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Miscellaneous contributions to the knowledge of Scydmaenidae (Insecta: Coleoptera)

Příspěvek k poznání čeledi Scydmaenidae (Insecta: Coleoptera)

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Taxonomy, new species, new subspecies, new replacement name, Coleoptera, Scydmaenidae, Azores, Pakistan, Spain, Turkey, Ukraine

Abstract. Five new taxa of Scydmaenidae are described: *Scydmoraphes hastipes* sp. n. and *Stenichnus* (*Cyrtoscydmus*) *fallax* sp. n. from Northern Pakistan; *Euconnus zoufali* sp. n. from Ukraine; *Euconnus* (*Tetramelus*) *microps* sp. n. from Turkey; and *Euconnus* (*Napochus*) *duboisi eksilis* ssp. n. from Azores. *Euconnus* (*Tetramelus*) *marus* nom. n. replaces *Euconnus* (*Tetramelus*) *mirificus* Vít, 1989, which is a junior homonym of *Euconnus* (*Pycnophus*) *mirificus* Franz, 1989. The Iberian *Euconnus* (*Tetramelus*) *inflatipennis* Franz, 1960 group of species is commented and an up to date key to species including *Tetramelus inflatissimus* Franz, 1975 provided together with additional data.

INTRODUCTION

In this paper descriptions of two new scydmaenids from Northern Pakistan, *Scydmoraphes hastipes* sp. n. and *Stenichnus* (*Cyrtoscydmus*) *fallax* sp. n. are given. Both species belong to genera very poorly represented in this region.

Three other described taxa, belonging to the genus *Euconnus* Thomson, 1859 are: *Euconnus zoufali* sp. n. from Western Ukraine, which could not be assigned to any subgenus occurring in the Central Europe, *Euconnus* (*Tetramelus*) *microps* sp. n. from the Mediterranean coast of Southern Turkey, and finally *Euconnus* (*Napochus*) *duboisi eksilis* ssp. n., a clearly differentiated subspecies of the apparently scarce European species *Euconnus* (*Napochus*) *duboisi duboisi* Méquignon, 1929, is described from the Azores archipelago.

In addition, the illustration of the aedeagus and other data on *Euconnus* (*Tetramelus*) *inflatissimus* Franz, 1975 are given here together with a key to the closely related species *Euconnus* (*Tetramelus*) *inflatipennis* Franz, 1960 and *Euconnus* (*Tetramelus*) *mirificus* Vit, 1989. *Euconnus* (*Tetramelus*) *marus* nom. n. is proposed to replace *Euconnus* (*Tetramelus*) *mirificus* Vit, 1989: 864.

MATERIAL AND METHODS

Abbreviations given for the collections: NMP - Národní muzeum v Praze, Czech Republic; ZML - Zoological Museum Lund, Sweden; CSV - S. Vít collection, Geneva, Switzerland.

Abbreviations used in the descriptions (also in combinations): co. - combined (Length / Width etc.); L. - length; W. - width; A.- antennae; aS. - apical segment of antennae; Cl. - antennal 4-segmented club; E. - elytra; Fl. - flagellum (= antennal segments 3-7); H. - head; ms. - meso; mt. - meta; P. - pronotum; Pd. - pedicel; Ti. - tibia; Ta. - tarsus.

Examples of combined use: H.W. = head width; co.L.H.P. = combined length of head and pronotum; co.W.E. = combined width of elytra; co.L.Fl.Pd. = combined length of flagellum and pedicel; etc.

The male genitalia and other dissected parts were mounted in Canada Balsam on an acetate slide pinned under the beetle mounting card.

For the measurements and ratios given in the descriptions a magnification of 160 x (Leitz) was used, but the characters mentioned in the key to species can be determined with a magnification of 50 x.

TAXONOMY

Scydmoraphes hastipes sp. n.
(Figs 1-3)

Diagnosis. Macrophthalmous in male; body length 1.27 mm; body width 0.56 mm; distinctly two-coloured: head medium yellowish-brown, apical segment of antennae and pygidium darkened, blackish-brown; pronotum strongly punctate; elytra with only shallow microsculpture; antennae lacking a distinct club; metathoracic wings present.

Note. This species is placed tentatively in *Scydmoraphes* Reitter, 1891; it shows some similarities with *Stenichus* (*Cyrtoscydmus*) species, and with *Scydmoraphes rothangensis* Franz, 1981 (see Remarks).

Type material. Holotype ♂ (CSV): "Pakistan, Hazara, Kaghan Valley, sector Ghnwool Valley, Makhair Forest, alt 2000 m a.s.l., 30.vi.1985, leg. S. Vit".

Description. Head small, with scattered minute punctures, across eyes much wider than long (ratio H.W./H.L.: 1.50), shortened behind; width less than the pronotal base width; supra-antennal prominences obliterated, lateral margins slightly reflexed; frons flattened, setose; tempora short, strongly convergent, bearing only scarce, fine and suberect setae; vertex weakly convex, lacking any trace of a median impression. Eyes strongly protuberant laterally, round, pigmented, composed of a large number of ommatidia.

Antennae markedly slender and elongate, lacking a clearly defined club, formed of submoniliform segments, all segments finely granulate, not shiny; much longer than the head and pronotum combined (ratio A.L./co.L.H.P.: ♂ 1.30), and longer than the elytral combined width (ratio A.L./co.E.W.: ♂ 1.07); segments 3-10 subspherical or slightly oblong, subequal, except for the 6th slightly reduced and the 7th slightly swollen; pedicel clavate, 1.5 times as long as wide, distinctly shorter than the two following segments combined, and shorter than the apical segment (ratio Pd.L./aS.L.: ♂ 0.60).

Pronotum (Fig. 3) densely setose, markedly strongly punctate discally to rugose in its basal third; about as long as wide (ratio P.L./P.W.: ♂ 1.06), subglobous anteriorly, then constricted and weakly explanate basally; sides obtusely carinate in the basal third; basal edge weakly swelled, lacking any trace of median carina; basal foveae absent; basal transverse groove well developed, arched, reaching as far as the lateral foveae.

Elytra impunctate but delicately asperate; ratio E.L./E.W.: ♂ 1.35, ratio E.W./co.L.H.P.: ♂ 1.22; basal impressions well developed, each formed by two confluent impressions; subscutellar basal fovea large; subhumeral fovea hidden or obliterated; humeral folds prominent, extending posteriorly; scutellar area weakly prominent; apices subtruncate, not separately rounded.

Venter. Metasternum large, distinctly broader than long, evenly convex in male, longer than the four following sternites together, notched distally on the midline; metepisterna non-exposed ventrally; mesosternum rather long, mesepisterna well defined; sternal lamina only weakly developed, reduced to a low, angular, median ridge, mesosternal median process shortened, mesocoxae contiguous; downy hairs vestiture of the mesocoxal fossae present.

Legs simple, thin, long, stick-like; only the profemora more distinctly clavate; all tibiae spindly, narrowed apically; metatibia about equal to or slightly shorter than the mesotibia.

Aedeagus (Figs 1, 2) small, about 0.15 mm long, moderately sclerotized, simply egg-shaped, obtusely truncate apically; median orifice partially closed by two well sclerotized laminae; internal sac with sclerotized armature; paramerae absent.

Distribution. Pakistan, South-eastern Hazara, Indus Kohistan.

Biology. Found in a mixed leaf forest at about 2000 m a.s.l.; collected by sieving decaying wood in a basal hollow of *Aesculus indica.*

Etymology. Referring to the stick (hasta) like shape of the legs (pes, pedis).

Remarks. This Oriental species differs markedly in facies from the normal variation encountered among the *Scydmoraphes* from Western Palaearctic. *S. hastipes* sp. n. could represent a new subgenus. The pronotum, lacking the basal foveae and sublateral carinae, is of a shape intermediate between *Scydmoraphes* (obtusely carinate sides in the basal third) and *Stenichnus* (basal channel, distally placed lateral foveae). Also the aedeagus of this species is very unusual for *Scydmoraphes*. Lacking the parameres (as in *Neuraphes* s. l.), the basal piece is not free of some similarities with that of *Stenichnus* s. l. (Franz 1960b). The shape of the pronotum, including the tegumental characters, seems close to that found in *Scydmoraphes rothangensis* Franz, 1981 from Northern India (Franz 1981, not examined), of which the aedeagus, antennal formula and body size are different.

Stenichnus (*Cyrtoscydmus*) *fallax* sp. n.

(Figs 4-6)

Diagnosis. Macrophthalmous in male; body length 1.65-1.78 mm; body width 0.67-0.72 mm; colour from medium yellowish to reddish-brown; pubescence long and erect; head with few deep punctures; pronotum very finely, elytra strongly punctate; antennae lacking a distinct club; metathoracic wings present.

Type material. Holotype ♂ (CSV): "Pakistan, Hazara, Kaghan Valley, sector Ghnwool Valley, Makhair Forest, alt 2000 m a.s.l., 30.vi. 1985, leg. S. Vit". Paratype ♂ (CSV): same data as holotype.

Description. Head weakly convex, shiny, bearing only a few long and suberect setae, across eyes much wider than long (ration H.W./H.L.: 1.60), shortened behind the eyes; width slightly less than the pronotal base; supra-antennal prominences formed by the reflexed lateral margins; frons flattened or slightly convex (can be weakly deformed by scarce, deep punctures); connected upwards obliquely to the clypeus; transverse groove present, shallow; tempora reduced; vertex flattened, lacking any trace of the median impression. Eyes strongly protuberant laterally, round, pigmented, formed of a large number of ommatidia.

Antennae thin, progressively thickened, lacking a clearly defined club, as long as the head and pronotum combined and just shorter than the combined elytral width (ratio A.L./co.E.W.: ♂ 0.95); pedicel cylindrical, nearly twice as long as wide, shorter than the two following segments combined, and shorter than the apical segment (ratio Pd.L./aS.L.: ♂ 0.77); segment 3 small, elongate, clavate; segments 4-6 subspherical, increasing in size progressively, segment 5 slightly swollen; segments 5-11 rimmed basally. The club itself can be considered as three- or as five-segmented because the three apical segments are similarly shaped and more dull, or because the five apical segments are finely granulate.

Pronotum (Fig. 6) wide, cordiform, about as long as wide, shiny, finely setose and very finely punctate on the disc; convex and rounded anteriorly, then constricted and somewhat flattened in the basal third; lateral foveae well developed; base with no clearly defined basal foveae, with a longitudinal swelling on the midline flanked on each side by a shallow impression then laterally by a small shallow fovea; basal angles strongly granulate.

Elytra densely punctate, covered with long erect setae; ratio E.L./E.W.: ♂ 1.34-1.38, ratio E.W./co.L.H.P.: ♂ 1.06-1.08; basal impressions present, each formed by two confluent impressions of which the subscutellar one extends posteriorly; basal foveae hidden or obliterated, the subscutellar one weakly hairy; humeral folds subobliterated, not extending backwards; basal fourth of the suture markedly swollen, strongly prominent; apices subtruncate, not separately rounded.

Venter. Metasternum much wider than long, convex in male, longer than the sternal lamina, slightly shorter than the four following sternites together, notched distally on the midline; metepisterna not exposed ventrally; mesosternum short, mesepisterna ill-defined; sternal lamina well-developed but not markedly raised, somewhat thickened, tooth-like produced in its distal and apical edge; downy hairs vestiture well developed, located mesally and laterally of the mesocoxae.

Legs simple, thin, profemora lacking sexually dimorphic characters; metatibia as long as mesotibia.

Aedeagus (Figs 4, 5) large, about 0.3 mm long, basal piece rather flattened dorso-ventrally, rounded apically and then markedly bilobed; median orifice dorsally with a characteristic median, digit-like projection; internal sac with sclerotized armature as figured; parameres well developed, simple, provided with a row of preapical sensillae.

Distribution. Pakistan, South-eastern Hazara, Indus Kohistan.

Biology. Found in a mixed leaf forest, at about 2000 m a.s.l., in forest litter and decaying wood in a basal hollow of *Aesculus indica*.

Etymology. The specific epithet alludes to the atypical morphological characters of the species.

Remarks. The aedeagus of this species is of an unusual shape within the subgenus *Cyrtoscydmus*, where the distal edge of the basal piece is not bilobed, but projecting into a median strut, or at least simply truncate.

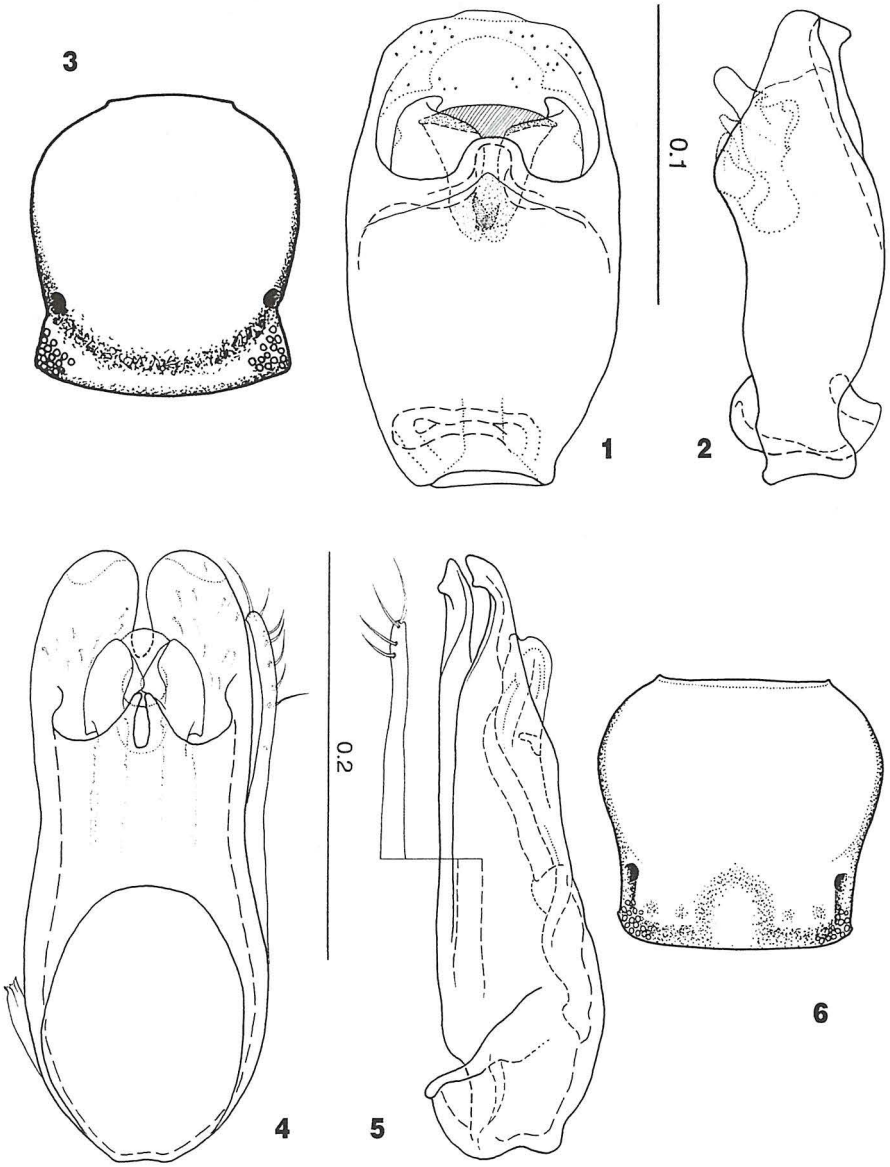
Euconnus zoufali sp. n.

(Figs 12-14)

Diagnosis. A large species, macrophthalmous in male; body length 1.86 mm, body width 0.68 mm; discretely two-coloured: head, pronotum and antennae reddish-brown, elytra medium-rust-red, legs and palps paler; integument shiny, punctures sparse and superficial; antennae ill-thickened apically, with no distinctly transverse segments, and no distinctly formed club; segments 3 and 10 about as broad as long; metathoracic wings present.

Type material. Holotype 1♂ (NMP): labelled: "Užhorod, Vl. Zoufal".

Description. Head moderately convex, round, about as long as wide, about as wide as the pronotal base, vaguely asperate, with only few punctures; supra-antennal prominences large, weakly prominent; frons simply flattened, bulky, very abruptly connected to the clypeus but separated from the latter by a deep transverse groove and a well defined carina on the base of the clypeus;



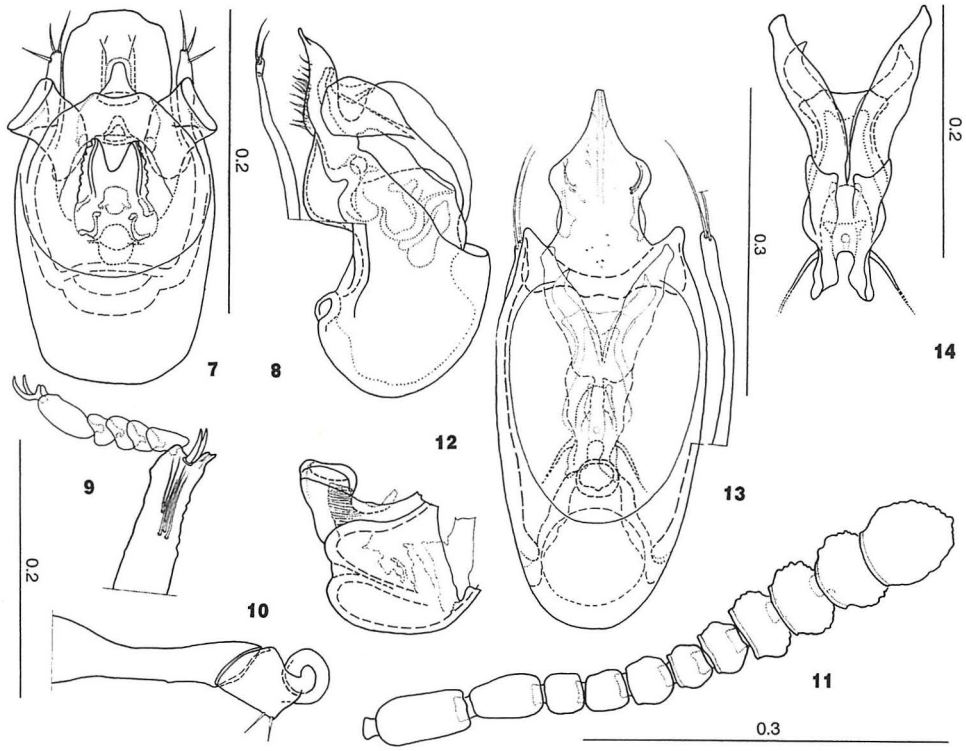
Figs 1-6. 1-3: *Scydmoraphes hastipes* sp. n.: 1 – aedeagus, dorsal aspect; 2 – aedeagus, lateral aspect; 3 - pronotum (sketched). 4-6: *Cyrtoscydmus fallax* sp. n.: 4 – aedeagus, dorsal aspect; 5 – aedeagus, lateral aspect; 6 - pronotum (sketched). All scales given in mm.

Obr. 1-6. 1-3: *Scydmoraphes hastipes* sp. n.: 1 - aedeagus shora; 2 - aedeagus bočně; 3 - pronotum (náčrt). 4-6: *Cyrtoscydmus fallax* sp. n.: 4 - aedeagus shora; 5 - aedeagus bočně; 6 - pronotum (náčrt). Měřítka v mm.

tempora long, convergent, weakly arched, covered with coat of spindly setae directed backward, provided with collar comb; vertex simply convex. Eyes well developed, as large as tempora, round, composed of about thirty well pigmented ommatidia.

Antennae slender, submoniliform, longer than the combined length of the head and pronotum (ratio A.L./co.L.H.P.: ♂ 1.09), and distinctly longer than the elytral combined width (ratio A.L./co.E.W.: ♂ 1.21); all segments subcylindical, basally rimmed; 4-segmented antennal club ill-defined, segments finely granulated, not shiny; segment 7 suboblong (in male), more closely club-like shaped; the club longer than the segments 3-7 combined, but distinctly shorter than segments 2-7; segment 3 markedly shortened; segment 5 more elongate; pedicel less than twice as long as wide, distinctly shorter than the two following segments combined and shorter than the apical segment (ratio Pd.L./aS.L.: ♂ 0.61); the latter longly pyriform with distinctly constricted tip.

Pronotum weakly elongate (ratio P.L./P.W.: ♂ 1.12), barrel-like; disc with few punctures and fine suberect setae; sides with stiff parapleural setae and a lateral comb of bristle-like setae ex-



Figs 7-14. 7-11: *Tetramelus microps* sp. n.: 7 - aedeagus, dorsal aspect; 8 - aedeagus, lateral aspect; 9 – apex of right protibia, meso-ventral aspect; 10 - metatrochanter; 11 – left antenna, ventral aspect. 12-14: *Euconnus zoufali* sp. n.: 12 - aedeagus, dorsal aspect; 13 - aedeagus, lateral aspect (fragment); 14 - aedeagus, armature of internal sac. All scales given in mm.
Obr. 7-14. 7-11: *Tetramelus microps* sp. n.: 7 - aedeagus shora; 8 - aedeagus bočně; 9 - koncová část předních holení; 10 - metatrochanter; 11 - levé tykadlo zespodu. 12-14: *Euconnus zoufali* sp. n.: 12 - aedeagus shora; 13 - aedeagus bočně (fragment); 14 - aedeagus, struktury vnitřního vaku. Měřítka v mm.

tending to the basal edge; base with six well-developed foveae, of which the two median ones are smaller but contiguous, separated by a minute subobliterate median carina; lateral carinae long, oblique, placed medially, between the submedian and lateral fovea.

Elytra depressed dorsally, with few superficial punctures; ratio E.L./E.W.: ♂ 1.50; ratio E.L./co.L.H.P.: ♂ 1.35; with a shallow discal depression in about basal third of the suture; basal depressions obliterate; four basal foveae very minute or ill-defined, indicated only by a shallow basal depression extending posteriorly; humeral folds well defined, elongate, prominent; basal tenth of the suture thickened.

Venter. Metasternum distinctly broader than long, one and half times longer than the sternal lamina, slightly longer than the four following abdominal sternites together, evenly convex in male, but with a minute median bud-like protuberance; metepisterna not exposed ventrally; metacoxae broadly separated by a simple truncate process; sternal lamina well developed, thin, not very raised, ventral edge acute; mesosternum short; mesocoxal median process highly atrophied; mesepisterna characteristically modified; downy hairs vestiture of the mesocoxal fossae weakly developed.

Legs. Protrochanters provided with a thin, tooth-like, produced carina forming an obtuse tooth; profemora more distinctly clavate than meso- and metafemora; meso- and metatibiae distinctly sinuate on their inner sides; mesotibiae weakly sinuate; ratio msTi./Ta.: 1.52; ratio mtTi./Ta.: 1.8; ratio mtTi./msTi.: 1.13.

Sexual dimorphism unknown, but the bud-like median protuberance of the metasternum and the sinuate shape of the legs could be peculiar to male.

Aedeagus (Figs 12-14) 0.51 mm long, strongly flattened dorso-ventrally; basal opening strongly winded ventrally; latero-apical edges of the basal piece tooth-like prolonged; ventro-apical lamina large, flame-like, widened in the middle; each side of the widening provided with a group of sensillae; internal sclerotized armature as figured, symmetrical, weakly sclerotized. Parameres well-developed, provided with two long apical setae.

Distribution. So far known only from the holotype. However, Uzhgorod and its surrounds (formerly the territory of Czechoslovakia) is *de facto* Ukrainian border with Slovakia and it's hardly credible than the species has never been collected again.

Biology. Not known.

Etymology. Named for Prof. Vladimír Zoufal, a well-known Czech coleopterist (of the first quarter of this century) and a highly regarded collector of Pselaphidae and Scydmaenidae.

Remarks. The unique specimen comes from Machulka's collection (NMP), annotated in Machulka's hand "*Euconnus* subgen. nov.", "Spec. nov." It cannot be assigned to any European subgenus of the genus *Euconnus* Thomson, 1859, because of an unusual combination of characters of the pronotum, antennae and aedeagus. Unfortunately the aedeagus was seriously damaged during our study and only its basal portion (Fig. 13) remains disponible presently.

Euconnus (*Tetramelus*) *microps* sp. n.

(Figs 7-11)

Diagnosis. Small species, microphthalmous in both sexes; body length 1.14-1.22 mm, width 0.44-0.50 mm; colour from straw-yellowish to medium rust-red, elytra impunctate; integument only vaguely asperate, impunctate; antennae with segments (7), 8, 9, 10 more or less strongly transverse.

Type material. Holotype ♂ (CSV): "Turquie mérid., vil. Antalya, Kalkan, maquis litter (350 m a.s.l.), 12.iv.1996, leg. S. Vit". Paratypes (all CSV): 1♂: same data as holotype; 1♀: idem, "E Kalkan, maquis litter m. (50 m a.s.l.), 10.iv.1996, leg. S. Vit"; 1♂, 1♀: idem, "E-Kalkan, maquis litter, 10.iv.1993, leg. S.Vit"; 1♂, 3♀♀: idem, "dead stock of *Ceratonia,* 10.iv.1993, leg. S.Vit".

Description. Head round-shaped, about as broad as long, ratio H.L./H.W.: 0.91-1.00; wider than the pronotal base; supra-antennal prominences subobliterated; frons flattened, abruptly connected to the clypeus; fronto-clypeal transverse groove shallow; tempora rounded, covered with simple, suberect setae; vertex simply convex. Eyes small, pigmented, reduced to three or four loosely defined ommatidia, protruding laterally and visible from above.

Antennae (Fig. 11) about as long as or slightly longer than the combined length of the head and pronotum (ratio A.L./co.L.H.P.: ♂ 1.06; ♀ 0.98-1.06), and generally longer than the elytral combined width (ratio A.L./co.E.W.: ♂ 1.14; ♀ 1.02-1.11); segments 6-9 rimmed basally; 4-segmented antennal club well defined, dull, segment 7 small, subglobulous in both sexes, but more closely similar to those of the flagellum; club about equal to or just slightly shorter than the segments 2-7 combined; segments 3-6 suboblong, subequal, except for the segment 5 which is slightly thickened, and the segment 6 slightly reduced in size in both sexes; pedicel about one and half times as long as broad, slightly shorter than the two following segments combined and shorter than the apical segment which itself is markedly shortened (ratio Pd.L./aS.L.: 0.67-0.75).

Pronotum of rather variable proportions (ratio P.L./ P.W.: ♂ 1.04; ♀ 0.92-1.17), always markedly inflated anteriorly; base with only two markedly developed median foveae; transverse groove and lateral carinae obliterated; parapleural setae reduced in length.

Elytra 1.5 times longer than broad, impunctate; ratio E.L./E.W.: ♂ 1.80; ♀ 1.36-1.45; ratio E.L./co.L.H.P.: ♂ 1.38; ♀ 1.25-1.55; basal impressions well developed; basal foveae minute, hidden; humeral folds well defined, gently carinate.

Venter. Metasternum more than one and half times longer than the sternal lamina, deeply depressed in male, flattened in female, longer than the four following segments together; sternal lamina raised, distinctly pigmented and weakly sinuate on its ventral edge.

Legs weakly curved; protibia (Fig. 9) provided with an obtuse apical strut; two apical spurs present at pro- and mesotibiae; distal edge of metatrochanters (Fig. 10) tooth-like projected, provided with two bristles; metatibiae very gently sinuate in both sexes, generally slightly shorter than the mesotibiae; (ratio mtTi./msTi.: 0.91-1.00).

Sexual dimorphism ill-pronounced and subtle; the females somewhat more robust (see ratio E.L./E.W.); protibiae more distinctly curved in male; metasternum medially strongly depressed in male.

Aedeagus (Figs 7-8) well characterised by its small size (0.25 mm), by the broad and subtruncate ventro-apical lamina, by the pair of short and stout lateral horny processes projecting externally out of the median orifice and by the well developed sclerotized armature of the internal sac; lateral processes plainly truncate and thickened apically; parameres widened apically, bearing three short and bristly apical sensillae.

Biology. The species inhabits coastal calcar slopes from the sea level up into the neighbouring hills where it occurs in the rather shallow stratum of the maquis litter.

Distribution. South-Western Anatolia, Lycia (vilayet of Antalya).

Etymology. The specific epithet refers to the micropthalmy of the species.

Remarks. Because of the two independent lateral processes, the aedeagus of this species exhibits an interesting affinity with the *E. reitteri* species group which is widespread in the Caucasus (Vít & Hlaváč 1997, 1998). Nevertheless, the aedeagus of *E.* (*T.*) *microps* sp. n. is organised very differently by having the complex sclerotized structures of the internal sac, where the lateral processes seem hardly homologous with the horny-processes found in the *E. reitteri* species group. Given the current state of knowledge of *Euconnus* (*Tetramelus*), there is no evidence to associate *E.* (*T.*) *microps* sp. n. with the *E. reitteri* species group.

Euconnus (*Napochus*) *duboisi eksilis* ssp. n.
(Figs 15-17)

Diagnosis. Body size smaller than in *E.* (*N.*) *duboisi duboisi* Méquignon, 1929, sclerotized armature of the internal sac differently shaped and loosely sclerotized.
Type material. Holotype ♂ (ZML): "Açres, S. Miguel, Ponta Delgada, Stadsparken, 24.vii.1983, A. H. Törnvall". Paratypes: 1 ♂: same data as holotype (CSV); 1 ♀: "Provoacao, Mirador Pico Longo, 30.vii.1983, A. H. Törnvall" (ZML).
Description. Macrophthalmous in both sexes; body length 1.27-1.38 mm, width 0.53-0.55 mm; mature specimens well pigmented, two-coloured, head and pronotum dark brown, pronotal base and elytra yellowish-brown, appendages paler, elytra with distinct punctures; integument shiny, densely pubescent; antennal club 1.5 times wider than flagellum, segments 8, 9 and 10 at least weakly transverse.

Head round-shaped, about as broad as or slightly broader than long (ratio H.W./H.L.: 1.04-1.14), normally covered with long recumbent setae or, if these missing, distinctly punctate; distinctly narrower than the pronotal base; supra-antennal prominences developed; frons weakly concave, very abruptly connected to the clypeus; the latter seems provided with a minute median bud-like process; tempora tightly rounded, covered with a dense coat of bristle-like setae and provided with a collar comb; vertex projected backward. Eyes large, egg-shaped, as large as the temporal interval, formed by a large number of minute ommatidia.

Antennae slightly shorter than the combined length of the head and pronotum (ratio A.L./co.L.H.P.: 0.94), and shorter than the elytral combined width (ratio A.L./co.E.W.: 0.94); 4-segmented club well defined, segments coarsely granulate, slightly dull, rimmed basally; segment 7 small, subspherical, in structure more similar to those of the club; club longer than the segments 2-7 combined; flagellum compactly tightly shaped, segments 3-6 short, subglobous, subequal, except for the segment 5 which can be slightly larger; pedicel only slightly longer than broad and about as long as the two following segments combined and distinctly shorter than the apical segment (ratio Pd.L./aS.L.: 0.55), the latter stout, rather obtuse apically.

Pronotum conical, about as long as (♀) or slightly shorter than (♂) the basal width, (ratio P.L./P.W.: ♂ 0.94, ♀ 1.03); base curved, lacking foveae or basal groove.
Elytra slightly depressed discally, with distinct punctures; ratio E.L./E.W.: ♂ 1.40-1.45, ♀ 1.42; ratio E.W./co.L.H.P.: 1.0; basal foveae absent; basal depressions subobliterated, somewhat deepened close to humeral folds, the latter present; apices separately rounded.

Venter. Metasternum evenly convex in both sexes, finely punctured, as long as the four following sternites together, one and half times longer than the sternal lamina, the latter not thickened, as long as the three following sternites together.

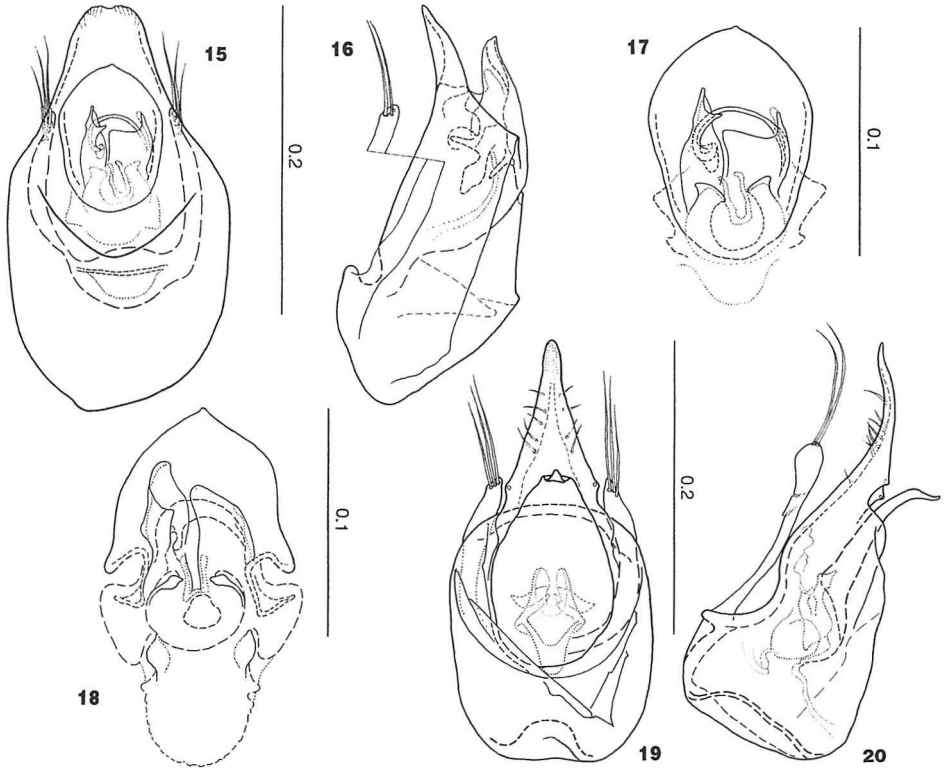
Legs. All tibiae markedly swollen in the middle, sinuate; metatibia slender, about as long as (♂) or slightly longer than (♀) mesotibia; ratio mtTi./msTi.: 1.03-1.07; ratio msTi./msTa.:1.64-1.66; ratio mtTi./mtTa.: 1.47-1.60.

Sexual dimorphism very subtle and not clearly defined. The most stable features could be the shape of the elytra (see ratio E.L./E.W.), which are more elongate and subparallel in male.

Aedeagus (Figs 15-17) of the same shape as in *Euconus* (*N.*) *duboisi duboisi*, with the sclerotized armature of the internal sac very loosely developed in *E.* (*N.*) *duboisi eksilis* ssp. n. compared to the weakly sclerotized and different structure in *E.* (*N.*) *duboisi duboisi* (Fig. 18, see also Binaghi 1956: 71, fig. 3-d).

Biology. Not known.

Distribution. Azores, São Miguel Island.



Figs 15-20. 15-17: *Napochus duboisi eksilis* ssp. n.: 15 – aedeagus, dorsal aspect; 16 – aedeagus, lateral aspect; 17- aedeagus, armature of internal sac. 18: *Napochus duboisi duboisi* Méquignon, aedeagus, armature of internal sac. 19-20: *Tetramelus inflatissimus* Franz: 19 - aedeagus, dorsal aspect; 20 – aedeagus, lateral aspect. All scales given in mm.

Obr. 15-20. 15-17: *Napochus duboisi eksilis* ssp. n.: 15 - aedeagus shora; 16 - aedeagus bočně; 17 - aedeagus, struktury vnitřního vaku. 18: *Napochus duboisi duboisi* Méquignon, aedeagus, struktury vnitřního vaku. 19-20: *Tetramelus inflatissimus* Franz: 19 - aedeagus shora; 20 - aedeagus bočně. Měřítka v mm.

Etymology. The specific epithet is a latinised combination of letters with no meaning.
Remarks. The species was also recorded from Madeira and the Canary Islands (CSV) but all examined specimens actually belong to *E.* (*N.*) *duboisi duboisi* (for aedeagus also see Binaghi 1956).

Review of Iberian *Euconnus* (*Tetramelus*) related to *E.* (*T.*) *inflatipennis* Franz, 1960

(Figs 19-21)

The species of the subgenus *Tetramelus* Motschulsky, 1870 recorded from the North-West of the Iberian peninsula and possessing sexually dimorphic antennae do not constitute a formally named species group. They were recently but incompletely studied (Vít 1989). One another closely related species, *Tetramelus inflatissimus* Franz, 1975 from Portugal, described in a lengthy work on the Scydmaenidae of the Caucasus and Palestine (Franz 1975), escaped our attention. Presently, the following three species belong to this informal group.

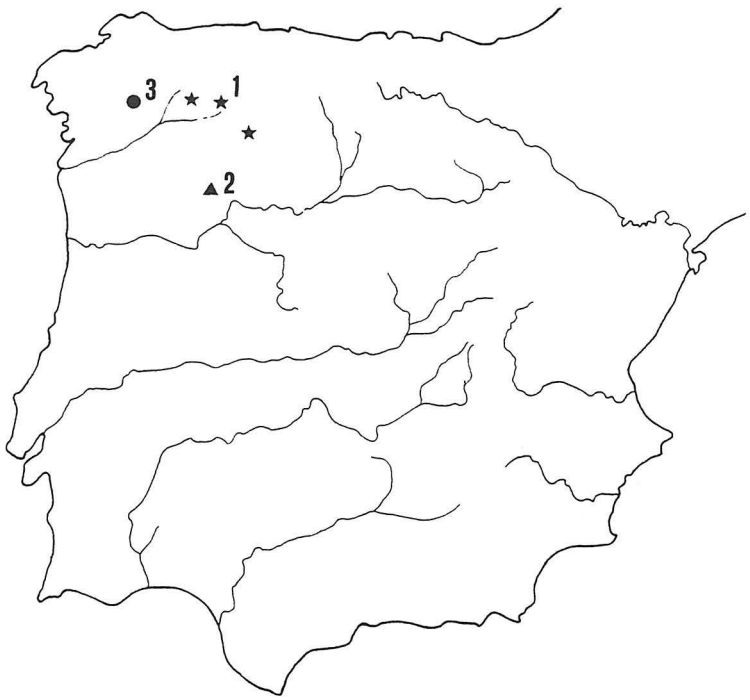


Fig. 21. Distribution map of the following species: 1 - *Tetramelus inflatipennis* Franz; 2 - *Tetramelus marus* Vit; 3 - *Tetramelus inflatissimus* Franz.
Obr. 21. Mapka rozšíření následujících druhů: 1 - *Tetramelus inflatipennis* Franz; 2 - *Tetramelus marus* Vit; 3 - *Tetramelus inflatissimus* Franz.

Euconnus (*Tetramelus*) *inflatipennis* Franz, 1960

Euconnus (*Tetramelus*) *inflatus* Franz, 1957: 220-222; fig. 22.
Euconnus (*Tetramelus*) *inflatipennis* Franz, 1960a: 11 (nom. n.).
Euconnus (*Tetramelus*) *inflatus*: Franz 1963: 232 (as lapsus for *inflatipennis*).
Euconnus (*Tetramelus*) *inflatipennis*: Vit 1989: 866-867; figs 6-9.

Euconnus (*Tetramelus*) *inflatissimus* Franz, 1975 (Figs 19, 20)

Euconnus (*Tetramelus*) *inflatissimus* Franz, 1975: 50-51, fig. 26.

Material studied. 1♂ (CSV): "S. Martinho, C de Barros", "*E.* (*Tetramelus*) *inflatissimus* Franz, R. Rous det. 1990".

The species was known only from the holotype. Our specimen is undoubtedly an unstudied pendant of the holotype (see labelling, origin).

Remark. Aedeagus (Figs 19, 20) probably partially deformed by dessication.

Euconnus (*Tetramelus*) *marus* nom. n.

Euconnus (*Tetramelus*) *mirificus* Vit, 1989: 864.

Remark. The name is a junior homonym of *Euconnus* (*Pycnophus*) *mirificus* Franz, 1989: 52 from Thailand.

Etymology. The specific epithet is a latinised combination of letters with no meaning.

Key to species

1. Body length 1.53 mm, body width 0.63 mm. Head subcircular, as long as broad, and as wide as pronotum, tempora rounded; length of male antenna 0.96 mm, antennal segments 6-9 modified, segment 7 with a short, tube-like projection on its ventro-mesal side; ratio E.L./E.W.: 1.56. ..... *E.* (*T.*) *marus* nom. n.
- Body length over 1.7 mm, body width 0.7-0.8 mm. Head ovoid, as long as broad, and narrower than pronotum, tempora convergent behind; length of male antenna 1.04-1.12 mm; ratio E.L./E.W.: 1.38-1.40. 2
2. Length of male antenna 1.06 mm, only segments 8-10 modified, each with an obtuse, tooth-like, carina-free projection on its ventro-mesal side; ratio E.L./E.W.: 1.42 (♂). Body length 1.78-1.85 mm. ..... *E.* (*T.*) *inflatissimus* Franz
- Length of male antennae 1.04-1.12 mm; segments 6-10 modified, each with a thin carina on its ventro-mesal side; ratio E.L./E.W.: 1.38-1.40. Body length 1.70-1.90 mm. ..... *E.* (*T.*) *inflatipennis* Franz

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SOUHRN

Práce uvádí popisy pěti nových taxonů čeledi Scydmaenidae a aktualizuje údaje týkající se iberské skupiny druhů podrodu *Tetramelus* blízkých druhu *Euconnus* (*Tetramelus*) *inflatipennis* Franz, 1960.

Dva nové druhy, *Scydmoraphes hastipes* sp. n. a *Stenichnus* (*Cyrtoscydmus*) *fallax* sp. n. jsou popsány z území severního Pákistánu, kde jsou oba rody pouze velice chudě zastoupeny. Další tři popsané taxony patří do rodu *Euconnus* Thomson, 1859. Jsou to: *Euconnus zoufali* sp. n. ze západní Ukrajiny, druh zjevně nepatřící k žádnému z podrodů rodu *Euconnus*, zastoupených ve střední Evropě; *Euconnus* (*Tetramelus*) *microps* sp. n. z jihozápadního pobřeží Turecka, a nakonec poddruh *Euconnus* (*Napochus*) *duboisi eksilis* ssp. n. nehojného evropského druhu *Napochus duboisi* Méquignon, 1929, jehož výskyt na Azorských ostrovech byl dosud neznámý.

Dále zde dodatečně uvádím vyobrazení aedeagu druhu *Euconnus* (*Tetramelus*) *inflatissimus* Franz, 1975 společně s aktualizovaným klíčem pro tuto skupinu druhů. Nedávná studie této skupiny druhů podrodu *Tetramelus* Motschulsky, 1870, charakterizovaných pohlavně dimorfními tykadly samců, nebyla totiž úplná (Vit 1989). Byl v ní opomenut právě druh *E.* (*T.*) *inflatissimus* z Portugalska, jehož původní popis byl publikován v souhrnné práci o Scydmaenidae Palestiny a Kavkazu (Franz 1975). V této skupině druhů dále rovněž navrhuji náhradní druhové jméno *marus* nom. n. pro původně použité *Euconnus* (*Tetramelus*) *mirificus* Vit, 1989: 864, které se ukázalo být mladším homonymem thajského druhu *Euconnus* (*Pycnophus*) *mirificus* Franz, 1989: 52.