



Contribution to the knowledge of the family *Cantharidae* (Coleoptera) from the western Palaearctic

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Abstract. New species of the family Cantharidae are described and illustrated: *Islamocantharis (Unicantharis) johanidesi* sp. n. (Turkey), *Rhagonycha antennata* sp. n. (Turkey), *R. paflagonica* sp. n. (Turkey), *Malthinus stanislavi* sp. n. (Turkey), *Malthodes muraniensis* sp. n. (Slovakia), *M. kirisensis* sp. n. (Turkey), *M. stanislavi* sp. n. (Greece), *M. olympicus* sp. n. (Turkey) and *M. weigeli* sp. n. (Turkey). Additional data on the distribution of further 6, already known species are given.

■ Taxonomy, Coleoptera, Cantharidae, *Islamocantharis*, *Rhagonycha*, *Malthinus*, *Malthodes*, new species, distribution, Palaearctic region

INTRODUCTION

Nine new species of the family Cantharidae are described and illustrated in the present paper. Eight of them come from Turkey and Greece, demonstrating the richness of species of the family Cantharidae in this area, while the last one was collected in Slovakia, showing that new species can be still discovered also in Central Europe.

MATERIAL AND METHODS

Material studied is deposited in the following collections:

MMOC – private collection of Marion Mantič (Ostrava)

NHMB – Naturhistorisches Museum, Basel

NMEG – Naturkundesmuseum, Erfurt

NMPC – National Museum, Prague

The shades of colours used in the descriptions are classified according to Paclt (1958), the structures of integument are named according to Harris (1979). They were observed under the x90 magnification. The terminology of the portions of aedeagus was used according to Wittmer (1969). The locality labels of the type material are cited in the original version, only dates are written in the English style. The names of localities of the additional material examined are transliterated.

TAXONOMIC PART

Islamocantharis (Unicantharis) johanidesi sp. n.

Type material: holotype (NMPC), ♂, “E Turkey, Hakkari env., 10.–18.vi.1997, M. Johanides lgt.”.

Differential diagnosis: *Islamocantharis (Uicantharis) johanidesi* sp. n. differs from the only hitherto known species of the subgenus *Uicantharis* ŠVIHLA, 1999, *I. (U.) cilicia* (PIC, 1904), by the black spot on pronotum and, especially, by different form of the aedeagus. Parameres are much shorter and tapered in the new species and apex of the dorsal part of aedeagus is rounded, not turned up lateroapically (cf. Wittmer 1971).

Description: Coloration. Head black with small, terra-cotta spots: one between antennal pits, pair of them between eyes and one, somewhat larger, on vertex. Mouthparts and first antennomere honey yellow, rest of antennae black, lower side of antennomeres 2–4 terra-cotta. Prothorax honey yellow, pronotum with transverse black spot in its posterior half, this spot possessing four rounded projections directed both anteriorly and laterally. Meso- and metasternum black, ventral part of abdomen black, sternites honey yellow bordered. Anterior femora honey yellow with black basal halves and posterior sides, tibiae honey yellow, tarsi black with honey yellow upper sides. Middle femora and tarsi black, tibiae honey yellow, darkened terminally, posterior legs completely black, with paler knees only. Scutellum black, elytra honey yellow, below humera sooty and with black apical fifth.

Male. Eyes of medium size, moderately protruding, head across eyes very slightly narrower than pronotum, behind eyes roundly narrowing posteriorly. Antenna reaching four fifths of elytral length, antennomeres 4–8 with longitudinal, semilustrous impression. Surface of head very finely imbricate-punctate, finely yellow pubescent, semilustrous. Pronotum moderately wider than long, its anterior margin widely rounded, anterior corners rounded, lateral margins straightly converging posteriorly, posterior corners obtusely angled, posterior margin sinuately protruding apically. Surface of pronotum very finely and densely punctate, finely yellow pubescent, semilustrous. Outer claws of all tarsi with basal, triangular appendice, reaching two thirds of length of claw. Elytra parallel-sided, their surface very finely rugulose-lacunose and yellow pubescent, matt, elytral nervation not developed. Aedeagus as in Figs 1–2. Female unknown. Length ♂: 9.4 mm.

Distribution: Southeastern Turkey.

Etymology: Dedicated to its collector, Martin Johanides (Praha).

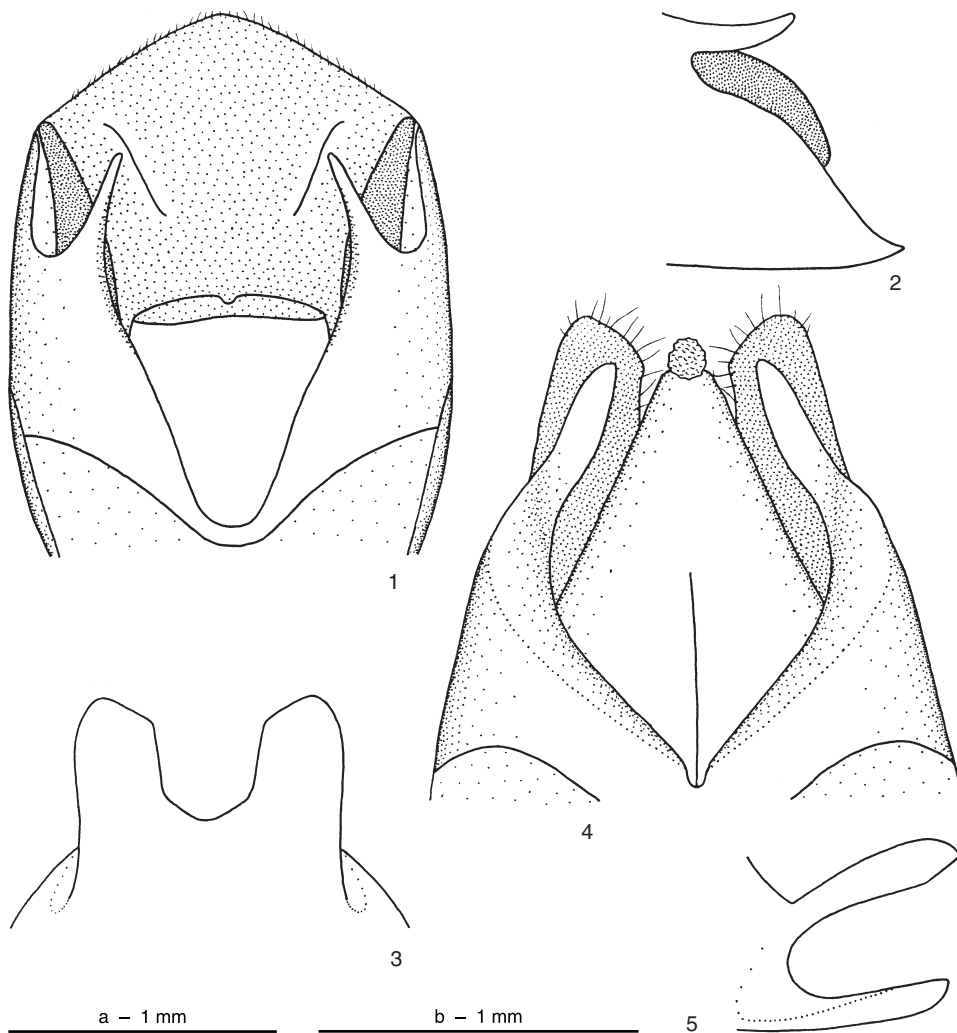
***Rhagonycha antennata* sp. n.**

Type material: holotype (NMPC), ♂, “Turkey – prov. Adiyaman, Nemrut Dagi, 900 m n. m., 6.vi.1993, V. Bíža + Z. Košťál lgt.“.

Differential diagnosis: *Rhagonycha antennata* sp. n. differs from all other species of this genus by antenna exceeding elytral apex in combination with pronotum slightly but distinctly narrowing posteriorly. According to the form of the aedeagus, it seems to be related to *R. brancuccii* ŠVIHLA, 1993, from which it differs, apart from the above mentioned characters, by divided portions of the dorsal part of aedeagus apically rounded and by unicolorous pronotum (cf. Švihla 1993b).

Description: Coloration. Head sooty, before eyes including mandibles rusty, maxillary palpi sooty, behind eyes rusty. Antenna sooty, first antennomere sienna. Prothorax honey yellow, meso- and metasternum sooty, ventral part of abdomen sooty, last abdominal segment honey yellow. Legs sooty, tibiae chestnut brown, darkened terminally. Scutellum and elytra sooty.

Male. Eyes relatively small, slightly protruding, head across eyes as wide as pronotum, behind eyes roundly narrowing posteriorly. Antenna long, antennomere 10 reaching elytral apex, antennomeres relatively stout. Surface of head very finely and densely imbricate-punctate, finely, sparsely yellow pubescent, matt. Pronotum distinctly wider than



Figs 1–5. *Islamocantharis (Unicantharis) johanidesi* sp. n.: (1) apical portion of aedeagus, ventral view; (2) ditto, lateral view. *Rhagonycha antennata* sp. n.: (3) dorsal part of aedeagus; (4) apical portion of aedeagus, ventral view; (5) ditto, lateral view. Scale a – Figs 1–2; b – Figs 3–5.

long, its anterior margin widely rounded, anterior corners rounded, lateral margins slightly but distinctly sinuately converging posteriorly, posterior corners obtusely rounded, posterior margin sinuate. Surface of pronotum imbricate-punctate, finely and sparsely yellow pubescent, matt. Elytra parallel-sided, their surface rugulose, finely and sparsely brown pubescent, matt, elytral nervation slightly indicated. Aedeagus as in Figs 3–5. Female unknown. Length δ : 5.7 mm.

Distribution: Southern part of central Turkey.

Etymology: Named according to its very long antennae.

***Rhagonycha paflagonica* sp. n.**

Type material: holotype (NMPC), δ , “TR: Prov. Kastamonu, Mt. Buyu Khacet (?=

Büyük Hacet), 1900–2200 m, 5 km N Yukarıbercin, 28.vii.2002, Šobotník lgt.“.

Differential diagnosis: *Rhagonycha paflagonica* sp. n. belongs to *R. femoralis* species group as defined by Dahlgren (1968). It is similar and related to *R. kronbladi* ŠVIHLA, 1993 and to *R. fugax fugax* MANNERHEIM, 1843. From the former it differs by shorter dorsal part of the aedeagus (cf. Figs 8–9), from the latter by smaller size, by smaller and less protruding eyes, by shorter antenna, (reaching two thirds of elytral length in *R. fugax*) and by turned and thickened apex of paramere.

Description: Coloration. Head black, mandibles honey yellow, maxillary palpi sepia. Antennae black, first two antennomeres honey yellow. Prothorax, meso- and metasternum black, ventral part of abdomen sooty to black. Femora black, anterior and middle ones with paler knees, tibiae honey yellow, posterior ones with darkened terminal half, tarsi sooty. Scutellum black, elytra honey yellow with basal half of suture narrowly chestnut brown.

Male. Eyes relatively small, moderately protruding, head across eyes very slightly narrower than pronotum, head behind eyes roundly narrowing posteriorly. Antenna slightly exceeding elytral midlength. Surface of head finely and very densely punctate, sparsely and finely yellow pubescent, matt. Pronotum very slightly wider than long, its anterior margin widely rounded, anterior corners almost rectangular, slightly rounded, lateral margins sinuately diverging posteriorly, posterior corners almost sharp, moderately protruding, posterior margin widely rounded. Surface of pronotum punctate and pubescent like that of head, matt. Elytra moderately dilated posteriorly, their surface very finely and shallowly rugulose-lacunose, very finely and sparsely yellow pubescent, semilustrous. Elytral nervation not developed. Aedeagus as in Figs 6–8. Female unknown. Length ♂: 4.9 mm.

Distribution: Northwestern Turkey.

Etymology: Paflagonia was an ancient kingdom, on the territory of which the type locality is situated.

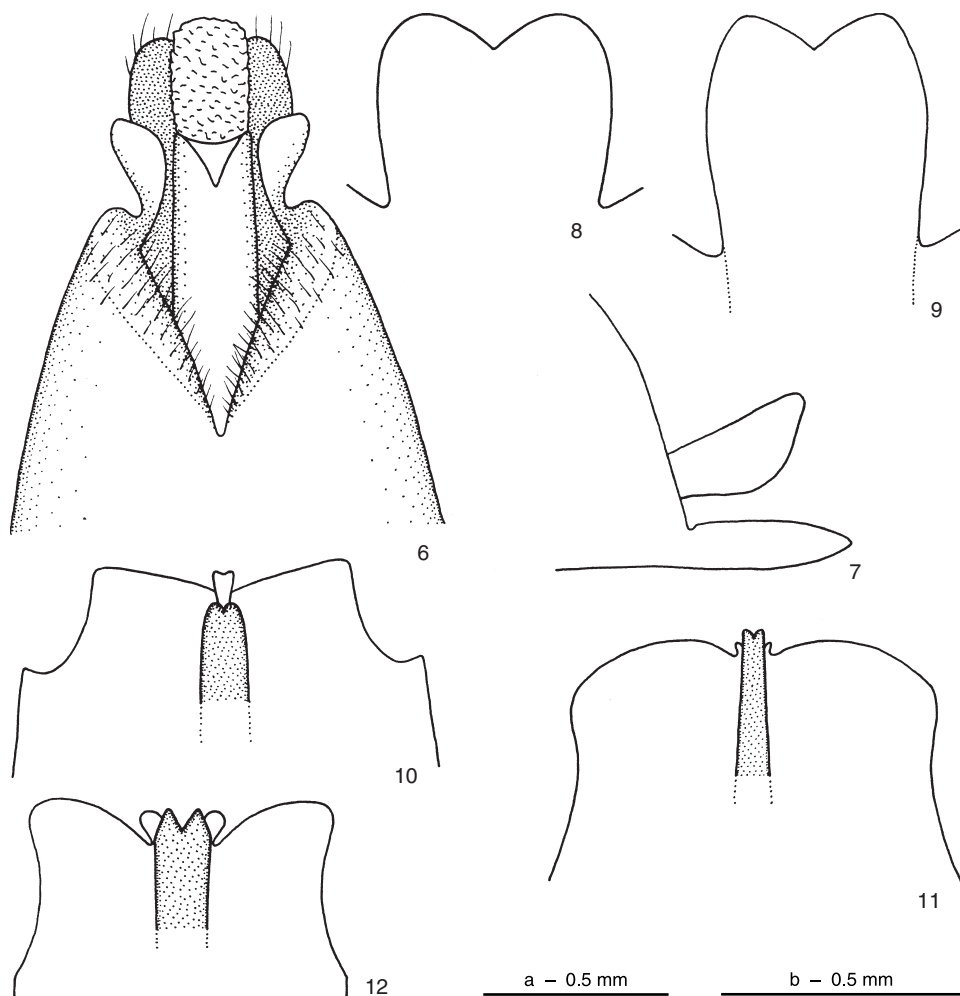
Malthinus stanislavi sp. n.

Type material: holotype (NMPC), ♂, “SE Turkey, Hop pass, 15 km NE Mardin, 37 23N 40 41E, 16.v.2001, S. Kadlec lgt.“; paratypes (NMPC), same data 4♂♂ 4♀♀.

Differential diagnosis: *Malthinus stanislavi* sp. n. is closely related to *M. damascenus* WITTMER, 1936 and to *M. axillaris* KIESENWETTER, 1852. From the former it differs by both basophyse and ventral apophyse of phallus more wider and more deeply emarginate, from the latter by shorter ventral apophyse of phallus (cf. Figs 10–12) and by small number (1–3) of teeth on the longer laterophyse, in comparison with 8–13 teeth in *M. axillaris*.

Description: Coloration. Head including mouthparts honey yellow, black from midlength of eyes posteriorly. Antennae honey yellow, antennomeres darkening posteriorly from one third to one half of antennal length. Prothorax honey yellow, pronotum with very narrowly black anterior corners in male, which are more or less widely dark in female and with wide, black mediolongitudinal stripe with sinuate margins. Ventral side of thorax and abdomen honey yellow, anterior legs entirely honey yellow in both sexes, middle legs entirely honey yellow or, rarely, with small spot at midlength of femora in male, with widely darkened middle portion of both femora and tibiae in female, posterior legs almost entirely black with exception of yellow bases of femora, knees, apices of tibiae and tarsi in both sexes. Scutellum black, basal third to half of elytra honey yellow, darkening apically, apex of each elytron with yellow spot.

Male. Eyes relatively small, moderately protruding, head across eyes by one third



Figs 6–12. *Rhagonycha paflogonica* sp. n.: (6) apical portion of aedeagus, ventral view; (7) ditto, lateral view; (8) dorsal part of aedeagus. *R. kronbladi* ŠVIHLA: (9) dorsal part of aedeagus; *Malthinus stanislavi* sp. n.: (10) apical portion of aedeagus without laterophyses, dorsal view. *M. axillaris* KIESENWETTER: (11) apical portion of aedeagus without laterophyses, dorsal view. *M. damascenus* WITTMER: (12) apical portion of aedeagus without laterophyses, dorsal view. Scale a – Figs 6–9; b – Figs 10–12.

wider than pronotum, head behind eyes straightly narrowing posteriorly. Antenna reaching two thirds of elytral length. Surface of head finely imbricate-punctate and yellow pubescent, matt. Pronotum as long as wide, its anterior margin straight, anterior corners moderately rounded, lateral margins almost parallel, very slightly sinuate before obtusely rounded posterior corners, which very slightly protruding laterally, posterior margin widely rounded. Surface of pronotum sculptured and pubescent like that of head, matt. Elytra parallel-sided, covering four fifths of abdominal length, their surface very finely rugulose-lacunose and yellow pubescent, matt. Apical portion of aedeagus as in Fig. 10.

Sexual dimorphism. Eyes in female slightly smaller than in male, antenna shorter, reaching elytral midlength. Length ♂ ♀: 3.3–4.9 mm.

Distribution: Southeastern Turkey.

Etymology: Dedicated to its collector, Stanislav Kadlec (Litvínov).

Comments: *M. axillaris*, *M. stanislavi* sp. n. and *M. damascenus* represent a natural group of species, characterised by the asymmetric both parameres and laterophyses, characters unique within the subfamily Malthiniinae. In all these species two variants of the position of laterophyses exist. When the aedeagus is observed in dorsal view, situated with its apex forwards, the ratio of the longer laterophyse situated on the right side (R) to that situated on the left side (L) is as follows: *M. axillaris*, R/L = 9/2; *M. stanislavi* sp. n., R/L = 4/1 and *M. damascenus*, R/L = 2/1.

***Malthodes muraniensis* sp. n.**

Type material: holotype (NMPC), ♂, “Slovakia c., Muráň – Poludnica NR, 7286(4), lesostep – smyky, sklep (= swept and beaten in forest steppe), 18.v.2003, M. Mantič lgt.“; paratypes (MMOC, NMPC): same data, 25 ♂♂; same locality, Quercetum, 22.v.2002, M. Mantič lgt., 2 ♂♂.

Differential diagnosis: *Malthodes muraniensis* sp. n. in consequence of its strongly reduced last sternite cannot be compared with any other European species. According to the form of its aedeagus, it seems to be related to *M. biroi* KASZAB, 1955 and maybe also to *M. bidens* WITTMER, 1970, however, both these species possess long last sternite (cf. Kaszab 1955 and Wittmer 1970).

Description: Coloration. Body entirely sepia, mandibles honey yellow, bases of tibiae somewhat paler.

Male. Eyes relatively small, moderately protruding, head across eyes very slightly narrower than pronotum, head behind eyes roundly narrowing posteriorly. Antenna almost reaching end of abdomen. Surface of head very finely and sparsely punctate and brown pubescent, lustrous. Pronotum almost twice as wide as long, its anterior margin straight, rounded before anterior corners, which are obtuse, almost not rounded, protruding, lateral margins arcuate inwards, posterior corners similar to anterior ones, posterior margin widely rounded, moderately protruding posteriorly. Surface of pronotum finely and shallowly rugulose-lacunose, sparsely and finely brown pubescent, semilustrous. Abdomen exceeding elytra by about one fifth of elytral length, elytra parallel-sided, their surface rugulose-lacunose, finely and sparsely brown pubescent, matt. Last abdominal segments and aedeagus as in Figs 13, 26. Female unknown. Length ♂: 1.8–2.1 mm.

Distribution: Slovakia.

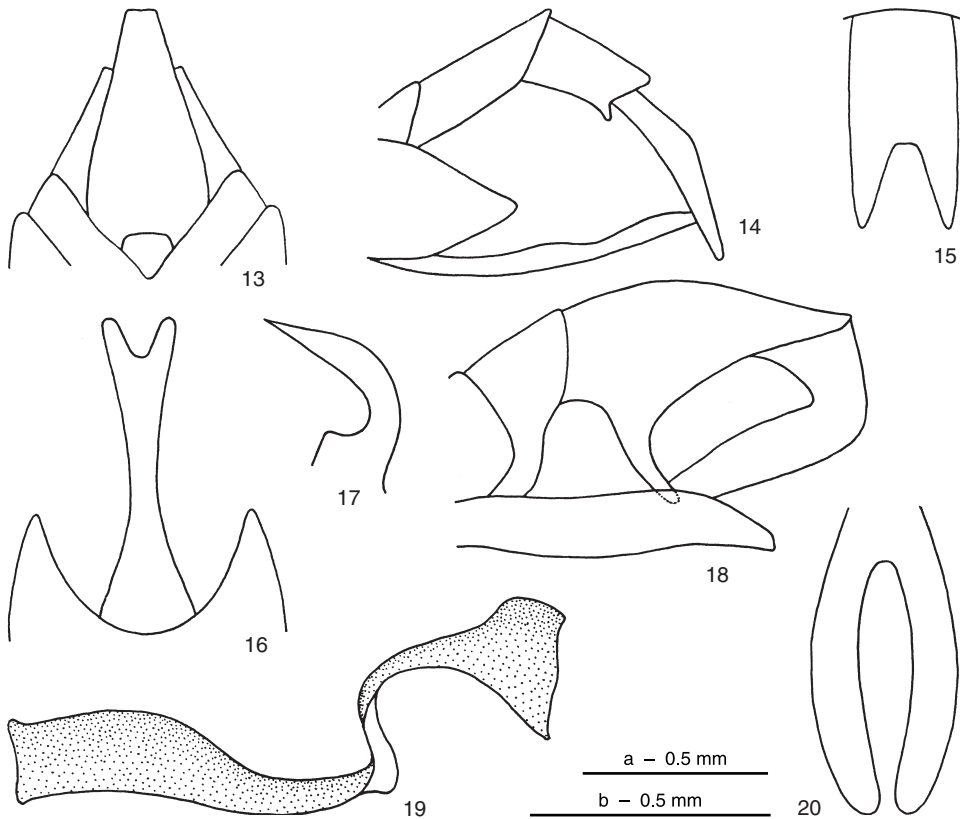
Etymology: Named according to its type locality.

***Malthodes kirisensis* sp. n.**

Type material: holotype (NMEG), ♂, “Turcia, d. Antalya 7, Kiris b. Kemer, 5 km w. Forellenhof, 36 36.27N 30 28.5E, 350 m, 30.iii.2000, Fritzlär lgt.“.

Differential diagnosis: Last abdominal segments of *Malthodes kirisensis* sp. n. are most similar to those of *M. walteri* ŠVIHLA, 2002, however, the form of the last sternite is different (cf. Švihla 2002) and aedeagus is of a different type, without lateral projections of its ventral part in the new species. The last mentioned character indicates the relationship with *M. pseudobesucheti* WITTMER, 1970, from which *M. kirisensis* sp. n. differs by divided last tergite, by penultimate tergite without lateroapical spike and by different form of laterophyse in lateral view (cf. Wittmer 1970).

Description: Coloration. Head black, yellow before antennal pits including mouthparts, antennae chestnut brown, first two antennomeres yellow. Prothorax black, pronotum



Figs 13–20. *Malthodes muraniensis* sp. n.: (13) last abdominal segments, ventral view; (14) last abdominal segments, lateral view; (15) last tergite, dorsocaudal view; (16) last sternites, ventral view; (17) laterophyse, lateral view. *M. kirisensis* sp. n.: (14) last abdominal segments, lateral view; (15) last tergite, dorsocaudal view; (16) last sternites, ventral view; (17) laterophyse, lateral view. *M. stanislavi* sp. n.: (18) last abdominal segments, lateral view; (19) last sternite, oblique lateral view; (20) last tergite, ventral view. Scale a – Figs 14–16, 18–20; b – Figs 13, 17.

tum with wide, mediolongitudinal yellow stripe, strongly dilated both anteriorly and posteriorly. Anterior femora black, knees and tibiae rusty, tarsi sepia, middle and posterior legs sepia, only knees somewhat paler. Meso- and metasternum black with yellow epimera, ventral portion of abdomen sepia, sternites yellow bordered, last abdominal segment honey yellow. Scutellum and basal part of elytra sepia, their middle portion dark olivaceous, apex of each elytron with lemon yellow spot.

Male. Eyes of medium size, slightly protruding, head across eyes as wide as pronotum, behind eyes almost straightly narrowing posteriorly. Antenna almost reaching abdominal apex. Surface of head finely and shallowly rugulose-lacunose, finely and sparsely yellow pubescent, semilustrous. Pronotum slightly wider than long, its anterior margin almost straight, rounded before anterior corners, which are bevelled and slightly protruding laterad, lateral margins arcuately narrowing posteriorly, posterior cornes rounded, protruding laterad, posterior margin rounded, protruding apically. Surface of pronotum sculptured and pubescent like that of head, semilustrous. Elytra slightly exceeding abdominal midlength, their surface sculptured and pubescent like that of head and pronotum, semilustrous. Last abdominal segments and aedeagus as in Figs 14–17, 27. Female

unknown. Length ♂: 2.6 mm.

Distribution: Southwestern Turkey.

Etymology: Named according to its type locality.

***Malthodes stanislavi* sp. n.**

Type material: holotype (NMPC), ♂, “GR: Peloponnesos, Parnon Mts, Kosmas, 1500 m, 21.vi.2003, S. Benedikt lgt.”.

Differential diagnosis: *Malthodes stanislavi* sp. n. is related to *M. sedileformis* WITTMER, 1993, from which it differs by laterophyses not sinuate before their apices, by penultimate tergite with longer lateral projection and by last tergite divided almost to its base (cf. Wittmer 1993).

Description: Coloration. Body sepia, only mandibles and last abdominal segment somewhat paler, rusty to sienna.

Male. Eyes relatively large and protruding, head across eyes moderately wider than pronotum, head behind eyes roundly narrowing posteriorly. Antenna slightly exceeding apex of elytra. Surface of head very finely punctate, sparsely and finely yellow pubescent, semilustrous. Pronotum slightly wider than long, its anterior margin nearly straight, roundly bevelled before anterior corners, which are almost sharp, slightly protruding, lateral margins nearly parallel, slightly rounded, posterior corners obtusely rounded, posterior margin rounded, protruding posteriorly. Surface of pronotum punctate and pubescent like that of head, semilustrous. Elytra cover two thirds of abdominal length, parallel-sided, their surface finely rugulose-lacunose and yellow pubescent, matt. Last abdominal segments and aedeagus as in Figs 18–20, 28. Female unknown. Length ♂: 2.7 mm.

Distribution: Greece: Peloponnesos.

Etymology: Dedicated to its collector, Stanislav Benedikt (Starý Plzenec).

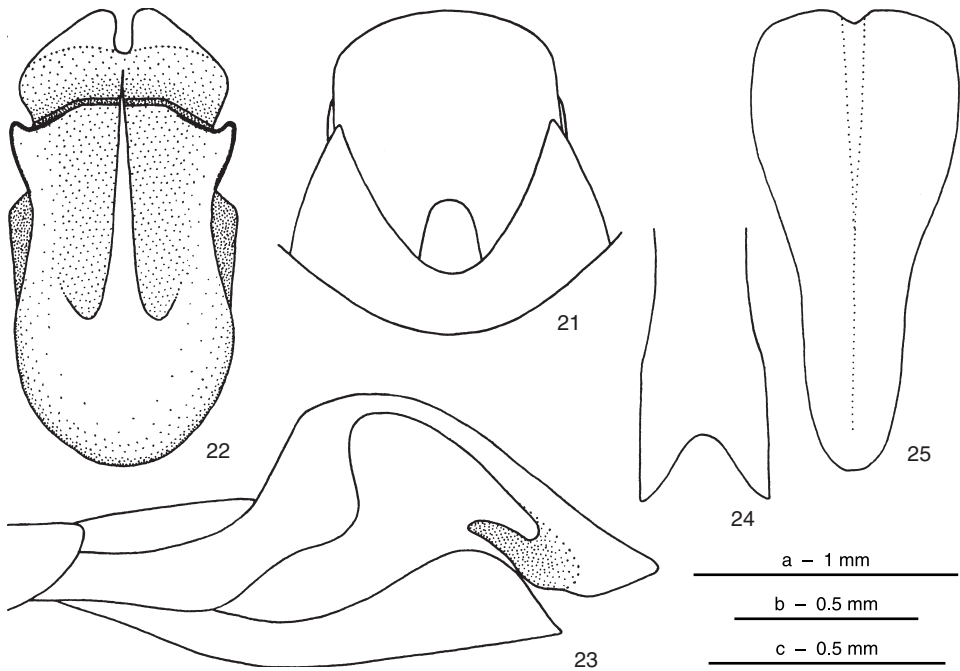
***Malthodes olympicus* sp. n.**

Type material: holotype (NMEG), ♂, “Turcia, d. Antalya 4, Olympos, Bey Dag, 3625.15 N 3026.19 E, 200 m, 28.iii.2000, Fritzlar leg.”.

Differential diagnosis: *Malthodes olympicus* sp. n. is by the form of the last abdominal segment similar to *M. pusillopygus* WITTMER, 1965 and to *M. jordanicus* WITTMER, 1963, however, these species possess a different type of the aedeagus (cf. Wittmer 1970 and 1997). By the last character and by the elongate lateral portions of the penultimate sternite, the new species is most closely related to *M. tartusensis* Wittmer, 1981, differing from it by tapered lateral portions of the penultimate sternite in lateral view and by different form of apophyses of the ventral part of the aedeagus (cf. Wittmer 1981).

Description: Coloration. Head including antennae black, only mandibles honey yellow. Prosternum egg-yolk yellow, pronotum sepia, both anterior and posterior margin narrowly egg-yolk to honey yellow, anterior corners sienna, posterior ones widely egg-yolk yellow. Meso- and metasternum sepia with egg-yolk yellow epimera, abdominal sternites sepia, egg-yolk yellow bordered, last abdominal segment entirely honey yellow. Legs sepia with slightly paler knees, scutellum and elytra sepia, apex of each elytron with lemon yellow spot.

Male. Eyes small, moderately protruding, head across eyes slightly narrower than pronotum, behind eyes roundly narrowing posteriorly. Antenna moderately exceeding apex of abdomen. Surface of head very finely imbricate-punctate and yellow pubescent, semilustrous. Pronotum slightly wider than long, its anterior margin nearly straight,



Figs 21–25. *Malthodes olympicus* sp. n.: (21) last abdominal segments, ventral view. *M. weigeli* sp. n.: (22) aedeagus, dorsal view; (23) last abdominal segments, lateral view; (24) curved portion of last tergite, dorso-caudal view; (25) last sternite, ventral view. Scale a – Figs 23–25; b – Fig. 21; c – Fig. 22.

roundly bevelled before anterior corners, which are obtusely rounded, lateral margins moderately converging posteriorly, almost straight, posterior corners obtusely rounded, posterior margin rounded, strongly protruding posteriorly. Surface of pronotum sculptured and pubescent like that of head, semilustrous. Elytra cover two thirds of abdominal length, parallel-sided, their surface very finely rugulose-lacunose and yellow pubescent, semilustrous. Last abdominal segments and aedeagus as in Figs 21, 29, apical portion of aedeagus strongly darkened. Female unknown. Length ♂: 3.3 mm.

Distribution: Southwestern Turkey.

Etymology: Named according to the Olympos ruins, its type locality.

***Malthodes weigeli* sp. n.**

Type material: holotype (NMEG), ♂, “Turcia m., Prov. Antalya, Bey Daglari, Umg. Hisarcandir, 364748 N 302928 E, 800–1200 m, 31.v.2002, leg. A. Weigel“; paratypes (NMEG), same data, 2♀.

Differential diagnosis: *Malthodes weigeli* sp. n. seems to be related to *M. gillerforsii* WITTMER, 1993 and to *M. pergensis* WITTMER, 1993 from which it differs especially by the form of the last tergite, protruding inwards and by different aedeagus (cf. Wittmer 1993).

Description: Coloration. Head sooty, mouthparts rusty, antennae sepia, first antennomere and base and tip of second one rusty. Prothorax orange, anterior corners very narrowly sepia. Meso- and metasternum sepia with yellow epimera, abdominal sternites sepia, yellow bordered, last abdominal segment egg-yolk yellow, apical portion of last

tergite darkened. Legs sepia, basal portions of tibiae rusty. Scutellum and elytra sienna, each elytron with apical egg-yolk yellow spot.

Male. Eyes of medium size, protruding, head across eyes slightly wider than pronotum, head behind eyes roundly narrowing posteriorly. Antenna slightly exceeding abdominal apex. Surface of head very finely imbricate-punctate and yellow pubescent, semilustrous. Pronotum slightly wider than long, its anterior margin straight, roundly bevelled before anterior corners, which are obtusely rounded and moderately protruding, lateral margins arcuately emarginate, very slightly converging posteriorly, posterior corners obtusely rounded, posterior margin rounded, slightly protruding posteriorly. Surface of pronotum sculptured and pubescent like that of head, semilustrous. Elytra very slightly exceeding abdominal midlength, parallel-sided, their surface finely and shallowly rugulose-lacunose, finely yellow pubescent, semilustrous, central elytral nerve slight but distinct. Last abdominal segments and aedeagus as in Figs 22–25, last sternite longitudinally concave on its inner side and with narrow, mediolongitudinal carina, slightly dilating apically on its outer side, last tergite longitudinally impressed on its outer side.

Sexual dimorphism. Eyes in female smaller and less protruding than in male, head across eyes moderately narrower than pronotum. Antenna shorter, reaching elytral apex only. Length ♂♀: 3.8–4.5 mm.

Distribution: Southwestern Turkey.

Etymology: Dedicated to its collector, Andreas Weigel (Wernburg).

NOTES ON DISTRIBUTION

Cantharis figurata MANNERHEIM, 1843

Material examined: Uzbekistan, Tashkent reg., Chatkalskiy zapovednik Nat. Res., 12.vi.1974, 1♂ (NHMB).

Distribution: N, W and C Europe, N and C Kazakhstan, Siberia (Švihla 1993a). New species for Uzbekistan.

Dichelotarsus flavimanus MOTSCHULSKY, 1860

Material examined: Russia, Sakhalin, Tymovskiy distr., Nabilskiy khrebet Mts, Mt. Lopatin, 800–1400 m, 16.–19.vii.1993, Pütz & Wrase lgt., 2♂♂ (NMPC).

Distribution: N Europe; Russia: Ural Mts, Siberia, Tchuktcha, Tuva, Kuriles; Mongolia (Kazantsev 1992). New species for Sakhalin.

Rhagonycha rassouli WITTMER, 1981

Material examined: Syria, Halab, Winkler lgt., 1♂ (NHMB).

Distribution: Turkey, Iraq (Švihla 1995). New species for Syria.

Rhagonycha syriaca DAHLGREN, 1968

Material examined: Turkey, Prov. Mus, Buğlan geçidi pass, 1900 m, 13.–16.vi.1976, Holzschuh & Ressler lgt., 1♂ (NHMB).

Distribution: Israel (Magis 1975), Lebanon, Syria, Jordan (Švihla 1993b). New species for Turkey.

Rhagonycha alagoesa (REITTER, 1893)

Material examined: Turkey, Prov. Erzurum, Tekedereşi, 15 km SW Erzurum, 39 48N 41 10E, 2300 m, 2.–3.vii.2001, M. Fikáček, J. Hájek & J. Straka lgt., 1♂ (NMPC).



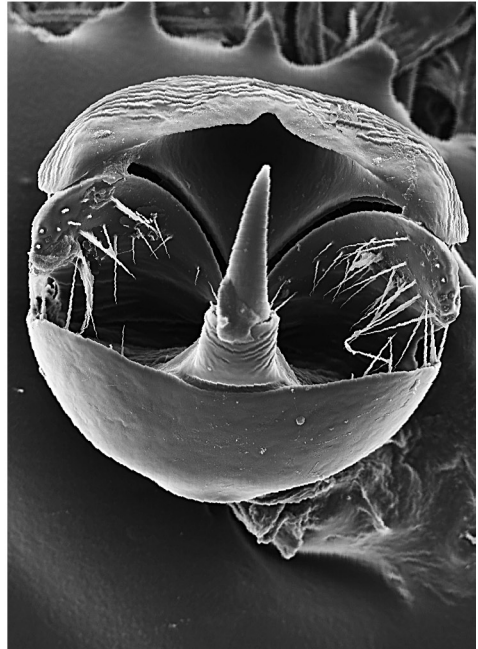
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28



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Figs 26–29. *Malthodes muraniensis* sp. n. ($\times 330$): (26) aedeagus, dorsal view. *M. kirisensis* sp. n. ($\times 215$): (27) aedeagus, dorsal view. *M. stanislavi* sp. n. ($\times 205$): (28) aedeagus, dorsal view. *M. olympicus* sp. n. ($\times 280$): (29) aedeagus, dorsal view.

Distribution: Described and hitherto known only from Armenia (Reitter 1893). New species for Turkey.

***Malthodes balfourbrownei* WITTMER, 1966**

Material examined: Georgia, Batumi, 20.v.1987, V. Kuznetsov lgt., 1♂; Batumi, Botanical garden, 19. v. 1987, S. Kazantsev lgt., 1♂ (all NHMB).

Distribution: Described and hitherto known only from Turkey (Wittmer 1966). New species for Georgia.

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REFERENCES

- Dahlgren, G. (1968): Beiträge zur Kenntnis der Gattung Rhagonycha (Col. Cantharidae). – Entomol. Blätter, 64: 93–124.
- Harris, R. A. (1979): The glossary of surface sculpturing. – Occas. Pap. Entomol., 28: 1–31.
- Kaszab, Z. (1955): Neue und wenig bekannte Malacodermata (Coleoptera) aus dem Karpatenbecken. – Acta Zool. Acad. Sci. Hung., 1: 289–307.
- Kazantsev, S. (1992): Contribution to the knowledge of Palaearctic Cantharidae (Coleoptera). Notes on Diche-lotarsus Motschulsky. – Entomol. Basiliensia, 15: 267–278.
- Magis, N. (1975): Sur les Malacodermes paléarctiques (45–48). – Bull. Soc. Roy. Sci. Liège, 44: 717–723.
- Paclt, J. (1958): Farbenbestimmung in der Biologie. – VEB Gustav Fischer Verlag, Jena, 76 pp.+5 pls.
- Reitter, E. (1893): Achter Beitrag zur Coleopteren-Fauna des russischen Reiches. – Wien. Entomol. Z., 12: 109–114.
- Švihla, V. (1993a): New data of distribution of Palaearctic Cantharidae (Coleoptera). – Zprávy Čsl. Spol. Entomol. ČSAV, 27: 72–75.
- Švihla, V. (1993b): Contribution to the knowledge of the genus Rhagonycha Eschsch. (Coleoptera, Cantharidae) from Eastern Mediterranean. – Entomol. Basiliensia, 16: 255–277.
- Švihla, V. (1995): Contribution to the knowledge of the genus Rhagonycha Eschscholtz (Coleoptera, Cantharidae) II. – Entomol. Basiliensia, 18: 71–90.
- Švihla, V. (2002): A contribution to knowledge of the subfamily Malthininae (Coleoptera: Cantharidae) from the western Palaearctic. – Fol. Heyrovskyana, 10: 119–154.
- Wittmer, W. (1966): 33. Beitrag zur Kenntnis der palaearktischen Malacodermata (Col.). – Ann. Mag. Nat. Hist., 9: 491–503.
- Wittmer, W. (1969): Über die Gattung Malachidius Motsch. (Progeutes Abeille). (44. Beitrag zur Kenntnis der Palaarktischen Cantharidae / Coleoptera). – Mitt. Schweizer Entomol. Ges., 42: 169–180.
- Wittmer, W. (1970): Zur Kenntnis der Gattung Malthodes Kies. (Col., Cantharidae) (48. Beitrag zur Kenntnis der palaearktischen Cantharidae). – Entomol. Arb. Mus. Frey, 21: 13–107.
- Wittmer, W. (1971): Zur Kenntnis der Gattung Cantharis (Col. Cantharidae). – Entomol. Arb. Mus. Frey, 22: 226–239.
- Wittmer, W. (1981): 68. Beitrag zur Kenntnis der palaearktischen Cantharidae und Malachiidae (Coleoptera). – Entomol. Basiliensia, 6: 406–415.
- Wittmer, W. (1993): 79. Beitrag zur Kenntnis der palaearktischen Fauna (Coleoptera – Cantharidae). – Entomol. Basiliensia, 16: 279–305.
- Wittmer, W. (1997): Neue Cantharidae (Col.) aus dem indo-malaiischen und palaearktischen Faunengebiet mit Mutationen. 2. Beitrag. – Entomol. Basiliensia, 20: 223–366.