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A Revision of the Genus *Haplothrix* SCHILSKY, 1896

(Coleoptera, Melyridae)

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Abstract

The genus *Haplothrix* SCHILSKY, 1896 is revised, 14 species are placed in this genus, from which 9 are described as new to science: *Haplothrix sanguinicollis* sp. n. (Afghanistan), *H. vana* sp. n. (NW India), *H. soluta* sp. n. (Iran), *H. effusa* sp. n. (Iran), *H. pospisili* sp. n. (Rhodes), *H. leucosa* sp. n. (Afghanistan), *H. captiosa* sp. n. (Turkey), *H. mera* sp. n. (Turkey), *H. chalif* sp. n. (Iran, Iraq). New combinations are proposed for five other species: *Haplothrix ruficollis* (REITTER) comb. n., *H. pusilla* (SCHILSKY) comb. n., *H. subtilis* (REITTER) comb. n., *H. armeniaca* (KIESW.) comb. n., *H. aequalis* (REITTER) comb. n.

Introduction

The genus *Haplothrix* SCHILSKY, 1896, originally a subgenus of *Dasytiscus* KIESENWETTER, 1859, was given the full generic status and re-defined in my paper on the tribe Chaetomalachiini (MAJER, 1989 a). SCHILSKY's conception of his subgenus *Haplothrix* based only upon the vestiture of the upper body surface has been proved by me to be straying. The generic characters in *Haplothrix* are delimitated very well but only on the tegmen and phallus.

The dissecting technique used here is the same as in my paper on *Dasytidius*-species from the Balkans and Turkey (MAJER, 1989 b).

Abbreviations used

BMNH = British Museum, Nat. Hist., London (U. K.)
IPE = Institut für Pflanzenschutzforschung, Eberswalde (GDR)
KMB = Author's private collection, Brno (Czechoslovakia)
MCM = Museo Civico di Storia Naturale, Milano (Italy)
MHNP = Muséum National d'Histoire Naturelle, Paris (France)
MLU = Museum of Zoology and Entomology, Lund University (Sweden)
NHMB = Naturhistorisches Museum Basel (Switzerland)
NMP = Národní muzeum Praha (Czechoslovakia)
NMW = Naturhistorisches Museum Wien (Austria)
RC = Private collection of Dr. Robert CONSTANTIN, Saint-Lô (France)
TMB = Természettudományi Múzeum, Budapest (Hungary)
ZMB = Zoologisches Museum, Humboldt University, Berlin (GDR)
ZSM = Zoologische Staatssammlung, München (FRG)

Key to species

1 Pronotum with distinct submarginal lines (Figs 1–3) 2
– Pronotum without submarginal lines (Figs 4–15) 4

2 Pronotum rufous as contrasting with piceous head and elytra . . . *H. sanguinicollis* sp. n.
– Pronotum with coloration not contrasting with head and elytra 3

3 Elytra with rufescent apex. Pronotum scarcely transverse, eyes less prominent (Fig. 3) . . . . . 3. *H. soluta* sp. n.
– Elytra unicolorous, mostly rufopiceous. Pronotum strongly transverse, eyes distinctly prominent (Fig. 2) . . . . . 2. *H. vana* sp. n.

4 Pronotum with erect black bristles (Figs 4–7) 5
– Pronotum only with very fine marginal fringe composed of light hairs (Figs 8–15) 8

5 Pronotum strongly transverse, hairs arranged towards a transverse prebasal line (Fig. 6) . . . . . 6. *H. pospisili* sp. n.
– Pronotum less transverse, hairs arranged towards a point near base 6

6 Body very small (1.5 mm). Pubescence of elytra without visible more erect hairs. Coloration of pronotum, elytra, and legs light-flavous . . . . . 7. *H. leucosa* sp. n.
– Body mostly larger (1.6–2.3 mm). Pubescence of elytra with admixed semi-erect hairs. Coloration of pronotum, elytra and/or legs darker, at most elytra testaceous to rufotestaceous 7

7 Body mostly variegated, i. e. pronotum lighter than head and elytra, or coloration testaceous to light flavous; rarely body surface fuscous but body always relatively slender (Fig. 4) . . . . . 4. *H. ruficollis* (Reitt.)
– Body robust and relatively broad (Fig. 5), never variegated, upper surface completely piceous . . . . . 5. *H. effusa* sp. n.

8 Pronotum subangulate at sides; antenna extremely long (Fig. 14) . . . . . 12. *H. armeniaca* (Kiesw.)
– Pronotum more or less arcuate at sides; antenna moderately long 9

9 Pronotum less transverse, eyes more prominent (Fig. 15); elytra mostly lighter posteriorly . . . . . 14. *H. chalif* sp. n.
– Pronotum more transverse, eyes less prominent. Elytra always unicolorous 10

10 Intervals among punctures of pronotum with distinct network microsculpture; outline of pronotum more trapeziform (Fig. 10). Relatively large species (2.1–2.6 mm) . . . . . 10. *H. subtilis* (Reitt.)
– Intervals among punctures on pronotum without distinct microsculpture; pronotal outline scarcely trapeziform 11

11 Pronotum of nearly oblong outline (chiefly males, Fig. 9). More erect hairs on elytra hard to differ from very fine decumbent pubescence . . . . . 13. *H. aequalis* (Reitt.)
– Pronotum more arcuate at sides and/or base 12

12 ♂: sutural angles more or less acuminate (Fig. 11). Pubescence relatively dense and rather semi-villose . . . . . 9. *H. captiosa* sp. n.
– ♂: sutural angles rounded 13

13 Very small species (1.6 mm) with entirely decumbent, extremely fine hairs . . . . . 8. *H. pusilla* (Schils.)

– Larger species 2.2–2.7 mm with coarser pubescence; more erect hairs present on pronotum . . . . . 11. *H. mera* sp. n.

1. *Haplothrix sanguinicollis* sp. n.
(Figs 1, 29, 46)

Easily distinguishable from species having distinct submarginal pronotal lines in pronotum being rufous.

Ground coloration piceous to black; distal portion of femora, complete tibiae, tarsi, and pronotum (which is more or less infuscate in middle of anterior quarter), base of antenna (joints 1–4(–5), or, at least, 2–3) orange-reddish to rufotestaceous; anterior half of head is of that same colour but head may completely be darkened (then dark coloration is correlated with infuscate antennal joints 1 and 4), mouthparts more or less piceous. Integument relatively sparsely and finely punctate, pubescence dual and (on pronotum) bicolorous; no marginal fringe. Head polished, with scattered fine punctures, eyes slightly prominent; antennal joints 6 and 8 distinctly smaller than neighbouring, none of them transverse. Pronotum transverse, with well defined submarginal lines; base subarcuate, sides arcuate (marginal denticles unexpressive), apex straight; upper surface strongly polished; intervals glabrous, evenly convex, much broader than punctures which are fine and rather scattered, pronotal lateral areas below submarginal lines glabrous; basal pubescence very fine, light (yellowish), sparse, hard to see; altogether 30–40 black bristles present on pronotum. Elytra dilated posteriorly in both sexes, sutural angles obtuse, side margins bordered up to apex, puncturation distinctly coarser than on pronotum and head, but still relatively fine, glabrous intervals broader than punctures; pubescence yellowish, very fine, short and sparse but more erect hairs may be distinguished, even though uneasily.

♂ (Fig. 1). Antennal joints distinctly elongate, chiefly 7–10; antenna very long: length of elytra/length of antenna = 1.38. Pronotum less transverse. Pygidium nearly semicircular, apex weakly emarginate. Sternum VII with straight hind margin. Tegmen rather parallelsided (Fig. 29). Phallus in side view (Fig. 46) relatively robust, apex curved; internal sac without distinct structure. Length = 1.96 mm; Width = 0.78 mm.

♀. Antennal joints never elongate, 5–10 nearly as long as wide; antenna shorter: length of elytra/length of antenna = 2.9–3.1. Pronotum more transverse. Pygidium strongly trapeziform, apex scarcely emarginate. Internal copulatory organs membranous. Length = 1.96–2.26 mm; Width = 0.83–0.91 mm.

Distribution: Afghanistan

Types. Holotype, ♂ (NHMB) and 4 ♀ paratypes (2 NMHB, 2 KMB): "J. Klapperich, Tangi-Gharuh, 1600 m, am Kabulfluß, 10.5.52, O. Afghanistan".

2. *Haplothrix vana* sp. n.
(Figs 2, 30, 47)

Unicolorous species with pronotal submarginal lines, easy to distinguish from other species.

Predominant ground coloration usually fuscous, it may be seldom darker (nearly piceous) but more frequently is lightened to pale testaceous (in such a case head, apical antennal segments and area around scutellum remain more or less infuscate); head, distal portion of antenna and femora usually darkened (more infuscate), sternum VII mostly lightened. Integument lustrous, finely and rather sparsely punctate, pubescence dual (on pronotum) and bicolorous; marginal fringe lacking at all. Head (chiefly in male) with prominent eyes, surface strongly polished, scarcely punctate; antennal joints not

distinctly transverse. Pronotum distinctly transverse, relatively short; base and sides arcuate (marginal denticles strongly reduced), apex straight; submarginal lines developed well, nearly complete (terminating just before the very pronotal apical margin); surface strongly polished with scattered fine puncturation; basal pubescence scattered, yellowish, very fine, altogether 20–30 fine black bristles occur on pronotum. Elytra more coarsely punctate than pronotum, intervals subconvex, with fine microsculpture, therefore little lustrous, scarcely wider than punctures; marginal bordering of elytra very fine, hard to see; sutural angles slightly obtuse.

♂ (Fig. 2). Antenna somewhat longer, joints rather more slender, eyes more prominent. Elytra less dilated posteriorly. Pygidium subtrapeziform, apex broadly and shallowly incised. Tegmen slender (Fig. 30). Phallus in side view (Fig. 47) very slender; internal sac without specific structure. Length = 1.43–1.53 mm; Width = 0.58–0.63 mm.

♀. Antenna somewhat shorter, joints scarcely transverse; eyes less prominent. Elytra more dilated posteriorly. Pygidium strongly convergent, apex shortly and shallowly incised. No specific characters in membranous copulatory organs. Length = 1.61–2.00 mm; Width = 0.65–0.87 mm.

Distribution: NW India

Types (26 ex). Holotype, ♂ (NHMB) and 20 paratypes (14 NHMB, 6 KMB): "Kulu, 1250 m, 10.5.1977; Indien, Him. Prad., Wittmer, Brancucci". – 3 paratypes (NMHB): idem, but "Chopal-Khangna Nallah, 2300 m, 7.5.77". – 2 paratypes (NHMB): "Simla-Naldera, 2250 m, 3.5.1977".

3. *Haplothrix soluta* sp. n.
(Figs 3, 31, 48)

Easily distinguishable in distinct submarginal pronotal lines and bicolorous elytra.

Bicolorous species: upper surface lustrous, ground coloration black, elytra posteriorly lightened; legs testaceous (femora usually darker), antennal scape and distal portion of antenna darker, antenna sometimes strongly darkened and only joints 2–3(–4) testaceous (in such a case also femora strongly darkened); mouthparts infuscate to piceous. Integument finely but densely punctate, pubescence dual and (on pronotum) bicolorous; marginal fringe lacking at all. Head with dense, rather granulate sculpture and fine longitudinal wrinkles, therefore little lustrous; antennal joints subserrate, 6 and 8 distinctly smaller; eyes not strongly prominent. Pronotum subquadrate in outline, sides subarcuate, marginal denticles strongly reduced, submarginal lines fine and not prominent, terminating close before apical margin of pronotum; upper surface glabrous, finely and moderately densely punctate, punctures somewhat condensed sidewards, intervals about twice broader than punctures; light pubescence very fine, arranged towards a point just behind middle, altogether 15–20 black bristles occur on pronotum. Elytra with punctures nearly as wide as intervals which are convex with microsculpture, therefore semi-mat; pubescence light, short, recumbent and semi-erect; marginal bordering of elytra very fine and little conspicuous; sutural angles almost obtuse.

♂ (Fig. 3). Extremities longer and stouter. Elytra nearly parallelsided. Pygidium strongly transverse, rather semicircular, apex shallowly emarginate. Hind margin of sternum VII subarcuate. Tegmen (Fig. 31) relatively slender, strongly constricted near middle. Phallus in side view (Fig. 48) dilated towards apex, tip incurved; internal sac without distinct structure. Length = 1.96 mm; Width = 0.78 mm.

♀. Extremities shorter and more slender. Elytra widened posteriorly. Pygidium strongly converging, apex moderately incised. Internal copulatory organs membranous. Length = 2.08–2.39 mm; Width = 0.78–0.96 mm.

Distribution: Iran

Types. Holotype, ♂ (NMP) and 1 paratype (KMB): "S Iran, 27 km E Yasuj, 2650 m, 16.6.1973; loc. no. 244, Exp. Nat. Mus. Praha". – 3 paratypes (NMP): "S Iran, Síakht Dena, 2500–3000 m, 13–14.6.1973; loc. no. 241, Exp. Nat. Mus. Praha".

4. *Haplothrix ruficollis* (Reitter, 1889) comb. n.
(Figs 4, 32, 49)

Dasytiscus ruficollis Reitter, 1889: 25; Schilsky, 1896: I, 59
var. *femoralis* Schilsky, 1896: 59
var. *nigricollis* Schilsky, 1896: I, 59
var. *bicoloriceps* Pic, 1926: 1

Recognizable in having erect black bristles and mostly variegated upper body surface.

The species was described according to specimens with orange pronotum, but the species is in fact very immense in variability; the lightest specimens have always still lighter pronotum and extremities (head is the darkest bodypart); intercalary formae are rufotestaceous (but neither head nor elytra distinctly darker), with completely pale extremities; the darkest specimens are rufopiceous to piceous, extremities pale, but femora and antenna darker. Integument lustrous, puncturation rather dense; pubescence dual and (pronotum) bicolorous. Head densely and finely punctate to rugose; eyes slightly prominent, antennal joints submoniliate, 6 and 8 somewhat smaller. Pronotum slightly transverse, sides arcuate, marginal denticles strongly reduced, upper surface glabrous, without submarginal lines, puncturation very fine, intervals about twice wider than punctures; light, very fine, subdecumbent pubescence arranged towards a point just behind centre; altogether 25–30 black bristles present on pronotum. Elytra with moderately dense puncturation, punctures as broad as subconvex, finely sculptured intervals, elytra therefore little lustrous; marginal bordering of elytra extremely fine, inconspicuous, sutural angles almost obtuse; pubescence fine, very short, dual (subdecumbent and semi-erect hairs).

♂ (Fig. 4). More slender; extremities somewhat stouter. Pygidium nearly semicircular. Tegmen (Fig. 32) nearly parallelsided. Phallus in side view (Fig. 49) arched, slightly widened posteriorly; internal sac without distinct structure. Length = 1.56–1.87 mm; Width = 0.60–0.66 mm.

♀. More dilated posteriorly; extremities more slender. Pygidium nearly trapeziform. Internal copulatory organs membranous. Length = 1.82–2.09 mm; Width = 0.69–0.83 mm.

Distribution: USSR (Armenia, Georgia), Turkey (Armenia).

Types (TMB). Lectotype, ♂, 4 paralectotypes: "Caucasus, Araxesthal [Armenia, Nakhichevanskaya ASSR, Araks valley; Reitter (1889: 25) gives in addition: "Araxesthal bei Ordubad, von Fräulein Antonie Kelbitschek gesammelt"], Leder Reitter" (printed, with black margin). Lectotype bears label "D. ruficollis m. 1888" (Reitter's MS).

Other material. USSR, Armenia, Araks valley, Reitter & Leder leg. (same labels as in types); (numerous specimens in KMB, MCM, NHMB, NMP, TMB, ZMB). – Georgia, Tbilisi ["Tiflis"], E. König leg. (1 NHMB). – "Caucasus, Thana-Thal, E. König" (1 NHMB).

Turkey: Armenia, Mescit dagl. ["Meskisch Geb."], N of Erzurum, Reitter & Leder leg. (2 TMB, 1 ZMB).

5. *Haplothrix effusa* sp. n.
(Figs 5, 23, 33, 50)

Piceous, upper surface with intermixed semi-erect hairs; pronotum without submarginal lines and with erect dark bristles.

Coloration fuscous to piceous, upper surface with feeble aeneous lustre; tibiae and tarsi rufotestaceous, femora infuscate, scape and mouthparts piceous. Integument finely, moderately densely punctate; pubescence dual and (on pronotum) bicolorous. Head with dense, rather elongate punctures, nearly wrinkled; eyes very little prominent; antennal joints submoniliate, 6 and 8 smaller than neighbouring, 5–10 weakly transverse. Pronotum nearly quadrate, without submarginal lines, sides arcuate, altogether 30–40 black bristles on pronotum, basal pubescence extremely fine (much finer

than on elytra), arranged towards longitudinal median line and towards a point near base; puncturation of upper surface fine, regular, intervals glabrous, wider than punctures; marginal denticles irregular, mostly indistinct. Elytra with dense punctures which are as wide as intervals, these subconvex with microsculpture, not very lustrous; sutural angles distinct, pubescence whitish, short and fine, dual - subrecumbent and semi-erect.

♂ (Fig. 5). Elytra parallelsided, antennal joints more robust. Pygidium nearly semicircular. Tegmen (Fig. 33) nearly parallelsided. Phallus in side view (Fig. 50) arched and widened posteriorly; internal sac with paired spinules. Length = 2.04–2.26 mm; Width = 0.78–0.96 mm.

♀. Elytra dilated posteriorly, antennal joints more slender. Pygidium nearly semicircular. Internal copulatory organs with sclerotized distal portion of vagina (Fig. 23). Length = 2.13–2.26 mm; Width = 0.98–1.00 mm.

Distribution: Iran

Types. Holotype, ♂ (NHMB) and 4 paratypes (3 NHMB, 1 KMB): "Rood-bar-Ghazvin, 900/1500 m, 13.5.; Iran 1970, Wittmer, v. Bothmer".

6. *Haplothrix pospisili* sp. n.

(Figs 6, 34, 51)

The species strongly resembles *Dasytiscus affinis* Morawitz, so that the both species are being mostly confused, but the arrangement of hairs into a prebasal line on pronotum in *H. pospisili* habitually indicates its appurtenance to *Haplothrix*.

Coloration black, upper surface with greenish tinge; tibiae and tarsi (these infuscate) rufotestaceous to orange yellowish, femora strongly infuscate to piceous, apex of femora lighter (seldom tibiae completely pale); mouthparts sometimes lighter, antenna completely black, only joints 2–3(–4) dark-brown. Integument with dense punctures; pubescence dual and (on pronotum) bicolorous. Head with slightly prominent eyes, surface with dense irregular punctures and microsculpture; antennal joints subserrate, 6 and 8 smaller than neighbouring. Pronotum transverse, widest at basal third, sides strongly arcuate, surface with dense fine punctures, intervals subconvex with expressive microsculpture, surface therefore little lustrous; submarginal pronotal lines absent; perimeter of pronotum bordered, chiefly side margins, whose marginal denticles are irregular and reduced; fundamental pubescence whitish, relatively dense, arranged into a prebasal transverse line, short sparse bristles present in number 10–30, these sometimes quite inconspicuous. Elytra finely bordered, puncturation coarser than on pronotum, intervals subconvex, lustrous; pubescence whitish, more erect hairs uneasy to distinguish from decumbent ones.

♂ (Fig. 6). Parallelsided, pronotum more transverse. Pygidium nearly semicircular in outline, apex broadly truncate and shallowly emarginate. Tegmen (Fig. 34) broadest at apical third. Phallus in side view (Fig. 51) widened posteriorly. Length = 1.78–1.98 mm; Width = 0.65–0.69 mm.

♀. More dilated posteriorly, pronotum less transverse. Pygidium trapeziform. Internal copulatory organs membranous. Length = 2.00–2.30 mm; Width = 0.70–0.87 mm.

Distribution: Rhodes, Sporades

Types (KMB). Holotype, ♂ and 60 paratypes: "Rhodos insula, Rhodos, 7–13.6.1981, Kr. Pospíšil leg.". – 1 paratype: "Rhodos, Klost. Artemidi, v. Oertzen". – 1 paratype: "Rhodes, Turquie d'Asie, L. Bleuse". – 1 paratype: "Nrdl. Sporaden, Skopelos, Emge".

Derivatio nominis: dedicated to the memory of Mr. Kristian Pospíšil, the collector of this species.

7. *Haplothrix leucosa* sp. n.
(Figs 7, 35, 52)

Species expressive in completely light-flavous coloration, pronotum with dark bristles.

Coloration very light, orange flavous, pronotum apically slightly infuscate; eyes black, basal half of head infuscate, mouthparts piceous, antennal joints 5–11 gradually infuscate. Integument with very fine and dense punctures; pubescence dual and bicolorous.

♂ (Fig. 7). Head with dense puncturation, intervals subconvex and lustrous, antennal joints submoniliate. Pronotum without submarginal lines, with straight base and apex, sides subogival; puncturation very fine and almost dense, punctures nearly as wide as intervals which are almost glabrous; fundamental pubescence fine, quite decumbent, yellowish, arranged towards a point near base; altogether 10–12 black bristles present on upper surface; marginal denticles sparse, reduced, but regular. Elytra subtruncate at apex, sutural angles obtuse, puncturation very dense, coarser than on pronotum, subconvex intervals with microsculpture, as wide as punctures, pubescence very fine, short, apparently single (quite decumbent), several more erect hairs hard to distinguish.

Pygidium nearly semicircular. Tegmen (Fig. 35) parallelsided, also phallobase very slender and parallelsided. Phallus in side view (Fig. 52) strongly bent, distally parallelsided (but most likely secondarily deformed); internal sac with very fine and dense spines. Length = 1.65 mm; Width = 0.65 mm.

Distribution: Afghanistan

Types. Holotype, ♂ (KMB): "Afghanistan, Umgeb. Kabul, leg. J. Klapperich".

8. *Haplothrix pusilla* (Schilsky, 1896) comb. n.
(Figs 10, 16, 19, 20, 28, 36, 37, 53)

Dasytiscus (Dasytidius) pusillus SCHILSKY, 1896: N, 85

Differs from the very similar *H. captiosa* sp. n. in normally rounded sutural angles in male.

Unicolorous, piceous, base of antenna, tibiae and tarsi more or less light. Integument with fine and dense, regular puncturation; pubescence very fine, short and decumbent, not very dense, but more erect hairs may be distinguished.

♂ (Fig. 10). Head with large, prominent eyes, puncturation fine but irregular, with microsculpture; antennal joints 6 and 8 distinctly smaller than neighbouring, 8–9 somewhat transverse. Pronotum strongly transverse, base arcuate, sides subarcuate, apex nearly straight, disc with fine sparse and regular puncturation, marginal denticles sparse and indicated only, side margins bordered, chiefly at basal corners of pronotum; pubescence arranged into an arcuate prebasal line. Elytra parallelsided, sutural angles almost rounded, side margins narrowly but not expressively bordered, marginal fringe very fine and sparse, inconspicuous; puncturation coarser than on pronotum, punctures partly confluent, intervals wider than punctures; pubescence very fine but more erect hairs may be distinguished.

Pygidium (Fig. 16) transverse, subtrapeziform. Sternum VII (Fig. 20) with arcuate hind margin, VIII as figured (Fig. 19). Spicular fork (Fig. 28) very fine, as in other *Haplothrix*-species. Tegmen (Figs 36, 37) with phallobase being scarcely narrower than body of tegmen. Phallus in side view (Fig. 53) very slender, slightly incurved posteriroly. Length = 1.56 mm; Width = 0.53 mm.

Distribution: Turkey

Types (NMW). Holotype, ♂: "Luschan"; "Gjölbanhi 1882" (printed); "pusillus det. Schilsky" (not Schilsky's MS!); "Dasytiscus pusillus n. sp. Schils." (Schilsky's MS). Recent wording of the locality remains unknown to me.

9. *Haplothrix captiosa* sp. n.
(Figs 11, 24, 38, 54)

Easily distinguishable from all *Haplothrix*-species in acuminate sutural angles in males.

Black to fuscous, legs testaceous, femora more or less infuscate, antenna fuscous to piceous, joints 2–4 (–6) sometimes testaceous (then also femora not infuscate). Integument densely and regularly punctate; pubescence dense, rather semi-villose, unicolorous (whitish), apparently single (but several scattered, more erect hairs present on elytra); marginal fringe on both elytra and pronotum fine but visible. Head with moderately prominent eyes, puncturation irregular, fine and dense; antennal joints 6 and 8 not very smaller than neighbouring, 5–10 never strongly transverse. Pronotum transverse, sides strongly arcuate, submarginal lines absent, marginal denticles regular but very fine; upper surface densely and finely punctate, intervals mostly glabrous, nearly as wide as punctures; dense whitish reclinate pupescence arranged towards a prebasal transverse line. Elytra bordered at side margins, apex more or less truncate; puncturation dense, coarser than on pronotum, intervals subconvex, nearly glabrous, somewhat wider than punctures; lateral fringe weak but visible; pubescence of upper surface as dense as on pronotum, apparently merely decumbent, but several more erect hairs may be distinguished.

♂ (Fig. 11). Antenna longer and stouter, joints 6 and 8 more distinctly smaller. Elytra parallelsided, apex truncate, sutural angles acuminate, at least pronounced. Pygidium strongly transverse, rather semicircular. Tegmen (Fig. 38) rather parallelsided, phallobase moderately long. Phallus in side view (Fig. 54) slender, gradually tapering apex; internal sac without distinct spinules. Length = 1.56–2.00 mm; Width = 0.56–0.78 mm.

♀. Antenna shorter and more slender, joints 6 and 8 scarcely smaller than neighbouring. Elytra slightly dilated posteriorly, apex truncate, rather rounded, sutural angles obtuse. Female internal copulatory organs figured (Fig. 24), a similar structure may be found in most *Haplothrix*-species. Length = 1.91–2.30 mm; Width = 0.74–0.87 mm.

Distribution: Turkey

Types. Holotype, ♂ (NMP) and 10 paratypes (5 NMP, 5 KMB): "Beynam, Anat., 28.6.47, Exp. N. Mus. ČSR". – 7 paratypes (NMP): "Ankara-Baraj, Anat., 3–4.7.47., Exp. N. Mus. ČSR".

10. *Haplothrix subtilis* (Reitter, 1885) comb. n.
(Figs 12, 17, 39, 40, 55, 56)

Dasytiscus subtilis Reitter, 1885: 244, 245; Liberti, 1986: 191, Figs 20, 21.
Dasytiscus (Dasytidius) subtilis: Schilsky, 1896: N, 84
Dasytiscus puberulus Bourgeois, 1885: 262
Dasytiscus (Dasytidius) praecox var. *puberulus:* Schilsky, 1896: 82

Large cylindrical species with expressive structure of pronotum, coloration testaceous to piceous.

Species variable in both coloration and size: the lightest specimens are completely pale testaceous, pronotum mostly somewhat darker (more fuscous), head even darker completely, or at least at basal portion; the darkest specimens completely fuscous (extremities testaceous), head and pronotum piceous. Integument regularly and rather densely punctate, pubescence unicolorous and dual; marginal fringe indistinct, nearly absent. Head with scarcely prominent eyes, surface finely rugose and punctate, antenna with transverse penultimate joints, 6 and 8 distinctly smaller than neighbouring. Pronotum transverse, slightly converging anteriorly, sides scarcely arcuate, marginal denticles small, reduced, almost regular; surface with distinct regular punctures, intervals with distinctive microsculpture; pubescence decumbent, more erect at sides, arranged towards a transverse prebasal line. Elytra with rounded sutural angles, side margins very finely bordered, puncturation not very dense, punctures

fine and regular, intervals about twice wider than punctures; pubescence short, whitish, fine and sparse, dual: two kinds of more and less erect hairs may be distinguished.

♂ (Fig. 12). Antenna more robust. Elytra parallelsided. Pygidium nearly trapeziform (Fig. 17). Tegmen (Figs 39, 40) strongly constricted in middle. Phallus in side view (Figs 55, 56) distinctly bent in middle, body tapering apex; internal sac without distinctive structure. Length = 2.04–2.39 mm; Width = 0.78–0.91 mm.

♀. Antenna more slender. Elytra more widened posteriorly. Pygidium strongly trapeziform, apex shallowly incised. Internal copulatory organs membranous. Length = 2.04–2.42 mm; Width = 0.83–1.00 mm.

Distribution: Crete, Cyprus, Lesvos, Rhodos, Turkey.

Types of *Dasytiscus subtilis* (TMB). Lectotype, ♂: "Ins. Creta, Reitter" (printed, black margin); "Dasytiscus subtilis m. n. sp. 1885" (Reitter's MS). – 4 paralectotypes bear the same locality data.

Types of *Dasytiscus puberulus* (MHNP). Holotype, ♂: "Syrie"; "type"; "Dasytiscus puberulus Bourg.".

Other material. Crete: "Creta" v. Oertzen leg., (1 KMB, 4 ZMB, 4 IPE, 1 BMNH). – Chandrás, Ep. Sitía, 17.7.1925, A. Schultz leg. (1 ZMB). – Agios Nicholaus, swept in vegetation, 23.6.1979, Cederholm leg. (1 MLU).

Cyprus: Platus Krios R., 4000 ft., 4.7.1967, G. A. Mavromoustakis leg. (1 BMNH).

Lesvos: Mytilini, 2.8.1959, Gozmányi leg. (5 KMB, 28 TMB).

Rhodes: Rhodos, 24.6.–4.7.1958, T. Palm. leg. (12 MLU).

Turkey: Prov. Muglia, Torba, 6 km N Bodrum, 17.–31.6.1985, Probst leg. (3 KMB). – Burnova, Izmir, 22.7.1938 (5 KMB, 14 ZMB). – idem, 15.7.1931, B. P. Uvarov leg. (6 BMNH). – Beynam, 28.6.1947, Exp. N. Mus. ČSR (3 NMP). – Smyrna (KMB, TMB, ZMB). – Angora, 1930, Staněk leg. (NMP). – Adana, C. Demaison leg. (2 RC). – Besika Bay (3 BMNH).

Remarks. The name *subtilis* has priority as it is already mentioned by Bourgeois (1885) when he described *D. puberulus*. The locality data "Syrie" in the type specimen of *D. puberulus* and also the data "Mesopotamia" and "Jerusalem, Reitter" need verification, they are not considered in the distribution of this species.

11. *Haplothrix mera* sp. n.

(Figs 13, 41, 57)

Distinguished from allied species by the semi-erect hairs on pronotum, larger body and rounded sutural angles.

Coloration black, legs rufotestaceous, partly infuscate, femora mostly strongly infuscate but apices of femora always light, antenna fuscous to piceous but segments 2–4 often rufotestaceous, 5–11 gradually darkened; mouthparts always piceous. Integument very densely punctate, pubescence unicolorous, whitish, apparently single but somewhat more erect hairs present on elytra and pronotum; marginal fringe absent.

♂ (Fig. 13). Head very densely punctate, punctures rimmed and contiguous; antenna subserrate, penultimate segments transverse, 6 and 8 somewhat smaller. Pronotum transverse, widest across basal third, base subarcuate, sides strongly arcuate and slightly converging forwards, apex straight; submarginal lines totally absent; marginal denticles small, reduced, irregular, pubescence whitish, decumbent, arranged towards a transverse prebasal line, puncturation distinct, moderately dense, regular, intervals glabrous, somewhat wider than punctures. Elytra strongly and densely punctate, much more coarsely than pronotum, intervals with microsculpture, scarcely as wide as punctures; pubescence dual: scattered more erect hairs admixed into reclinate ones; apex of elytra subtruncate or rounded, sutural angles slightly rounded respectively; marginal fringe absent.

Pygidium semicircular to trapeziform, apex straight. Tegmen (Fig. 41) nearly parallelsided. Phallus in side view (Fig. 57) very robust: internal sac with dense slender and very small spinules. Length = 2.26–2.66 mm; Width = 0.87–1.09 mm. Female unknown(!).

Distribution: Turkey

Types. Holotype, ♂ (NMP) and 60 ♂ paratypes (NMP, 15 KMB): "Ankara-Baraj, Anat., 3–4.7.1947, Exp. N. Mus-ČSR." – 1 paratype (NMP): "Mogan Gölü, Anat., 5.7.1947, Exp. N. Mus. ČSR". – 4 paratypes (NMP): "Turkey, C. Anat., Kayseri, 15.6.1970, Loc. no. 7., Exp. Nat. Mus. Praha". – 1 paratype (NMP): "Angora, 1930, Turcia, Staněk leg.".

12. *Haplothrix armeniaca* (Kiesenwetter, 1878) comb. n.
(Figs 14, 42, 58)

Dasytiscus Armeniacus Kiesenwetter, 1878: 215
Dasytiscus armeniacus: Reitter, 1885: 242
Dasytiscus (Haplothrix) armeniacus: Pic, 1937: 51

Small slender species, expressive in having long extremities, chiefly antenna in male; pubescence single, very fine and decumbent.

Fuscous species, head and pronotum dark-brown to piceous; legs testaceous (femora mostly darkened), antenna completely fuscous, or joints 2–11 lightened. Integument very densely punctate, pubescence unicolorous (whitish), apparently single but somewhat more erect hairs intermixed in elytral pubescence. Head with no prominent eyes, surface very densely punctate to longitudinally wrinkled; antenna extremely long, chiefly in male, joints never transverse. Pronotum weakly transverse, base subarcuate, sides nearly subogival to subarcuate, apex straight; marginal denticles inconspicuous; surface with sparse to dense punctures; interspaces mostly glabrous; submarginal lines lacking at all. Elytra with dense punctures passing into transverse wrinkles, sutural angles rounded, pubescence whitish, very fine, short and recumbent, several more erect hairs intermixed; marginal fringe not developed.

♂ (Fig. 14). Antenna long (length of elytra/length of antenna = 1.5); joints rather elongate, conical. Pronotum subogival at sides. Pygidium transverse, oblong. Tegmen constricted (Fig. 42). Phallus in side view (Fig. 58) robust; internal sac with several larger formations. Length = 1.69–1.72 mm; Width = 0.61–0.62 mm.

♀. Antenna much shorter (length of elytra/length of antenna = 2.1); joints rather submoniliate than conical. Pronotum subarcuate at sides. Terminalia unknown due to the being the female specimen originally defective. Length = 1.87 mm; Width = 0.74 mm.

Distribution: USSR-Armenia

Types. Lost, Kiesenwetter (1878) gives "Armenien, Juli. S. [= Schneider leg.]".
Other material (KMB). 2 ♂ and ♀: "Caucasus, Armen. Geb., Leder Reitter".

13. *Haplothrix aequalis* (Reitter, 1885) comb. n.
(Figs 8, 9, 18, 21, 22, 25–27, 43, 44, 59)

Dasytiscus aequalis Reitter, 1885: 244, 246
Dasytiscus (Haplothrix) aequalis: Schilsky, 1896: N, 87; Reitter, 1902: 210

Small unicolorous species with fine pubescence, distinguishable in the shape of pronotum and terminalia.

Completely dark-brown species, only tibiae, tarsi, and basal portion of antenna somewhat lightened (but in a fresh specimen from Thivai upper surface black, elytra and femora piceous, joints 2–4 and tibia and tasri rufopiceous). Integument with fine and dense puncturation; pubescence unicolorous, whitish, very fine and short, nearly single. Head with no prominent eyes, surface with sparse punctu-

res and shallow transverse wrinkles, antennal joints submoniliate. Pronotum transverse, nearly quadrate in outline, base and apex subarcuate, sides subarcuate, marginal denticles strongly reduced; submarginal lines absent at all; surface with fine regular punctures, intervals glabrous, wider than punctures; pubescence very fine, decumbent, arranged towards a U-shaped line or towards a prebasal transverse line. Elytra with fine puncturation, punctures moderately dense and rather shallow, intervals with fine miscrosculpture; pubescence whitish, decumbent, very fine, several more erect hairs can scarcely be distinguished; marginal bordering evident at anterior elytral portion; apex broadly rounded, sutural angles rounded, too.

♂ (Fig. 9). Antenna more robust, sides of pronotum less arcuate. Pygidium (Fig. 18) nearly semicircular in outline. Sterna VII, VIII, and spicular fork figured (Figs 22, 25, 27). Tegmen (Figs. 43, 44) relatively slender. Phallus in side view (Fig. 59) robust; internal sac without distinctive spinules. Length = 1.78–1.90 mm; Width = 0.69–0.74 mm;

♀. Antenna less robust, sides of pronotum more arcuate Fig. 8. Pygidium (Fig. 21) briefly incised at apex. Sternum VII figured (Fig. 26). Copulatory organs membranous. Length = 2.00–2.09 mm; Width = 0.83–0.87 mm.

Distribution: Greece

Types (TMB). Holotype, ♂: "aequalis m. Typus. Graecia" (Reitter's MS).

Other material. "Graecia, Kraatz" (1 ZMB). – "D. Ganglb." (1 ZMB). – "Athen, Pic" (1 ZMB). – "Coll, Kraatz, Graecia" (3 IPE). – "Graecia, Rehberg" (1 KMB). – Skaramanga, pr. Athens 27–30.5.1939, Lindberg leg. (1 MUH). – Beotie, Thivai, 14.4.1959, H. Coiffait leg. (1 RC).

14. *Haplothrix chalif* sp. n.
(Figs 15, 45, 60)

Species expressive in bicolorous elytra and very slender body.

Fuscous, head and pronotum even darker and/or elytral apex testaceous, or upper surface completely black and elytral apex fuscous; legs testaceous, femora more or less darkened, antenna and mouthparts fuscous to piceous. Integument densely and finely punctate, pubescence whitish and single. Head with prominent eyes, surface with fine and irregular microsculpture, antennal joints subserrate, 6 and 8 not distinctly smaller than neighbouring. Pronotum feebly transverse, base and apex nearly straight, sides arcuate, marginal denticles nearly absent; submarginal lines absent, surface with very dense, fine and irregular puncturation, intervals glabrous, wider or narrower than punctures; pubescence very fine, decumbent, arranged towards a prebasal transverse line. Elytra with dense shallow punctures forming transverse wrinkles, intervals uneven, with microsculpture; apex somewhat attenuate; pubescence very fine, entirely decumbent, no more erect hairs.

♂ (Fig. 15). Slender, antenna robust and relatively long (length of elytra/length of antenna = 2.0). Pygidium transverse, subtrapeziform. Tegmen (Fig. 45) slender, angulate at sides posteriorly, phallobase poorly defined. Phallus in side view (Fig. 60) widened posteriorly and sinuate on dorsal side, apex hooked. Length = 2.00 mm; Width = 0.65 mm.

♀. Much more robust, widened posteriorly and more strongly convex. Antenna more slender and shorter (length of elytra/length of antenna = 2.6). Pygidium nearly semicircular in outline. Internal copulatory organs membranous. Length = 2.35 mm; Width = 0.87–0.90 mm.

Distribution: Iran, Iraq

Types. Holotype, ♂ and 1 paratype (NMHB): "Persien Bagdad, coll. Rich. Hicker". – 1 paratype (KMB): "Irak Bagdad". – 1 paratype (NMP): "SW Iran, Hoseiniyeh, 28 km NNW Andimeshk, 12–13.4.1977, 360 m; Loc. no. 286, Exp. Nat. Mus. Praha".

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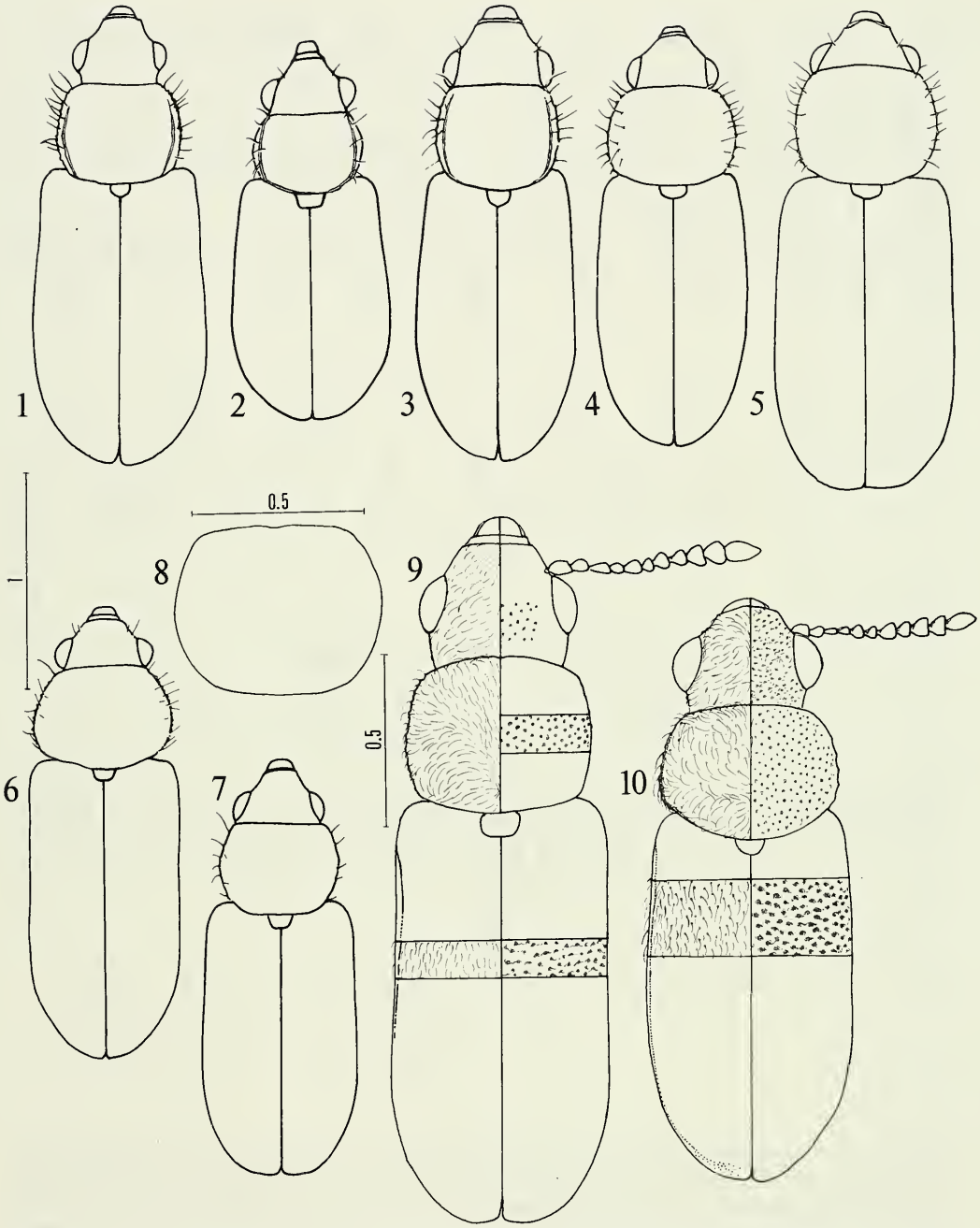
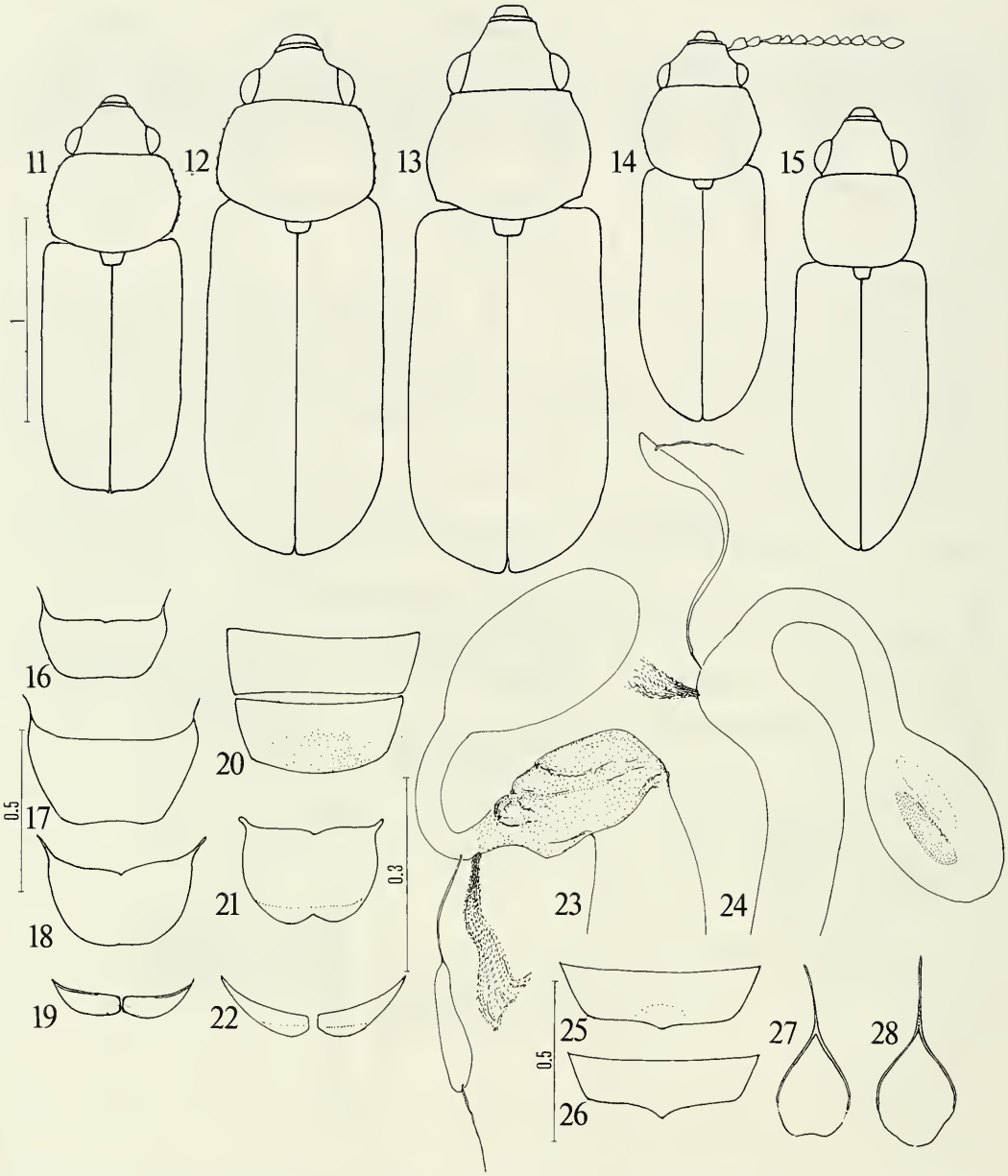
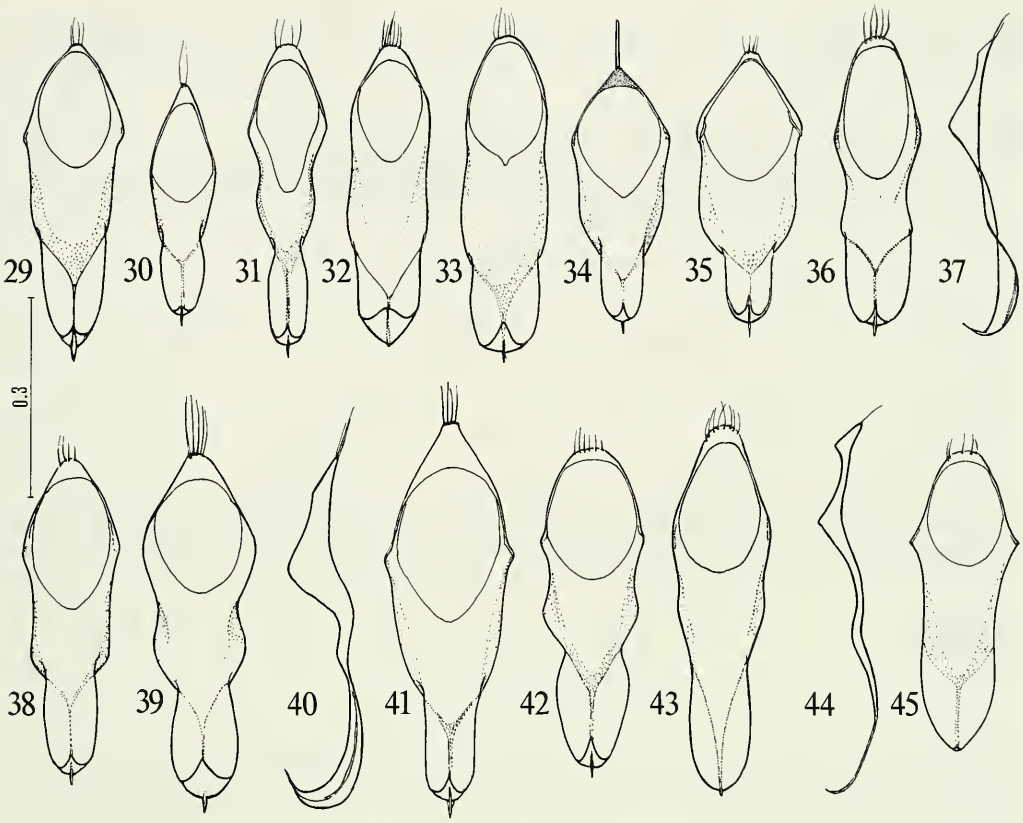


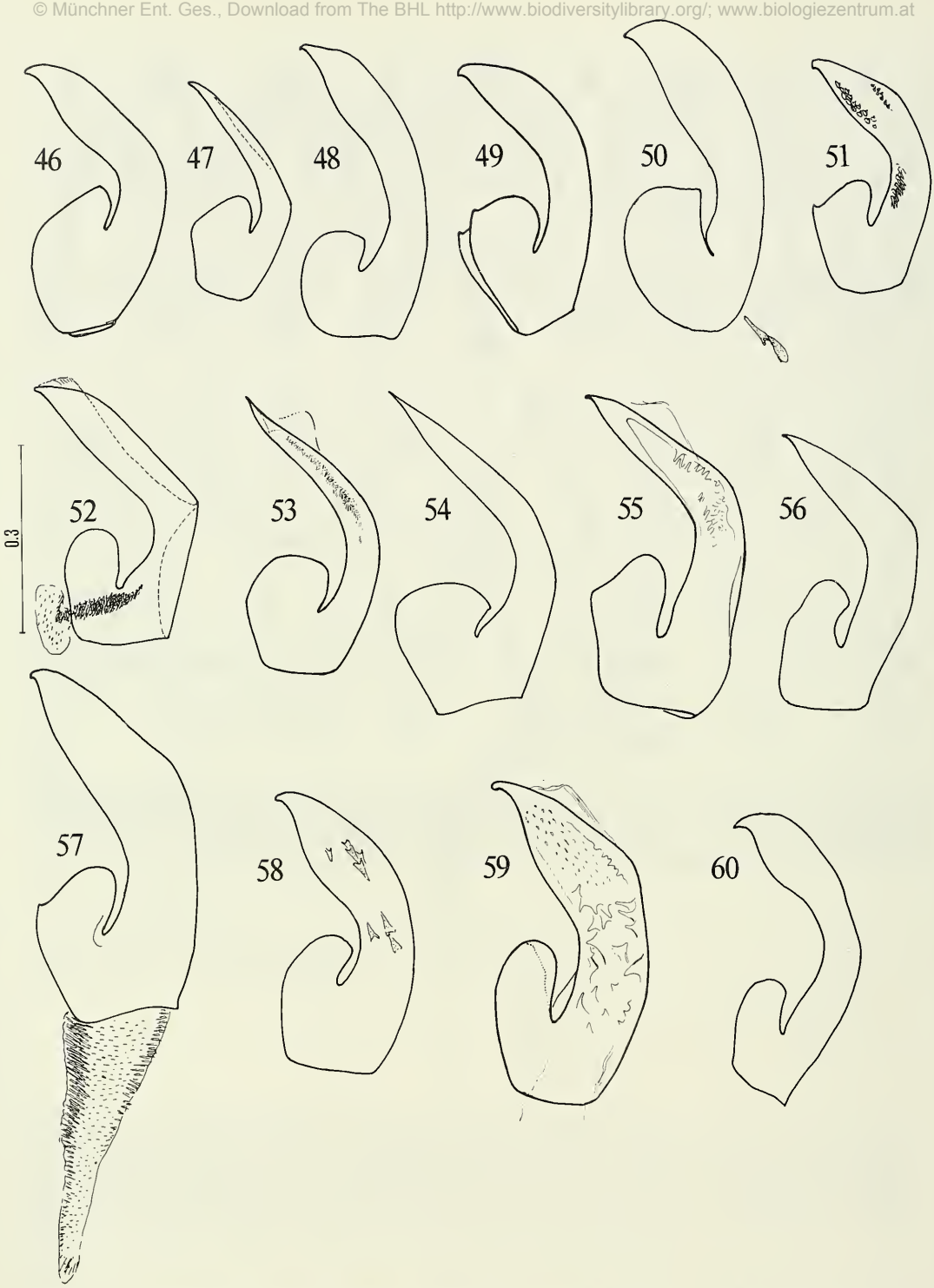
Figs 1–10. 1–7, 9–10: body outline, ♂; 8: outline of pronotum, ♀: 1 *Haplothrix sanguinicollis* sp. n., 2 *H. vana* sp. n., 3 *H. soluta* sp. n., 4 *H. ruficollis* (REITTER), 5 *H. effusa* sp. n., 6 *H. pospisili* sp. n., 7 *H. leucosa* sp. n., 8, 9 *H. aequalis* (REITT.), 10 *H. pusilla* (SCHILSKY). Scale in mm.



Figs 11–28. 11–15: body outline, ♂; 16–18: male pygidium; 19, 22: male sternum VIII; 21: female pygidium; 20–25: male sternum VII, 26: female sternum VII, 23–24: female internal copulatory organs, 27, 28: spicular fork: 11, 12 *Haplothrix captiosa* sp. n., 12, 17 *H. subtilis* (Reitt.), 13 *H. mera* sp. n., 14 *H. armeniaca* (Kiesw.), 15 *H. chalif* sp. n., 16, 19, 20, 28 *H. pusilla* (Schilsky), 18, 21, 22, 25, 26, 27 *H. aequalis* (Reitt.), 23 *H. effusa* sp. n. Scale in mm.



Figs 29–45. 29–36, 38, 39, 41–43, 45: tegmen, dorsal view; 37, 40, 44: same, side view: 29 *Haplothrix sanguinicollis* sp. n., 30 *H. vana* sp. n., 31 *H. soluta* sp. n., 32 *H. ruficollis* (Reitt.), 33 *H. effusa* sp. n., 34 *H. pospisili* sp. n., 35 *H. leucosa* sp. n., 36, 37 *H. pusilla* (Schils.), 38 *H. captiosa* sp. n., 39, 40 *H. subtilis* (Reitt.), 41 *H. mera* sp. n., 42 *H. armeniaca* sp. n., 43, 44 *H. aequalis* (Reitt.), 45 *H. chalif* sp. n. Scale in mm.



Figs 46–60: Phallus, side view: 46 *Haplothrix sanguinicollis* sp. n., 47 *H. vana* sp. n., 48 *H. soluta* sp. n., 49 *H. ruficollis* (Reitt.), 50 *H. effusa* sp. n., 51 *H. pospisili* sp. n., 52 *H. leucosa* sp. n., 53 *H. pusilla* (Schilsky), 54 *H. captiosa* sp. n., 55, 56 *H. subtilis* (Reitt.), 57 *H. mera* sp. n., 58 *H. armeniaca* (Kiesw.), 59 *H. aequalis* (Reitt.), 60 *H. chalif* sp. n. Scale in mm.