribution, Europe, Mediterranean Region, North Africa, West Asia

Introduction

The Holarctic genus *Omalium* Gravenhorst, 1802 contains about 50 species and subspecies in the western Palaearctic Region, including several widely distributed species in the Palaearctic and the Holarctic regions, and 12 taxa known as *nomina dubia* (Schülke & Smetana 2015). Many species which were described from Europe and West Asia are known only from the original descriptions without provided illustrations of important morphological diagnostic features (e.g. aedeagi). Only the Central European fauna of the genus has been relatively satisfactorily studied (Zanetti 1987, 2011). Thus, the west Palaearctic fauna of *Omalium* needs a comprehensive revision.

This article is based on the study of material from several collections, including type material. As a result, new taxonomic and distributional data for 13 species of *Omalium*, mainly from the Mediterranean and West Asian regions, are presented. All studied specimens belong to six species groups which were previously established by Zanetti (1987, 2002) and Shavrin (2023). Two species are redescribed and illustrated, two synonymies are proposed, and numerous faunistic records are provided.

Material and methods

The material examined here is deposited in the following collections:

cA—collection of S. Anlaş, Manisa, Turkey;

cR—collection of A.B. Ryvkin, Moscow, Russia;

cSh—collection of A.V. Shavrin, Daugavpils, Latvia;

cSk—collection of V. Skoupý, Kamenné Žehrovice, Czechia;
 BMNH—The Natural History Museum, London, UK (D. Telnov);
 FMNH—Field Museum of Natural History, Chicago, USA (J.K. Wadleigh, M.K. Thayer);
 IRSNB—Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium (Y. Gérard);
 MHNG—Museum d’Histoire Naturelle, Genève, Switzerland (G. Cuccodoro);
 NME—Naturkundemuseum Erfurt, Germany (M. Hartmann);
 NMPC—National Museum, Prague, Czechia (J. Hájek);
 NMW—Naturhistorisches Museum Wien, Vienna, Austria (H. Schillhammer);
 ZIN—Zoological Institute of the Russian Academy of Sciences, St.-Petersburg, Russia (S.V. Andreeva & M.G. Volkovitch).

The following measurements are used in this paper and abbreviated as follows: HW—maximum width of head including eyes; HL—length of head (from base of labrum to posterior constriction along head midline); AL—length of antenna; OL—ocular length (longitudinal); TL—length of temple; PL—length of pronotum; PWmax—maximum width of pronotum; PWmin—minimum width of pronotum (basal portion); ESL—sutural length of elytra (length of elytra from apex of scutellum to posterior margin of sutural angle); EW—maximum width of elytra; MTbL—length of metatibia; MTrL—length of metatarsus; AW—maximum width of abdomen; AedL—length of aedeagus (from base of median lobe to apex of parameres); BL—total length of body (from anterior margin of clypeus to apex of abdomen).

Specimens were examined using Nikon SMZ 745T and Nikon Eclipse E200 stereomicroscopes. A digital camera (Sony Alpha DSLR-A300) was used for the habitus photographs. All figures were modified using Adobe Photoshop software. All measurements are given in millimetres and were made with a stereoscopic microscope equipped with an ocular micrometer. In the specimen lists, ‘dissected’ means that for males a plastic plate with the aedeagus in Canada balsam was pinned under the card with the beetle; abdominal tergite VIII, sternite VIII, and the apical segment are glued to the same card under the specimen. For details of the methodology and morphological terminology used in the present study see Shavrin (2025 a, b).

Results

Amplissimum group

Omalium muensteri Bernhauer, 1901

(Figs 1, 5–8)

Omalium muensteri Bernhauer, 1901: 540; Luze 1906: 542; Palm 1948: 82.

Omalium (*Omalium*) *muensteri*; Bernhauer & Schubert 1910: 55.

Type material examined. Lectotype (here designated) ♂: **NORWAY:** ‘Kristiania. | Münster’ <printed>, ‘Münsteri Brh | Norwegen | Type.’ <handwritten in black>, ‘Fauvel | vidit’ <light green, handwritten in black>, ‘Chicago NHMus | M.Bernhauer | Collection’ <printed>, ‘SYNTYPE | teste D.J.Clarke2014 | GDI Imaging Project’ <violet, printed>, ‘Lectotype | *Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <red, printed>, ‘*Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <printed> (FMNH).

Paralectotypes: **NORWAY:** 1 ♀: ‘Kristiania. | Münster’ <printed>, ‘Münsteri Brh | Norwegen | Type.’ <handwritten in black>, ‘Chicago NHMus | M.Bernhauer | Collection’ <printed>, ‘Münsteri Bernh. | Verh. z. b. Ges. 1908, | p. 540’ <large rectangular handwritten label, with black margins>, ‘SYNTYPE | teste D.J.Clarke2014 | GDI Imaging Project’ <violet, printed>, ‘PHOTOGRAPHED | Kelsey Keaton 2014 | Emu Catalog’ <blue, printed>, ‘FMNHINS | 2819649 | FIELD MUSEUM’ <printed, with barcode on the left side of the label> (FMNH); 1 ♂ (dissected): ‘Kristiania. | Münster’ <printed>, ‘Münsteri Brh | Norwegen | Type.’ <handwritten in black>, ‘Chicago NHMus | M.Bernhauer | Collection’ <printed>, ‘SYNTYPE | teste D.J.Clarke2014 | GDI Imaging Project’ <violet, printed> (FMNH); 2 ♀♀ (one specimen dissected): first two labels as the previous, ‘CNHM 1955 | Eduard Knirsch | Palaearctic Colln.’ <printed> (FMNH); 1 ♂: ‘♂’ <printed>, ‘Kristiania | Münster’ <printed>, ‘münsteri | Bnh. Type’ <handwritten>, ‘vidit Luze’ <printed>, ‘ex. coll. | Skalitzky’ <green, printed>, ‘TYPUS [printed] | *Omalium* |

Münsteri | Bernh.’ <printed>, ‘*Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <printed> (NMW); 2 ♀♀: ‘♀’ <printed>, 2nd and 3rd labels as the previous, ‘Type’ <blue, handwritten>, ‘vidit | Luze’ <printed>, ‘ex. coll. | Skalitzy’ <green, printed>, ‘TYPUS [printed] | Omalium | Münsteri | Bernh.’ <printed>, ‘*Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <printed> (NMW); 2 ♂♂: ‘♂’ <printed>, ‘Kristiania’ <printed>, ‘Münster’ <printed>, ‘Münsteri Bnh. | Norwegen | Type’ <handwritten>, ‘ex. coll. | Luze’ <yellow, printed>, ‘TYPUS [printed] | Omalium | Münsteri | Bernh.’ <printed>, ‘*Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <printed> (NMW); 1 ♂ (right antennomeres 3–11 missing): first three labels as the previous, ‘coll. Schuster’ <violet, printed>, ‘TYPUS [printed] | Omalium | Münsteri | Bernh.’ <printed>, ‘*Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <printed> (NMW); 1 ♂: first three labels as the previous, ‘O. Mün | steri’ <handwritten>, ‘vidit | Luze’ <printed>, ‘ex. coll. Skalitzy’ <green, printed>, ‘ex. coll. | Scheerpeltz’ <blue, printed>, ‘COTYPUS [printed] | Omalium | Münsteri | Bernh.’ <pink, handwritten>, ‘Umg. Kristiania | Norwegen’ <handwritten>, ‘*Omalium | Münsteri*’ <green, handwritten>, ‘*Omalium | muensteri* Bernhauer, 1901 | Shavrin A.V. det. 2025’ <printed> (NMW).

Additional material examined. NORWAY: 1 ♀: ‘Kristiania Münster’, ‘Collect. Hauser’, ‘*Omalium münsteri* Bernh.’ (NMW); 1 ♀: ‘Kristiania Münster’, ‘*Omalium Münsteri*’, ‘*Muensteri* Bernh. det. Luze’ (NMW); 1 ♂: ‘Kristiania Münster’, ‘Münsteri’, ‘*Muensteri* Bernh. det. Luze’ (NMW); 1 ♂: ‘Kr[istia].nia’, ‘*Omalium longicorne* mihi n. sp.’, ‘Münster Norv. longicorne’, ‘*Muensteri* Bernh. det. Luze’ (NMW); 1 ♂: ‘Münster Norv. longicorne’, ‘*Muensteri* Bernh. det. Luze’ (NMW); 1 ♀: ‘[illegible] Münster IV/06’, ‘Kristiania Ths Münster’, ‘Münsteri det. Münster’, ‘*Omalium Münsteri*’ (NMW); **SWEDEN:** 1 ♀: ‘Up[psala]. Rasbo. Tomta 18.3.1990 leg. Å. Lindelöw’, ‘*muensteri* det. S. Lundberg’ (NMW).

Redescription. Measurements (n=15): HW: 0.62–0.80; HL: 0.40–0.47; OL: 0.15–0.20; TL: 0.07–0.10; AL (lectotype): 1.32; PL: 0.50–0.59; PWmax: 0.77–0.87; PWmin: 0.68–0.75; ESL: 0.90–0.99; EW: 1.04–1.22; MTbL (lectotype): 0.55; MTrL (lectotype): 0.25 (MTrL 1–4: 0.10; MTrL 5: 0.15); AW: 1.02–1.37; AedL: 0.82; BL: 3.25–4.20 (lectotype: 3.45).

Habitus as in Fig. 1. Body reddish-brown, with slightly darker head and abdomen; mouthparts, antennae and legs yellow-brown (antennomeres 6–11 slightly paler). Punctuation of head irregular, finer and sparser on frontal part of clypeus, sometimes denser, larger and deeper in middle; neck with moderately regular, fine and relatively dense punctuation; punctuation of pronotum dense, slightly larger and deeper than that in middle part of head, sparser in lateral and mediobasal portions, usually finer in middle and mediobasal third; scutellum without punctures; punctuation of elytra dense, about as that on pronotum, sometimes finer around scutellum and slightly sparser in middle; abdominal tergites without distinct punctuation. Anterior half of clypeus with dense and transverse microsculpture, laterobasal parts of clypeus with dense diagonal and sometimes strong meshes, middle part with fine and sometimes indistinct transverse microreticulation, infraorbital portions with irregular longitudinal and diagonal meshes, stronger near margins of eyes; neck with indistinct and fine transverse meshes, usually invisible in middle; medioapical portion of pronotum sometimes with traces of indistinct microsculpture; scutellum and elytra without microreticulation; abdominal tergites with dense and coarse isodiametric microsculpture. Anterior part of clypeus with several erect elongate setae, each laterobasal parts of clypeus sometimes with additional long seta; lateral margins of pronotum and elytra with sparse and very short setae; abdomen with sparse and short adjoining setation; anterior and posterior margins of pronotum with indistinct fine and short cuticular fringe.

Head 1.5–1.7 times as broad as long, with slightly or relatively strongly elevated middle and infraorbital portions; clypeus broad and explanate, with posteriolateral margins gradually rounded posteriad and reaching level of middle or posterior third of eyes; supra-antennal elevations strongly elevated and explanate; anteriomedian depressions deep and wide, reaching level of anterior third of eyes. Middle part with irregular transverse and diagonal elevations between punctures, mediodorsal margins of infraorbital portions near margins of eyes with longitudinal fine elongate wrinkles. Antecellar foveae deep, sublinear or slightly convergent latero-apicad toward level of about middle of eyes. Temples about twice as long as longitudinal length of eyes, from posterior margins of eyes strongly narrowed toward neck. Nuchal constriction relatively wide and deep. Eyes moderately large and convex. Ocelli large, located distinctly behind level of posterior margins of eyes; distance between ocelli short, about twice as long as distance between ocellus and posterior margin of eye. Maxillary palpi moderately long, apical palpomere about four times as long as penultimate segment, from widest middle gradually narrowed toward subacute apex. Antenna reaching basal margin of elytra when reclined, with distinctly elongate antennomeres 5–10; basal antennomere wide, about three times as long as broad, antennomere 2 about twice shorter and distinctly narrower than basal antennomere,

3 slightly longer and narrower than 2, 4–5 distinctly shorter than 3, 6 slightly longer and broader than 5, 7 slightly broader than 6, 8 indistinctly broader than 7, 9–10 slightly broader than 8, apical antennomere 1.3 times as long preapical antennomere, from apical third strongly narrowed toward subacute apex.

Pronotum 1.4–1.5 times as broad as long, 1.1–1.2 times as broad as head, from widest middle distinctly more narrowed posteriad than anterior, anterior angles widely rounded, not protruded anteriorly, laterobasal margins indistinctly concave in front of obtuse hind angles. Lateral portions relatively narrowly impressed, each in about middle with wide elongate impressions. Surface of disc with two elongate, shallow or moderately deep longitudinal depressions, slightly broadened basad, without or with indistinct shallow and narrow medioapical depression; each lateroapical portion with indistinct, narrow and widely curved elevations, reaching about middle of pronotum; median surface between all pronotal depressions slightly elevated; middle portion sometimes with fine irregular transverse or diagonal elevations between punctures.

Elytra slightly broader than long, 1.6–1.8 times as long as pronotum, slightly broadened posteriad; lateral portions narrowly impressed and slightly explanate; hind margins somewhat straight. Dorsal surface of each elytron with strong irregular diagonal and longitudinal elevations between punctures, stronger in medioapical half. Hind wings fully developed.

Metatarsi more than twice shorter than metatibia.

Abdomen convex, slightly narrow or broader than elytra, with two small round wing-folding patches in middle of abdominal tergite IV and narrow palisade fringe on posterior margin of tergite VII.

Male. Posterior margin of abdominal tergite VIII straight. Posterior margin of abdominal sternite VIII widely concave. Aedeagus with relatively broad basal part, slightly narrowed toward wide and elongate median lobe; median lobe from preapical part gradually narrowed toward widely rounded apex, with distinct apical excision; median portion with short and narrow slightly sclerotized accessory plates, curved latero-apically, each rounded apically; parameres short, reaching middle half of median lobe, with distinctly narrowed preapical third, with one long and three short apical setae; internal sac wide and long, with field of large spines in apical part (Fig. 5). Lateral aspect of the aedeagus as in Fig. 6; apical portion of median lobe somewhat broadened, with rounded apex, slightly crenulated ventroapically, with distinct rounded tooth in about middle.

Female. Posterior margin of abdominal tergite VIII truncate. Posterior margin of abdominal sternite VIII truncate or slightly concave. Accessory sclerite with wide basal part and narrow elongate apical portion (Fig. 7). Spermatheca as in Fig. 8.

Comparative notes. Based on the body length and the coloration, and the general shape of the aedeagus, *O. muensteri* is similar to the East Palaearctic *O. longicorne* Luze, 1906, known from north-eastern Mongolia and eastern Siberia (Shavrin 2025b). It can be distinguished from *O. longicorne* by the larger, denser and coarser punctuation of the forebody, slightly broader pronotum, shorter elytra, distinctly broader and longer median lobe of the aedeagus, shorter parameres with narrower preapical portions, different shape of the female accessory sclerite, and other details of the morphology of the aedeagus.

Distribution. The Fennoscandian *O. muensteri* is known from several localities in Norway, Sweden and Finland.

Bionomics. Some specimens were collected in mosses (Palm & Lundberg 1993, Lundberg 2001), marshy bank of river (Palm & Lundberg 1993) or in organic remains near river (Strand 1969).

Remarks. *Omalium muensteri* was originally described based on an unspecified number of syntypes (“mehreren Stücken”) from “...Kongsberg in der Umgebung von Christiania in Norwegen”. I have studied 12 syntypes from FMNH and NMW, and one male from FMNH was designated as the lectotype in order to fix the identity of the name. This species is rarely found in collections. There are only several records from Norway (Bernhauer 1901; Lysholm 1912; Munster 1923; Strand 1969), Sweden (Lundberg 1984, 2001; Palm & Lundberg 1993), and Finland (Krogerus 1972). It was included in the Norwegian Red List (Ødegaard *et al.* 2015). Records for Caucasus and Caspian region are doubtful (Herman 2001). Luze (1906) redescribed it. Palm (1948) included *O. muensteri* in the key of rove beetles of Sweden. Despite this, no illustrations were provided for this species, including the aedeagus. Thus, I redescribed and illustrated it herein.

Caesum group

Omalium asturicum Fauvel, 1900

(Figs 2, 9–11)

Homalium asturicum Fauvel, 1900: 221.

Omalium asturicum; Zanetti 2002: 62.

Type material. Lectotype of *Omalium asturicum* Fauvel, 1900 ♂ (Fig. 2; dissected prior to the present study): **SPAIN**: ‘Asturien | Getschman 1379 | Reitter <printed label with thin black margin>, ‘asturiacum | Fvl.’ <handwritten in black>, ‘R.I.Sc.N.B. 17.479 | Omalium [handwritten in black] | Coll. et det. A. Fauvel’ <printed>, ‘Ex-Typus’ <white label with thin black margins, printed in red>, ‘LECTOTYPUS’ <red, printed>, ‘Omalium | asturicum Fauvel, 1900 | Shavrin A.V. det. 2024’ <printed> (IRSNB).

Paralectotypes: 1 ♂: first three labels as that in the holotype, with additional labels: ‘Paralecto- | typus’ <red, printed>, ‘Omalium | asturicum | Fauv. | det. Zanetti 2000 [printed]’ <handwritten in black> (IRSNB); 1 ♂ (dissected), 1 ♀ (dissected): ‘Asturien | Getschman 1379 | Reitter’ <handwritten in black>, ‘Coll. et det. A. Fauvel | Omalium [handwritten in black] | asturicus Fauv. [handwritten in black] | R.I.Sc.N.B. 17.479’ <printed>, ‘Ex-Typus’ <white label with thin black margins, printed in red>, ‘Paralecto- | typus’ <red, printed>, ‘Omalium | asturicum | Fauv. | det. Zanetti 2000 [printed]’ <handwritten in black> (IRSNB). All paralectotypes with additional printed label: ‘Omalium | asturicum Fauvel, 1900 | Shavrin A.V. det. 2024’.

Additional material examined. **SPAIN: ASTURIAS:** 1 ♂: ‘Asturien Getschman 1879 Reitter’ (NMW); 1 ♂: ‘Asturien’ (NMW); **LEÓN:** 1 ♀: ‘Caboalles Paganetti’, ‘Ex coll. Bettinger’ (IRSNB); 5 ♂♂, 2 ♀♀: ‘Caboalles Paganetti’ (NMW); 1 ♀: ‘Caboalles’ (NMW); 2 ♂♂: ‘Astorga Paganetti’ (NMW); **MADRID:** 3 ♂♂: ‘Umg. Escorial Hi.c., lg.H.Franz’ (NMW); 1 ♂, 1 ♀: Sistema Central Mts., Pinilla del Valle, 40°91' -3°82'. 28.04.2014. A.V. Shavrin leg. (cSh); **BADAJOS:** 1 ♀: Fuenoaeliente, Sierra Madrona, Fuente del Almiréz, 38°28'N 4°21'W. 790 m a.s.l. J.L. Lencina & C. Andujar leg. (NMW); **MÁLAGA:** 3 ♀♀: Sierra de las Nieves, Yunquera vic. 36°74'N -4°97'W. 13-14.05.2014. A.V. Shavrin leg. (cSh); **GRANADA:** 1 ♂: Sierra Nevada Mts., Veleta. 2300 m a.s.l. 29.09.2008. H. Meybohm leg. (NMW); 6 ♂♂, 4 ♀♀: same Mts., Capileira vill., Rio Nante, 36°99'N -3°35'W. 1550 m a.s.l. 08-09.05.2014. A.V. Shavrin leg. (cSh); 2 ♀♀: same Mts., pto. de la Ragua, 37°09'N -3°02'W. 2000 m a.s.l. 08-09.05.2014. A.V. Shavrin leg. (cSh).

Redescription. Measurements (n=39): HW: 0.45–0.47; HL: 0.33–0.36; OL: 0.13–0.15; TL: 0.08–0.10; AL (holotype): 1.02; PL: 0.40–0.47; PWmax: 0.62–0.65; PWmin: 0.57–0.60; ESL: 0.72–0.80; EW: 0.85–0.90; MTbL (holotype): 0.45; MTrL (holotype): 0.17 (MTrL 1–4: 0.07; MTrL 5: 0.10); AW: 0.82–0.85; AedL: 0.52; BL: 2.28–3.07 (lectotype with extended abdomen).

Habitus as in Fig. 2. Body and antennae reddish-brown, with distinctly darker head and slightly paler antennomeres 1–5; mouthparts and legs yellowish-brown; tarsi yellowish. Punctuation of head dense, sparser in apical half and denser, coarser and deeper in middle and postocular portions; nuchal constriction with dense punctuation about as that in mediobasal portion of head; punctuation of pronotum dense, large and deep, but slightly sparser than that in median part of head, sparser in middle and mediobasal third; scutellum without punctures; punctuation of elytra dense, about as that on pronotum, but coarser and deeper in middle, and finer and sparser around scutellum and along suture; abdominal tergites without distinct punctures or with fine and very sparse punctuation. Forebody without microsculpture except of anterior portion of clypeus with fine transverse microreticulation; abdominal tergites with dense isodiametric sculpture. Anterior portion of head with several moderately long and erect setae; abdominal tergites with sparse, fine and short setation.

Head 1.3 times as broad as long, with broad clypeus and strongly elevated supra-antennal elevations, with wide and deep anteriomedian depressions, reaching middle length of eyes; posteriolateral margins of clypeus parallel-sided, stretching posteriad toward level about middle length of eyes. Dorsal surface slightly elevated in middle and slightly more convex on infraorbital portions; middle area with irregular longitudinal elevations between punctures, infraorbital portions with diagonal elevations between punctures. Anteocelellar foveae wide and deep, linear, stretching antieriad toward level of posterior third or middle of eyes. Temples moderately long, but shorter than longitudinal length of eyes, widely rounded. Medioapical part of nuchal constriction without depression. Ocelli moderately small, located at level of hind portions of temples; distance between ocelli 1.4–1.6 times as long as distance between ocellus and posterior margin of eye. Apical palpomere more than three times as long as

slightly transverse penultimate segment, from widest basal part gradually narrowed toward acute apex. Antenna with distinctly elongate antennomeres 2–8 and slightly elongate 9–10; basal antennomere slightly more than two and a half times as long as wide, 2 about twice narrower and distinctly shorter than basal antennomere, 3 about as long as long and slightly narrower than 2, 4 distinctly shorter than 3, 5 slightly longer than 4, 6 distinctly broader than 5, 7 slightly longer than 6, 8 slightly shorter and broader than 7, 10 slightly broader than 9, apical antennomere about 1.3 times as long as 10, from middle strongly narrowed toward subacute apex.

Pronotum 1.3–1.5 times as broad as long, 1.3 times as broad as head, widest in about middle, distinctly more narrowed posteriad than anteriad; apical angles rounded, not or indistinctly protruded anteriad; hind angles acute, with widely sinuate laterobasal margins; apical margin widely rounded, about as long as somewhat rounded basal margin. Lateral portions deeply and widely impressed, with deep and wide oval depression slightly below middle. Surface of disc with two long and wide longitudinal depressions, significantly broadened and deepened basad; each lateroapical portion around these depressions and median portion distinctly elevated; median surface between punctures in middle with longitudinal elevations, stronger around longitudinal depressions.

Elytra 1.7–1.8 times as long as pronotum; lateral portions moderately widely impressed; hind margins straight or rounded. Surface of each elytron with transverse elevations between punctures around scutellum and longitudinal irregular elevations between punctures in medioapical half.

Abdomen slightly broader than elytra, with two very small oval wing-folding patches in middle of abdominal tergite IV.

Male. Posterior margin of abdominal tergite VIII truncate. Posterior margin of abdominal sternite VIII widely and moderately deeply sinuate. Aedeagus with small and broad basal part, gradually narrowed toward long and narrow median lobe, widely rounded apically; median portion with long sclerotized accessory plates, curved latero-apicad, each rounded apically; parameres short, reaching about middle of median lobe, slightly broadened apically, each with slightly broadened preapical part, rounded apex, three long apical and one preapical setae; internal sac moderately wide and long (Fig. 9 and fig. 42 in Zanetti (2002)). Lateral aspect of the aedeagus as in Fig. 10 and fig. 43 in Zanetti (2002); apical part of median lobe narrow, without ventroapical crenulation and teeth.

Female. Posterior margin of abdominal tergite VIII truncate. Posterior margin of abdominal sternite VIII rounded. Accessory sclerite with wide basal part. Strongly narrowed toward short and narrow apical part (Fig. 11). Spermatheca not recognized.

Comparative notes. Based on the general shape of the body, the aedeagus and the female accessory sclerite, coloration of the body, punctation of head and pronotum, and shapes of anteocellar foveae and temples, *O. asturicum* is more similar to *O. italicum* Bernhauer, 1902 (see below). It can be distinguished from the latter species by the broader and slightly shorter elytra, and narrower and longer median lobe with broader apical part.

Distribution. *Omalium asturicum* is distributed in Spain (Gamarra & Outerele 2008; Schülke & Smetana 2015).

Bionomics. *Omalium asturicum* can be collected in leaf litter and mosses near streams and rivers in mixed forests.

Remarks. *Homalium asturicum* was originally described based on four syntypes from “Asturies”. I studied all four syntypes from IRSNB (see above). Zanetti (2002) attributed it to the Caesum group, designated the lectotype and provided the figure of the aedeagus. It was recorded several times from north-western and central Spain (Asturia, León and Madrid provinces), which became the basis for distributional map provided by Gamarra & Outerele (2008). It is here recorded from Badajoz, Málaga and Granada provinces of Spain for the first time.

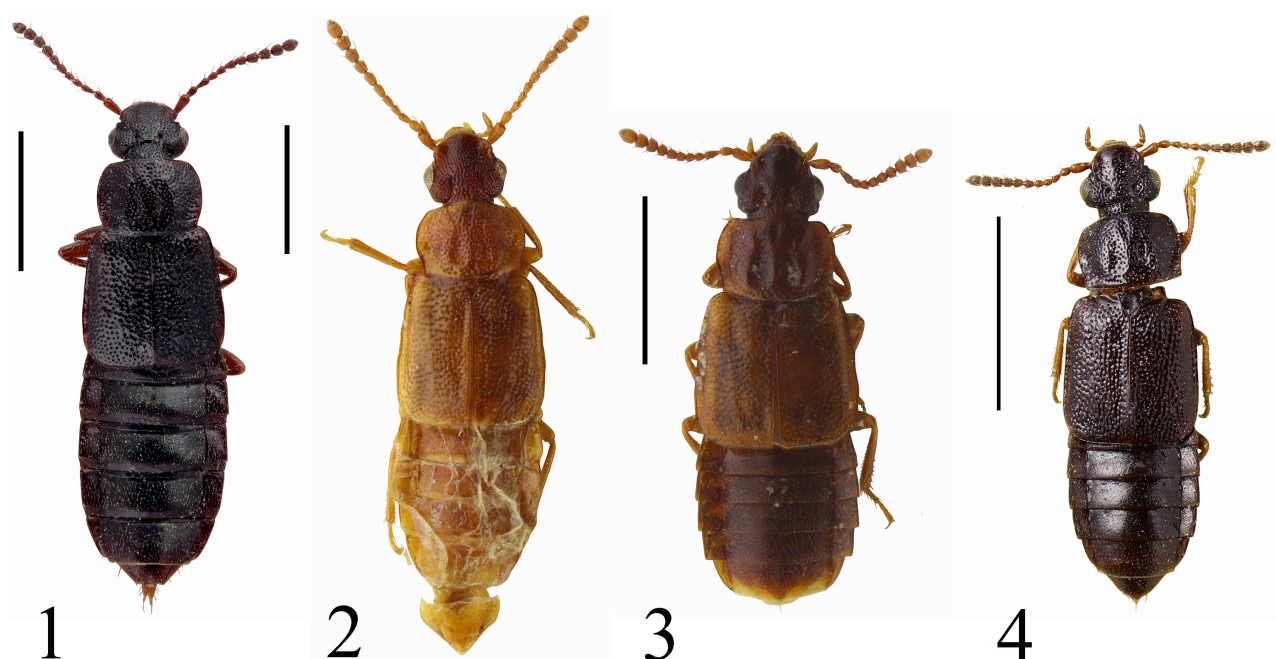
***Omalium italicum* Bernhauer, 1902**

Omalium italicum Bernhauer, 1902: 704.

Omalium tricolor Mulsant & Rey, 1880: 218.

Material. ALGERIA: 1 ♂: Djurdjura, Col de Tizi-N’Kouilal. 1700–1800 m a.s.l. 07.05.1988. C. Besuchet, I. Löbl & D. Burckhardt leg. (cSh).

Remarks. *Omalium italicum* is known from Central and South Europe, and Morocco (Schülke & Smetana 2015). It is here recorded from Algeria for the first time.



FIGURES 1–4. Habitus of *Omalium*. 1. *O. muensteri* (paralectotype). 2. *O. asturicum* (lectotype). 3. *O. vaulogerii* (holotype). 4. *O. deubeli* (lectotype). Scale bar: 1.0 mm.

Omalium rugatum Mulsant & Rey, 1880

Omalium rugatum Mulsant & Rey, 1880: 217.

Material. **ALGERIA:** 4 ♂♂, 5 ♀♀: Gde Kabilye, Akfadou forest, 8 km E Adekar. 1300 m a.s.l. 15.05.1988. C. Besuchet, I. Löbl & D. Burckhardt leg. (MHNG, cSh); 2 ♂♂: same data, 9 km W Adekar. 17.05.1988. (MHNG); 1 ♀: same data, Djebel Bou-Berak. 350 m a.s.l. 19.05.1988. (MHNG); 4 ♂♂, 3 ♀♀: Atlas de Bilda, Chrea sur Bilda. 1400 m a.s.l. 03.05.1988. C. Besuchet, I. Löbl & D. Burckhardt leg. (MHNG, cSh); 4 ♂♂, 1 ♀: Djurdjura rte de Tala Guilef. 1200 m a.s.l. 08.05.1988. C. Besuchet, I. Löbl & C. Burckhardt leg. (MHNG); **UKRAINE: CRIMEA:** 1 ♂, 2 ♀♀: environs of Lazovoye, near Ayu-Dag Mt. Bank of stream. 08.05.2010. A.S. Prosvirov leg. (cSh); **TURKEY: BOLU:** 1 ♂: Mudurnu, Mangirlar, 1 km W, 40°33'56.0"N 31°20'09.0"E. 1085 m a.s.l. 18.05.2022. (cA); **KASTAMONU:** 1 ♂: 45 km N Kastamonu. 25.05.1989. H. Schönmann & H. Schillhammer leg. (NMW); **ORDU:** 3 ♂♂, 4 ♀♀: Medudiye, Mahmudiye, 1 km SE, 40°35'35.0"N 37°39'31.0"E. 1252 m a.s.l. 14.05.2022. (cA).

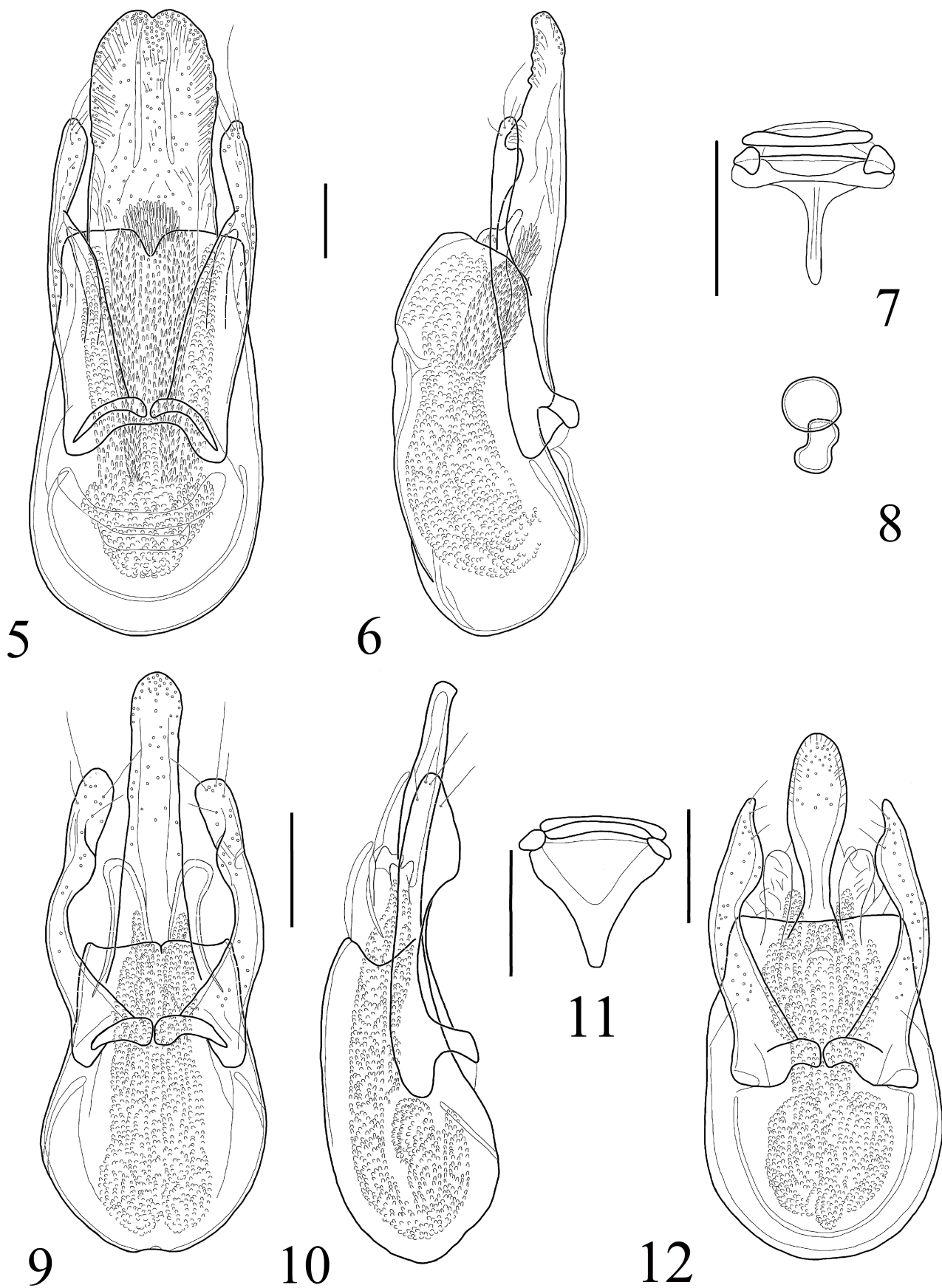
Remarks. *Omalium rugatum* is widely distributed in the western Palaearctic Region, and also known from Algeria, Cyprus and Turkey (Shavrin & Khachikov 2023). It is here recorded from Crimea (Ukraine), Bolu and Ordu provinces of Turkey for the first time.

Omalium turcicum Smetana, 1967

Omalium turcicum Smetana, 1967: 299.

Material. **TURKEY: IZMIR:** 1 ♂: S Sahlili, Boz Dağ. 19.05.1991. H. Schönmann & H. Schillhammer leg. (NMW).

Remarks. *Omalium turcicum* is known from Cyprus, Turkey and Caucasus (Zanetti 2002; Shavrin & Khachikov 2023).



FIGURES 5–12. Aedeagus (5, 6, 9, 10, 12), female accessory sclerite (7, 11) and spermatheca (8) of *Omalium*. (5–8. *O. muensteri* (paralectotype). 9–11. *O. asturicum* (paralectotype). 12. *O. vaulgeri* (holotype)). **5, 9, 12.** Aedeagus, parameral view. **6, 10.** Aedeagus, lateral view. **7, 11.** Female accessory sclerite, ventral view. **8.** Spermatheca, lateral view. Scale bar: 0.1 mm.

Omalium wunderlei Zanetti, 2002

Omalium wunderlei Zanetti, 2002: 50.

Material. **TURKEY: IZMİR:** 5 ♀♀: Yamanlar Dağ near Izmir. 18.05.1991. H. Schönmann & H. Schillhammer leg. (NMW); **BOLU:** 1 ♀: Mudurnu-Nallihan. 20.05.1987. H. Schönmann & H. Schillhammer leg. (NMW); **NIĞDE:** 1 ♂, 1 ♀: Ulukisla, Bolkar Daglari, 37°27'27"N 34°36'54"E. 2012 m a.s.l. 18.07-10.09.2020. E. Yagmur & Ö. Sipahioglu leg. (cA); **VAN:** 1 ♂: Güzeldere. 05.06.1987. H. Schönmann & H. Schillhammer leg. (NMW).

Remarks. *Omalium wunderlei* is known from Turkey and Armenia (Zanetti 2002; Shavrin & Khachikov 2023). It is here recorded from Izmir, Bolu, Niğde and Van provinces of Turkey for the first time.

Cinnamomeum group

Omalium cinnamomeum Kraatz, 1857

Omalium cinnamomeum Kraatz, 1857: 1000.

Material. **BOSNIA AND HERZEGOVINA:** 1 ♂: 'Jugosl[avia]. Absolon', 'Bjelašnica' (MHNG); 1 ♀: 'Mostar. VI. Zoufal' (MHNG); **GREECE: CORFU:** 2 ♂♂, 1 ♀: Vounniatades env. 39°30'46"N 19°53'23"E. 05.04.2019. L. Blažej & P. Vonička leg. (cH); **PELOPONNESE:** 3 ♂♂, 5 ♀♀: Patra, 5 km N Kalavryta. 12.5.1993. J. Jelinek leg. (NMPC); 1 ♂: Epire, Aghios Komassos. 25.04.1973. I. Löbl leg. (MHNG); 1 ♂: Emin Agapont. 360 m. 03.05.1973. I. Löbl leg. (MHNG); 1 ♀: 11 km S Konitsa. 400-450 m. 30.04.1973. I. Löbl leg. (MHNG); 5 ♂♂, 3 ♀♀: Polyndroson. 04.05.1973. I. Löbl leg. (MHNG); 1 ♂, 2 ♀♀: Prionia-Vermion. 21.05.1937. Bartoň (MHNG); **RHODES:** 3 ♂♂, 1 ♀: Petaloudes, 25-26.04.1973. C. Besuchet leg. (MHNG); **CRETE:** 1 ♂: Khania Therisso. 19.04.1982. M.I. Russel leg. (BMNH); **CYPRUS:** 4 ♀♀: Valley of Cedres, 12-18.07.1977. 1200 m a.s.l. C. Besuchet leg. (MHNG); 1 ♀: Caledonian Falls. 1400 m a.s.l. 16.07.1977. C. Besuchet leg. (MHNG); 1 ♂, 1 ♀: Mt. Olympus. 1900 m a.s.l. 24.07.1977. C. Besuchet leg. (MHNG); 2 ♂♂, 3 ♀♀: Troodhitissa Monastery. 1350 m a.s.l. 11.07.1977. C. Besuchet leg. (MHNG); **BULGARIA: KYUSTENDIL:** 2 ♀♀: Skakavitsa. 05.07.1984. L.V. Sakalian leg. (cR); **TURKEY: KIRKALERI:** 1 ♀: Demirköy, 31.07.1969. C. Besuchet leg. (MHNG); **IZMİR:** 2 ♂♂: environs of Gamlık. 08.05.1975. C. Besuchet & I. Löbl leg. (MHNG); 25 ♂♂, 18 ♀♀: Meryemana, Selçuk. 500 m a.s.l. 09.05.1975. C. Besuchet & I. Löbl leg. (MHNG); 1 ♂: Algamemnon. 28.05.1975. C. Besuchet & I. Löbl leg. (MHNG); **MANISA:** 6 ♂♂, 8 ♀♀: Salihli. 500 m a.s.l. 29.04.1975. C. Besuchet & I. Löbl leg. (MHNG); 1 ♂: Alaşehir, Dağarlar. Berlese trap, from tree hole. 16.03.2017. E. Yağmur leg. (cA); **MUĞLA:** 1 ♂: 10 km NO Muğla. 30.05.1975. C. Besuchet & I. Löbl leg. (MHNG); 1 ♂, 1 ♀: Bayir, 25 km NE de Kemer. 950 m a.s.l. 03.05.1975. C. Besuchet & I. Löbl leg. (MHNG); **BOLU:** 1 ♀: 9 km N Mengen. 750 m a.s.l. 23.05.1976. C. Besuchet & I. Löbl leg. (MHNG); 1 ♂: Ömerler near Bolu. 800 m a.s.l. 21.05.1976. C. Besuchet & I. Löbl leg. (MHNG); **ISPARTA:** 6 ♂♂, 3 ♀♀: Eğridir-Gandır. 950 m a.s.l. 06.05.1975. C. Besuchet & I. Löbl leg. (MHNG); **ZONGULDAK:** 1 ♀: 17 km N Safranbolu. 1000 m a.s.l. 16.05.1976. C. Besuchet & I. Löbl (MHNG); **KONYA:** 1 ♂, 1 ♀: 18 km SO Beyşehir. 1200 m a.s.l. 07.05.1978. C. Besuchet & I. Löbl leg. (MHNG); 1 ♀: Beyşehir, Kurucuova, Dumanlı 5 km N, 37°40'41"N 31°21'51"E. 1256 m a.s.l., pitfall trap. 10.10.2018-12.07.2019. E. Yağmur & S. Örgel leg. (cA); **MERSİN:** 13 ♂♂, 12 ♀♀: Mersin-Yeniköy. 650 m a.s.l. 29.04.1978. C. Besuchet & Löbl leg. (MHNG); **YOZGAT:** 1 ♂, 1 ♀: Akdağmadeni, 39°34'28"N 35°40'02"E. 1874 m a.s.l. pitfall trap. E. Yağmur & S. Örgel leg. 07.04-20.11.2018. (cA); **HATAY:** 5 ♂♂, 10 ♀♀: Antakya, Kışlak-Şenköy. 800-850 m a.s.l. 02.05.1978. C. Besuchet & I. Löbl leg. (MHNG); 2 ♀♀: Sağukoluk. 700 m a.s.l. 03.05.1978. C. Besuchet & I. Löbl leg. (MHNG); **LEBANON:** 4 ♂♂: Jeita. 26.03.1975. C. Besuchet leg. (MHNG); 1 ♂: ca 4.5 km W Kfardeblian, near Qalaa. 12.2012. 1400 m a.s.l., pitfall trap, mixed oak forest. C. Reuter leg. (NME); **SYRIA:** 1 ♂: Jabal an Nusayriyah [=Jabal al-Ansariya]. 03.05.2006. V. Skoupy leg. (cSk); **ISRAEL:** 3 ♀♀: Galilee, below Safad. 500 m a.s.l. 04.06.1973. I. Löbl leg. (MHNG); 2 ♂♂, 6 ♀♀: same data, 30.05.1973 (MHNG); 5 ♂♂, 4 ♀♀: same data, 500 m a.s.l. 26.04.1982. C. Besuchet & I. Löbl leg. (MHNG); 1 ♀: Tel Dan. 24.04.1982. C. Besuchet & I. Löbl leg. (MHNG); 1 ♂: Eilon, Nahal Betzet. 22.04.1982. C. Besuchet & I. Löbl leg. (MHNG); 2 ♂♂, 2 ♀♀: near Mt. Carmel. 100-500 m a.s.l. 17.04.1982. C. Besuchet & I. Löbl (MHNG); 7 ♂♂, 7 ♀♀: Montfort. 19.04.1982. C. Besuchet & I. Löbl leg. (MHNG); 10 ♂♂, 8 ♀♀: Mt. Meron. 27.05.1973. I. Löbl leg. (MHNG); 4 ♂♂, 4 ♀♀: Golan Baniyas. 24.04.1982. C. Besuchet & I. Löbl leg. (MHNG);

Remarks. *Omalium cinnamomeum* is known from south-eastern Europe and western part of Western Asia (Schülke & Smetana 2015; Shavrin & Khachikov 2023). It is here recorded from Bulgaria, Hatay (Turkey), Lebanon and Syria for the first time.

Oxyacanthae group

Omalium saulcyi Fauvel, 1875

Omalium saulcyi Fauvel, 1875: 5.

Material. ISRAEL: 2 ♂♂, 3 ♀♀: Galilee, Mt Meron, 700 m a.s.l. 26.06.1982. C. Besuchet & I. Löbl leg. (MHNG); 2 ♂♂: same data, Montfort. 19.04.1982. (MHNG); 7 ♂♂, 5 ♀♀: Golan, Mt. Hermon, 1600 m. 23.04.1982. C. Besuchet & I. Löbl leg. (MHNG); 3 ♂♂, 2 ♀♀: Judee, Mevasseret. 30.04.1982. C. Besuchet & I. Löbl leg. (MHNG).

Remarks. *Omalium saulcyi* is known from Greece, Cyprus, Israel, Jordan, Syria and Turkey (Schülke & Smetana 2015; Zanetti 2002).

Rivulare group

Omalium allardi Fairmaire & Brisout de Barneville, 1859

(Figs 3, 12)

Omalium allardii Fairmaire & Brisout de Barneville, 1859: 44.

Phloeonomus antennarium Reitter, 1911: 234.

Anthobium genistarum Coquerel, 1860: 164.

Omalium salzmanni Saulcy, 1864: 658.

Homalium vaulogeri Fauvel, 1905: 192, **syn. nov.**

Type material. Holotype of *Omalium vaulogeri* ♂ (Fig. 3; dissected): **TUNISIA:** ‘Kairouan | Tunisie’ <handwritten>, ‘Vaulogeri | Fvl.’ <handwritten>, ‘R.I.Sc.N.B. 17.479 | Omalium [handwritten] | Coll. et. det. A. Fauvel’ <printed>, ‘TYPE’ <red label with thin black margins>, ‘*Omalium* | *allardi* Fairmaire & Brisout de Barneville, 1859 | Shavrin A.V. det.’ <printed> (IRSNB).

Additional material examined. TUNISIA: 1 ♂: ‘Tunisie: Mateur C. Rocha’, ‘G. Fagel det. vaulogeri ?? Fauv.’ (IRSNB).

Remarks. *Homalium vaulogeri* was originally described based on the holotype from “Tunisie: Kairouan”. The study of the holotype (Fig. 3) and a comparison with specimens of *O. allardi* revealed that based on the external morphology and the shape of the aedeagus (Fig. 12), all these specimens are conspecific. Thus, I synonymized it with the latter species. Measurements of the holotype of *O. vaulogeri*: HW: 0.47; HL: 0.35; OL: 0.12; TL: 0.07; AL: 0.86; PL: 0.40; PWmax: 0.67; PWmin: 0.55; ESL: 0.72; EW: 0.90; AW: 0.89; AedL: 0.44; BL: 2.76. *Omalium allardi* is a widespread Palaearctic species (Schülke & Smetana 2015; Shavrin 2025b), also introduced in New Zealand (Klimaszewski *et al.* 1996). It is worth noting that it was recorded from North Africa, and known from Morocco, Algeria, Tunisia and Libya (Schülke & Smetana 2015).

Omalium falsum Eppelsheim, 1889.

Omalium falsum Eppelsheim, 1889: 21.

Omalium excellens Bernhauer, 1903: 190.

Material. IRAN: TEHRAN: 1 ♂, 3 ♀♀: Central Elburz, Damavand, east. 3000-3500 m a.s.l. 22.07.1970. (NMPC); 2 ♂♂: Darband Sar Valley. 2000-2500 m a.s.l. 16.7.1970. (NMPC).

Remarks. *Omalium falsum* is known from Caucasus (Azerbaijan, Georgia, Russia), Turkey and Iran (Shavrin & Khachikov 2023). It is here recorded from Tehran province of Iran for the first time.

***Omalium funebre* Fauvel, 1871**

(Fig 4)

Omalium funebre Fauvel, 1871: 99.

Omalium deubeli Bernhauer, 1915: 263, **syn. nov.**

Type material examined. Lectotype (**here designated**) of *Omalium deubeli* Bernhauer, 1915 ♀ (Fig. 4): **ROMANIA:** ‘Bucsecs | Deubel’ <printed>, ‘alpin’ <printed>, ‘Deubeli Brh | Typus’ <handwritten in black>, ‘Chicago NHMus | M.Bernhauer | Collection’ <printed>, ‘SYNTYPE | test D.J. Clarke2014 | GDI Imaging Project’ <violet, printed>, ‘PHOTOGRAPHED | Kelsey Keaton 2014 | Emu Catalog’ <blue, printed>, ‘FMNHINS | 2819642 | FIELD MUSEUM’ <printed, with barcode on the left side of the label>, ‘Omalium | funebre Fauvel, 1871 | Shavrin A.V. det. 2025’ <printed> (FMNH).

The photographs of the habitus and type labels of the holotype are available in Arthropod Collections Database of FMNH (last access: 28.10.2025).

Additional material examined. **ITALY:** 2 ♀♀: ‘Mte. Viso. 13.04.06. Pinker’ (NMW); **AUSTRIA:** 1 ♂, 3 ♀♀: ‘Umg. Innsbruck, Ti. Pechkaner’. ‘Alpein [Alpeinralm, the end of the Oberberg Valley in the upper of Stubai] 2100 m Heu [hay], 8.10.[19]33’ (NMW); 1 ♂: ‘Steiermark Stuhleck’ (FMNH); 1 ♀: ‘Stuhleck Spaeth’ (FMNH); 1 ♀: ‘Hohe Tauern Nassfeld Bernhauer’, ‘Quelmoos Juni. 1500 m’ (FMNH); **ROMANIA:** 1 ♂: ‘Ganglb[auer]. ’99 Negoii, Tr[ansylvania].’ (NMW); **MOLDAVIA:** 3 ♂♂: Calfa. 06.1983. A.G. Koval leg. (ZIN).

Remarks. *Omalium deubeli* was originally described from “Bucsecs” (Bucegi Mountains, Romania) based on two specimens. The studied type specimen (Fig. 4) from FMNH was designated as the lectotype in order to fix the identity of the name. Based on the external morphology, this specimen is conspecific with European *O. funebre*. Thus, it was synonymized with the latter species. *Omalium funebre* is known from several countries of Middle and South Europe (Schülke & Smetana 2015). It is here recorded from Moldavia for the first time.

***Omalium rivulare* (Paykull, 1789)**

Staphylinus rivularis Paykull, 1789: 65.

For synonyms and other references see Schülke & Smetana (2015), Herman (2001) and Shavrin (2025b).

Material. **TURKEY: BOLU:** 3 ♂♂, 1 ♀: Mudurnu, Mangirlar, 1 km W, 40°33'56.0"N 31°20'09.0"E. 1085 m a.s.l. 18.05.2022. (cA); **ORDU:** 1 ♂, 1 ♀: Medudiya, Mahmudiye 1 km SE, 40°35'35.0"N 37°39'31.0"E. 1252 m a.s.l. 14.05.2022. (cA); **YOZGAT:** 1 ♀: AkDağmadeni, 39°34'28"N 35°40'02"E. 1874 m a.s.l., pitfall trap. 07.04.-20.11.2018. E. Yağmur & S. Örgel leg. (cA); **TOKAT:** 1 ♀: Merkez, Şehitler, 1 km SW, 40°31'48.0"N 36°35'42.0"E. 1217 m a.s.l. 19.11.2011. (cA); **VAN:** 2 ♂♂, 2 ♀♀: Resadiye Van Lake, S bank, 38°41'N 42°50'E. 1800 m a.s.l. 21.04.-20.05.2014. C. Reuter leg. (NME).

Remarks. *Omalium rivulare* is one of the widespread species in the Holarctic Region (Schülke & Smetana 2015). It is here recorded from Ordu, Yozgat, Tokat and Van provinces of Turkey for the first time.

Xambeui group

***Omalium cribriceps* Fauvel, 1900**

Omalium cribriceps Fauvel, 1900: 221.

Omalium mesopotamicum Bernhauer, 1943: 71.

Material. **TURKEY: DIYARBAKIR:** 1 ♂: KaraçaDağ. 28.05.1987. M. Jäch leg. (NMW).

Remarks. *Omalium cribriceps* is known from Syria, Turkey, Iran and Iraq (Schülke & Smetana 2015; Shavrin & Khachikov 2023).

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