New species of the subfamily Malthininae  
(Coleoptera: Cantharidae)  
from the western Palaearctic Region

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Abstract. The following new taxa of the subfamily Malthininae from the western  
Palaearctic Region are described and illustrated: *Malthinus hulai* sp. nov. (Turkey),  
*M. ciraliensis* sp. nov. (Turkey), *M. malinkai* sp. nov. (Turkey), *M. egadiensis* sp.  
nov. (Italy: Egadi Is.), *Malthodes malinkorum* sp. nov. (Turkey), *M. zdeneki* sp.  
ov. (Turkey), *M. flagellatus* sp. nov. (Turkey), *M. aphroditae* sp. nov. (Cyprus),  
*M. fritzlari* sp. nov. (Cyprus), *M. lysosensis* sp. nov. (Cyprus), *M. anadyomenae*  
sp. nov. (Cyprus), *M. cyprogenius* sp. nov. (Cyprus), *M. denizianus lesvosensis*  
ssp. nov. (Greece: Lesvos I.), *M. andreasi* sp. nov. (Turkey), *M. paveli* sp. nov.  
(Iran), and *M. lycicus* sp. nov. (Turkey). Species status is given to *Malthodes  
bucakensis* Wittmer, 1970, stat. nov., elevated from *M. besucheti bucakensis*  
Wittmer, 1970. *Malthinus fasciatus* Olivier, 1790 is synonymised with *Malthinus  
bulgaricus* Švihla, 1990, syn. nov. Additional characters of *Malthinus peyerimhoffi*  
Constantin, 1979 are illustrated.

Key words. Coleoptera, Cantharidae, *Malthinus, Malthodes*, new species, new  
subspecies, status change, new synonym, Palaearctic Region

Introduction

The subfamily Malthininae is a large group of small and weakly sclerotized soldier beetles  
(Cantharidae). It occurs in all zoogeographical regions except of the Australian continent  
(Delkskamp 1977). The highest taxonomic diversity of the Malthininae is known from the  
Holarctic region, while the number of species in other regions is much lower, even though it  
would undoubtedly increase when some remote areas are better investigated.
BRANCUCCI (1980) subdivided the Malthininae into three tribes, namely the Malchinini, restricted to the western part of the Palaearctic Region, and the Malthinini and Malthodini, both occurring in all zoogeographical regions (except continental Australia), but predominantly in the Northern Hemisphere.

Species of *Malthinus* Latreille, 1806 are distributed mainly in the Holarctic region, although a small number of species is also known from the Oriental and Neotropical Regions. The basic works on the taxonomy of the Palaearctic species of the genus *Malthinus* were published by Wittmer (1969, 1971a, 1974) and CONSTANTIN (1979). They included most of the western Palaearctic species and only some species with striatopunctate elytra from Italy and the Iberian Peninsula were omitted. Many new species were subsequently described and all of them (until the end of 2004) were listed, including relevant references, by KAZANTSEV & BRANCUCCI (2007) who mentioned 305 valid names of species-group taxa.

The genus *Malthodes* Kiesenwetter, 1852 comprises 564 species and subspecies described until the end of 2004 (KAZANTSEV & BRANCUCCI 2007). The species are predominantly distributed in the Holarctic Region, with a small number of species being known from the Oriental Region, and doubtful records from the Afrotropical and Neotropical Regions. There are only several areas in which the fauna of *Malthodes* had been revised: Central Europe (WITTMER 1979), Greece (WITTMER 1980), Crete (KOPETZ 2007), Turkey (WITTMER 1970) and Israel (WITTMER 1966). Many subsequently published descriptions and taxonomic notes were summarised by KAZANTSEV & BRANCUCCI (2007). After 2004 appeared only two other papers dealing partly with *Malthodes*: ŠVIHLA (2005) and ŠVIHLA & MIFSUD (2006).

This paper describes 15 new species and one new subspecies of the Malthininae recently collected in Cyprus, Greece, Iran, Italy, and Turkey, and comments on the taxonomy of three known species from the western Palaearctic region.

**Material and methods**

The studied specimens are deposited in the following collections:

AKKG     Andreas Kopetz private collection, Erfurt-Kerspleben, Germany;
NHMB     Naturhistorisches Museum, Basel, Switzerland;
NMEG     Naturkundemuseum, Erfurt, Germany;
NMPC     Národní muzeum, Praha, Czech Republic;
RCSF     Robert Constantin private collection, Saint Lô, France;
ZMOC     Zdeněk Malinka private collection, Opava, Czech Republic.

Parts of the aedeagus are named according to Wittmer (1969) and BRANCUCCI (1980). Shades of colours used in the descriptions are classified according to PACLT (1958). The terminology of integument structures follows HARRIS (1979); the microsculptures were observed in a stereomicroscope under 90× magnification. Photographs of male genitalia were prepared with a JEOL 6380 LV scanning electron microscope. Locality labels of type specimens are cited verbatim with standardized dates; locality data of additional specimens are standardized. Separate labels are divided in the text by a double slash (//).
Taxonomy

Genus Malthinus Latreille, 1806

Malthinus fasciatus Olivier, 1790
(Figs. 1–2)
Malthinus bulgaricus Švihla, 1990: 200, syn. nov.

Additional material examined. FRANCE: ÎLE-DE-FRANCE: Paris-Sceaux, Achard lgt., 2 (NMPC); CHAMPAGNE-ARDENNE: Épernay, 12.vi.1946, Demaison lgt., 1 ♂ and 1 ♀ ‘in copula’ (NHMB); several further males from France, Austria and northern Italy (all NHMB).

Comments. When describing M. bulgaricus, I knew only two males of M. fasciatus from Paris-Sceaux. Because Paris is the type locality of Malthinus fasciatus and no type material was found in the Muséum d’Histoire Naturelle, Paris, where Olivier’s collection is deposited, I believed that these two specimens represent M. fasciatus. The specimen which I described from Bulgaria as a new species differs significantly in the shape of the median lobe with an extruding part of the phallus and widely opened, fused laterophyses (Fig. 1). Unfortunately, the aedeagi of the specimens from Sceaux (Fig. 2) have shown to be abberant (teratological?) as no other specimens with phallus not extruded were found in the material examined. Therefore, I synonymise the two species.

Malthinus hulai sp. nov.
(Fig. 3)
Type locality. Turkey, Antalya Province, Göynük, 40 km west of Antalya.

Description. Coloration. Head honey yellow, behind eyes chestnut brown to sepia; basal antennomeres honey yellow, gradually darkening towards apex to sepia. Prothorax honey yellow with wide, indistinctly delimited, sienna-coloured median longitudinal spot reaching neither anterior nor posterior margin of pronotum. Legs sienna, basal tarsomeres somewhat paler, meso- and metasternum and ventral part of abdomen sienna. Scutellum and elytra sienna; each elytron with egg-yolk yellow apical spot.

Male. Eyes of medium size, moderately protruding; head across eyes distinctly wider than pronotum, behind eyes arcuately narrowing posteriorly; surface of head rugulose-lacunose, very finely yellow pubescent, matt. Antenna reaching almost elytral apex. Pronotum slightly wider than long, anterior margin nearly straight, anterior corners obtusely rounded, lateral margins arcuate, posterior corners rounded, posterior margin widely rounded; surface of pronotum sculptured and pubescent similarly to head, matt, except for almost impunctate and lustrous area medially. Hind tibia simple. Elytra with rows of punctures, becoming irregular from about elytral midlength posteriorly, matt; basal half semilustrous. Aedeagus as in Fig. 3.
Female unknown.

Length (♂): 3.9 mm.

**Differential diagnosis.** *Malthinus hulai* sp. nov. is similar to *M. lasithiensis* Wittmer, 1975, known from Crete, in the presence of a pair of long and slender projections of the dorsal part of the phallus. It differs from the latter species by the tear-shaped apices of those projections and the shape of fused laterophyses (cf. Wittmer 1975).

**Etymology.** Dedicated to its collector, Vladimír Hula (Moutnice, Czech Republic).

**Distribution.** Southern Turkey.

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(*Malthinus ciraliensis* sp. nov. (Fig. 4))

**Type locality.** Turkey, Antalya Province, Çıralı.


**Description.** Coloration. Head anteriorly egg-yolk yellow, posteriorly of about midlength of eyes sienna to chestnut brown; antennae sepia, two basal antennomeres egg-yolk yellow. Prothorax honey yellow with transverse median spots before both anterior and posterior margin. Mesosternum and last abdominal segment egg-yolk yellow, remaining part of body ventrum sienna. Legs egg-yolk yellow, femora slightly darker, rusty. Scutellum and humeral portions of each elytron egg-yolk yellow, sutural area of basal third and rest of elytra sooty, each elytron with lemon-yellow apical spot.

Male. Eyes of medium size, moderately protruding; head across eyes moderately wider than pronotum, behind eyes almost straightly narrowing posteriorly; surface of head finely and sparsely punctate and yellow pubescent, lustrous; posterior portion of vertex more roughly rugulose-lacunose, matt. Antennae reaching almost elytral apex. Pronotum about one fifth wider than long, its anterior margin straight, anterior corners obtusely rounded, lateral margins arcuate, posterior corners obtusely rounded, posterior margin widely rounded; surface of pronotum pubescent similarly to head, rugulose-lacunose in middle of anterior portion, finely and sparsely punctate on remaining parts, with almost impunctate disc, semilustrous to lustrous, anteriorly matt. Hind tibia simple. Elytra with rows of punctures in basal third, becoming irregular posteriorly, with fine and sparse yellow pubescence, matt, basal third semilustrous. Aedeagus as in Fig. 4.

Female unknown.

Length (♀): 4.1 mm.

**Differential diagnosis.** In the shape of the aedeagus, *Malthinus ciraliensis* sp. nov. is similar to *M. lasithiensis* (Crete) and *M. hulai* sp. nov. (southern Turkey). It differs from both species by the shape of the projections of the dorsal part of phallus and the shape of fused laterophyses (cf. Fig. 3 and Wittmer 1975).

**Etymology.** Named after the type locality.

**Distribution.** Southern Turkey.
Figs. 1–4. Aedeagus, dorsal view. 1 – *Malthinus fasciatus* Olivier, 1790 (Épernay); 2 – ditto (Paris – Sceaux); 3 – *M. hulai* sp. nov. (holotype); 4 – *M. ciraliensis* sp. nov. (holotype). Scale bars = 0.1 mm.
Figs. 5–8. Aedeagus, dorsal view. 5 – *Malthinus malinkai* sp. nov. (holotype); 6 – *M. peyerimhoffi* Constantin, 1979 (Tizi-n-Test pass); 7 – *M. egadiensis* sp. nov. (holotype); 8 – *Malthodes malinkorum* sp. nov. (paratype). Scale bars = 0.1 mm.
Figs. 9–12. Aedeagus, dorsal view. 9 – *Malthodes zdeneki* sp. nov. (holotype); 10 – *M. flagellatus* sp. nov. (paratype); 11 – *M. aphroditae* sp. nov. (holotype); 12 – *M. fritzlari* sp. nov. (paratype). Scale bars = 0.1 mm.
Figs. 13–16. Aedeagus, dorsal view. 13 – *Malthodes lysosensis* sp. nov. (holotype); 14 – *M. anadyomenae* sp. nov. (paratype); 15 – *M. cyprogenius* sp. nov. (holotype); 16 – *M. andreasi* sp. nov. (paratype). Scale bars = 0.1 mm. Arrows refer to diagnostic characters mentioned in descriptions.
Figs. 17–20. Aedeagus, dorsal view. 17 – Malthodes paveli sp. nov. (holotype); 18 – M. lycicus sp. nov. (paratype); 19 – M. besucheti Wittmer, 1970 (paratype); 20 – M. bucakensis Wittmer, 1970 (Gülükdağ). Scale bars = 0.05 mm.
**Malthinus malinkai** sp. nov.
(Fig. 5)

**Type locality.** Turkey, Mardin Province, Hop Geçidi pass.

**Type material.** **Holotype:** ♂, ‘TR [= Turkey] – prov. Mardin, Hop Geçidi [= Hop Geçidi pass], Mardin env., 11.–14.v.2005, Z. Malinka lgt. [white label, printed]’ (NMPC). **Paratype:** 1 ♂, same data as holotype (NMPC).

**Description.** Coloration. Head anteriorly and around eyes honey yellow; vertex with V-shaped or rounded black spot; basal two antennomeres honey yellow, rest of antennomeres sienna with bases narrowly yellow. Prothorax, legs and ventral side of abdomen honey yellow; meso- and metasternum sienna. Scutellum honey yellow to sienna. Elytra in basal two thirds honey yellow with large, indistinctly delimited sepia-coloured scutellar spot, along suture narrowly connected with sepia-coloured posterior third of elytra; apex of each elytron with honey-yellow spot.

Male. Eyes large and rather strongly protruding; head across eyes almost one third wider than pronotum, behind eyes narrowing posteriorly, with lateral margins concave; surface of head almost impunctate, very finely and sparsely yellow pubescent, lustrous. Antenna reaching two thirds of elytral length. Pronotum slightly wider than long, its anterior margin nearly straight, anterior corners obtusely rounded, lateral margins arcuately narrowing posteriorly, slightly sinuate behind both anterior and posterior corners, posterior corners nearly rectangular, posterior margin widely rounded; surface of pronotum sculptured and pubescent similarly to head, lustrous. Hind tibia with small emargination on inner side before midlength similar to that of *M. tauri anatolicus* Wittmer, 1974 (ŠVIHLA 2002). Elytra with rows of punctures in basal third, becoming irregular and rugulose-lacunose posteriorly; surface of elytra covered with very sparse and fine yellow pubescence, matt, basal third semilustrous. Aedeagus as in Fig. 5.

Female unknown.

Length (♂): 3.9–4.0 mm.

**Differential diagnosis.** In the shape of the aedeagus, *Malthinus malinkai* sp. nov. is similar to *M. tauri* Pic, 1907 (Turkey). It differs from the latter by the more widely fused tubular laterophyses (cf. WITTMER 1974 and ŠVIHLA 2002). The posterior tibia of male is very similar to that of *M. tauri anatolicus* Wittmer, 1974 (cf. ŠVIHLA 2002).

**Etymology.** Dedicated to its collector, Zdeněk Malinka (Opava, Czech Republic).

**Distribution.** Southeastern Turkey.
Malthinus egadiensis sp. nov.
(Fig. 7)


Type locality. Italy, Egadi Islands, Marettimo.


Description. Coloration. Head including antennae black, mouthparts sepia. Prothorax sepia, anterior margin, anterior and posterior corners and posterior margin somewhat paler. Meso- and metasternum, ventral part of abdomen and legs chestnut brown. Scutellum and elytra chestnut brown, apex of each elytron with lemon-yellow spot.

Male. Eyes of medium size, protruding; head across eyes about one fifth wider than pronotum, temporal margins straightly narrowing posteriorly; surface of head imbricate-punctate, finely brown pubescent, matt. Antenna long, moderately exceeding elytral apex. Pronotum moderately wider than long, anterior margin nearly straight, anterior corners obtusely rounded; lateral margins arcuate, sinuate before posterior corners; posterior corners almost rectangular, hardly rounded, posterior margin widely rounded; surface of pronotum sculptured and pubescent similarly to head, matt. Elytra finely rugulose-lacunose, finely brown pubescent, semilustrous in basal third, rest of elytra matt. Aedeagus as in Fig. 7.

Female unknown.

Length (♂): 4.5 mm.

Differential diagnosis. Malthinus egadiensis sp. nov. is similar to M. gratiosus Pic, 1901 (Greece: Samos Island) in the shape of the apex of the ventral portion of the aedeagus. It differs from the latter in narrower and almost entirely parallel laterophyses and different shape of the phallus (cf. Wittmer 1971a). Wittmer (1971a) supposed that this specimen belongs to M. scapularis, described from Malta. An examination of Maltese material, however, showed that M. scapularis is a different species, described by Wittmer (1971a) as M. pseudoscriptus (Švihlá & Mifsud 2006).

Etymology. Named according to its type locality.

Distribution. Italy: Egadi Islands (near western coast of Sicily).

Genus Malthodes Kiesenwetter, 1852

Malthodes malinkorum sp. nov.
(Figs. 8, 22)

Type locality. Turkey, Mardin Province, Hop Geçidi pass.


Description. Coloration. Head including antennae black, only mouthparts chestnut brown to sepia. Prothorax black, posterior corners of pronotum widely egg-yolk yellow. Meso- and metasternum and ventral part of abdomen black. Scutellum and elytra sooty, apex of each elytron with egg-yolk yellow spot.

Male. Head elongate; eyes small, slightly protruding; head across eyes very slightly narrower than pronotum; temporal margins anteriorly almost parallel, posteriorly arcuately
narrowing; surface of head very finely and sparsely punctate and brown pubescent, lustrous. Antenna very slightly exceeding elytral apex. Pronotum very slightly wider than long; its anterior margin widely rounded, very slightly sinuate in middle, anterior corners obtusely rounded, lateral margins slightly concave, posterior corners obtusely rounded, posterior margin widely rounded; surface of pronotum sculptured and pubescent similarly to head, lustrous. Elytra finely rugulose-lacunose and brown pubescent, semilustrous. Last abdominal segments as in Fig. 22, aedeagus as in Fig. 8.

Female. Eyes slightly smaller and less protruding than in male; head across eyes by one fourth narrower than pronotum. Antenna shorter, not reaching elytral apex.

Length (♂): 3.9–4.5 mm.

**Differential diagnosis.** *Malthodes malinkorum* sp. nov. is similar to *M. seleucianus* Wittmer, 1970 (Turkey) in the shape of the last abdominal segments and the shape of the aedeagus. It differs from the latter species by the tapering and not emarginate last tergite, narrower last sternite and more elongate head (cf. WITTMER 1970). The aedeagus is very similar in both species except for phallus, which only slightly exceeds the base of the laterophyses in *M. malinkorum* sp. nov. but reaches three fourths of the length of the laterophyses in *M. seleucianus* (in the figure by WITTMER 1970, the phallus is wrongly situated more basally). Furthermore, in *M. seleucianus*, the laterophyses are narrower in their middle portion and not sinuate apically (cf. WITTMER 1970).

**Etymology.** Dedicated to the family of its collector, Zdeněk Malinka (Opava, Czech Republic).

**Distribution.** Southeastern Turkey.

* Malthodes zdeneki * sp. nov.  
  (Figs. 9, 23)

**Type locality.** Turkey, İcel Province, Güzeloluk, 1500 m a.s.l.


**Description.** Coloration. Head including antennae black, only mouthparts sienna. Thorax and legs black; abdominal sternites black, narrowly bordered with yellow. Elytra black, each elytron with lemon-yellow apical spot.

Male. Eyes small, moderately protruding; head across eyes about as wide as pronotum, arcuately narrowing posteriorly; surface of head very finely punctate and brown pubescent, semilustrous. Antenna reaching approximately apex of abdomen. Pronotum slightly wider than long, anterior margin widely rounded, anterior corners nearly rectangular, slightly rounded, lateral margins moderately concave, posterior angles obtusely rounded, posterior margin rather protruding apicad, rounded; surface of pronotum sculptured and pubescent similarly to head, semilustrous. Elytra finely rugulose-lacunose, finely brown pubescent, matt. Last abdominal segments as in Fig. 23, aedeagus as in Fig. 9.

Female unknown.

Length (♀): 3.9 mm.

**Differential diagnosis.** *Malthodes zdeneki* sp. nov. is similar to *M. seleucianus* (Turkey) in the shape of the last abdominal segments but the aedeagus differs strongly by the dorsoventrally flattened, apically hooked laterophyses (cf. WITTMER 1970).
Figs. 21–27. 21 – Malthinus peyerimhoffi Constantin, 1979, hind tibia of male. 22–24 – last abdominal segments of male, ventral view: 22 – Malthodes malinkorum sp. nov. (paratype); 23 – M. zdeneki sp. nov. (holotype); 24 – M. flagellatus sp. nov. (holotype). 25–27 – M. aphroditae sp. nov. (holotype): 25 – last abdominal segments of male, lateral view; 26 – last tergite of male, dorsal view; 27 – apical part of last sternite of male, oblique caudal view.
Etymology. Dedicated to its collector, Zdeněk Malinka (Opava, Czech Republic).

Distribution. Southern Turkey.

*Malthodes flagellatus* sp. nov.
(Figs. 10, 24)

**Type locality.** Turkey, Sirnak Province, Haberli.

**Type material.** **HOLOTYPE:** ♂, ‘TR [Turkey] – prov. Sirnak, Haberli, Midyat env. [sic!, it is situated in prov. Mardin], 13.v.2005, Z. Malinka lgt. [white label, printed]’ (NMPC). **PARATYPES:** 3 ♀♂, same data as holotype (NMPC).

**Description.** Coloration. Head including antennae black, only mouthparts sienna. Prothorax sepia, posterior corners widely and middle of posterior margin narrowly saffron yellow. Scutellum, meso-, metasternum and ventral part of abdomen sepia. Elytra sepia, each elytron with lemon-yellow apical spot.

Male. Head elongate; eyes small, moderately protruding; head across eyes distinctly narrower than pronotum; temporal margins anteriorly nearly parallel, posteriorly arcuately narrowing; surface of head very finely punctate and grey pubescent, semilustrous. Antenna approximately reaching base of apical spot on elytra. Pronotum very slightly wider than long, anterior margin widely rounded, anterior corners obtusely rounded, lateral margins slightly concave, posterior corners obtusely rounded, posterior margin moderately protruding apicad, rounded; surface of pronotum punctate and pubescent similarly to head, semilustrous. Elytra finely rugulose-lacunose and grey pubescent, matt. Last abdominal segments as in Fig. 24, aedeagus as in Fig. 10.

Female unknown.

Length (♂): 3.4–3.7 mm.

**Differential diagnosis.** *Malthodes flagellatus* sp. nov. is similar to *M. frater* Wittmer, 1970 (Turkey) in the shape of the last abdominal segments. It differs from the latter by the less narrowed apical portion of the last tergite and especially by the much shorter and more apically situated laterophyses of the aedeagus and the very long, sinuate phallus (cf. Wittmer 1970).

**Etymology.** Derived from Latin *flagellum* (small whip); the name refers to the very long, slender and sinuate phallus.

**Distribution.** Southeastern Turkey.

*Malthodes aphroditae* sp. nov.
(Figs. 11, 25–27)

**Type locality.** Northwestern Cyprus, 10 km south of Polis, north of Tera, northern slope, 500 m a.s.l.

**Type material.** **HOLOTYPE:** ♂, ‘CYPRUS W., 53, Polis, 10 km S, Tera N, 500 m, NE-Hang [= northern slope], 19.iv.2006, Fritzlar leg. [white label, printed]’ (NMEG). **PARATYPES:** 2 ♀♀, same data as holotype (AKKG); 4 ♀♂, ‘Cyprus, Paphos distr., Polis 10 km W, Aphrodite Bay footpath, 35°04´N 32°18´E, 158 m, 21.iv.1999, R. Constantin [lgt.] [white label, printed]’ (RCSF); 10 ♀♂, ‘Cyprus, Limassol district, Pissouri, 1 km SE, 34°40´N 32°43´E, 100 m, flowering hills, 19.iv.1999, R. Constantin [lgt.] [white label, printed]’ (RCSF, NMPC).

**Description.** Coloration. Head black, antennae sepia, mouthparts rusty to sepia. Prothorax sepia, posterior corners widely and posterior margin very narrowly bordered with egg-yolk yellow; in female, pronotum orange with anterior corners more or less widely and irregular
median longitudinal spot sepia. Meso- and metasternum and legs sepia; ventral part of abdomen sepia to chestnut brown, sternites narrowly bordered with yellow. Scutellum and elytra sepia, each elytron with egg-yolk yellow apical spot.

Male. Head elongate; eyes small, very slightly protruding; head across eyes slightly narrower than pronotum; temporal margins of head anteriorly nearly parallel, posteriorly arcuately narrowing; surface of head very finely punctate and yellow pubescent, semilustrous. Antenna slightly exceeding elytral apex. Pronotum very slightly wider than long, its anterior margin widely rounded, anterior corners obtusely rounded, lateral margins moderately concave, posterior corners obtusely rounded, posterior margin slightly protruding apicad, widely rounded; surface of pronotum sculptured and pubescent similarly to head, semilustrous. Elytra very finely rugulose-lacunose and yellow pubescent, semilustrous. Last abdominal segments as in Figs. 25–27; last sternite in ventral view nearly parallel-sided. Aedeagus as in Fig. 11.

Female. Antenna shorter than in male, not reaching elytral apex.

Length (♀): 3.2–3.8 mm.

Differential diagnosis. Malthodes aphroditae sp. nov. is similar to M. zurcheri Pic, 1911 (Cyprus) and M. malickyi Wittmer, 1980 (Cyprus) but differs from both species by the long and apically emarginate last tergite, more slender last sternite and narrow, apically tapering ventral part of the aedeagus (cf. Wittmer 1971b, 1980).

Etymology. Named after Aphrodite, the Goddess of Love of ancient Grecians, who according to the myth was born from sea spum on the coast of Cyprus.

Distribution. Cyprus.

Malthodes fritzlari sp. nov.

(Figs. 12, 28–30)

Type locality. Northwestern Cyprus, Akamas peninsula, west of Polis, north of Palos.


Description. Coloration. Head black, antennae sepia, mandibles rusty. Prothorax sepia, posterior corners more or less widely and posterior margin narrowly bordered with egg-yolk yellow; some females also with anterior margin narrowly bordered with yellow. Meso- and metasternum sepia; legs sepia, bases of tibiae slightly paler; ventral part of abdomen chestnut brown, sternites narrowly bordered with yellow.

Male. Eyes small, slightly protruding; head across eyes approximately as wide as pronotum; temporal margins arcurately narrowing posteriorly; surface of head very finely punctate and brown pubescent, lustrous. Antenna reaching abdominal apex. Pronotum about as wide as long, anterior margin widely rounded, anterior corners obtusely rounded, lateral margins slightly concave, posterior corners obtusely rounded, posterior margin slightly protruding apicad, widely rounded; surface of pronotum sculptured and pubescent similarly to head, lustrous. Elytra very finely rugulose-lacunose and yellow pubescent, matt. Last abdominal segments as in Figs. 28–30. Aedeagus as in Fig. 12.

Female. Eyes smaller than in male, head across eyes slightly narrower than pronotum. Antenna shorter, moderately exceeding elytral apex.
Figs. 28–33. 28–30 – *Malthodes fritzlari* sp. nov. (holotype): 28 – last abdominal segments of male, lateral view; 29 – last tergite of male, dorsal view; 30 – apical part of last sternite of male, ventro-caudal view. 31–33 – *M. lysosensis* sp. nov. (holotype): 31 – last abdominal segments of male, lateral view; 32 – apical part of last sternite of male, ventro-caudal view; 33 – last tergite of male, dorsal view.
Length (♂♀): 3.1–3.8 mm.

**Differential diagnosis.** *Malthodes fritzlari* sp. nov. is similar to *M. cyprogenius* sp. nov., from which it differs by the much longer and latero-apically angled last tergite, narrower bifurcation of the last sternite, shorter laterophyses of the aedeagus and somewhat different apex of the ventral part of the aedeagus. It is also similar to *M. lysosensis* sp. nov. and *M. anadyomenae* sp. nov., from which it differs by the absence of the median longitudinal groove on the ventral side of the last sternite.

**Etymology.** Dedicated to its collector, Frank Fritzlar (Jena, Germany).

**Distribution.** Cyprus.

*Malthodes lysosensis* sp. nov.

(Figs. 13, 31–33)

**Type locality.** Northwestern Cyprus, Lysos, southwest of Polis, 600 m a.s.l.


**Description.** Coloration. Head black, antennae sooty, mandibles sepia. Prothorax saffron yellow, anterior corners and cross-shaped median longitudinal stripe sepia; the stripe not reaching posterior margin of pronotum. Meso- and metasternum and legs sepia; ventral part of abdomen sepia, sternites narrowly bordered with yellow. Scutellum and elytra sepia, each elytron with yellow apical spot.

Male. Head moderately elongate; eyes of medium size, slightly protruding; head across eyes approximately as wide as pronotum, temporal margins arcuately narrowing posteriorly; surface of head very finely punctate and yellow pubescent, lustrous. Antenna moderately exceeding abdominal apex. Pronotum slightly wider than long, anterior margin widely rounded, anterior corners obtuse, very slightly rounded, lateral margins moderately concave, posterior corners obtusely rounded, posterior margin protruding apicad, rounded; surface of pronotum sculptured and pubescent similarly to head, lustrous. Elytra finely rugulose-lacunose, finely yellow pubescent, semilustrous. Last abdominal segments as in Figs. 31–33, last sternite ventrally in its apical half before bifurcation with median longitudinal groove. Aedeagus as in Fig. 13.

Female unknown.

Length (♂): 3.4 mm.

**Differential diagnosis.** *Malthodes lysosensis* sp. nov. is similar to *M. anadyomenae* sp. nov., from which it differs by the less emarginate last sternite with more slender branches of the bifurcation, presence of the median longitudinal groove on the ventral side of the last sternite restricted to the apical half, shorter last tergite lacking laterally protruding inner portions, absence of protuberances at the base of the aedeagus, shorter laterophyses and less emarginate ventral portion of the phallus.

**Etymology.** Named after the type locality.

**Distribution.** Cyprus.
**Malthodes anadyomenae sp. nov.**
(Figs. 14, 34–36)

**Type locality.** Southwestern Cyprus, Lemesós, Gorovasa.

**Type material.** HOLOTYPE: ♂, ‘ZYPERN, W, Lemesos (Limassol) [= Lemesós], Gorovasa, 10.iv.2006, leg. F. Fritzlar [white label, printed]’ (NMEG). PARATYPES: 1 ♂, same data as holotype (NMPC); 2 ♂♂ 1 ♀, ‘Cyprus, Limassol district, Pissouri, 1 km SE, 34°40´N 32°43´E, 100 m, flowering hills, 19.iv.1999, R. Constantin [lgt.] [white label, printed]’ (RCSF); 1 ♂, ‘Cyprus, Limassol district, Mandria, 5 km west, 34°52´N 32°48´E, 700 m, flowering hedges, 18.iv.1999, R. Constantin [lgt.] [white label, printed]’ (RCSF); 3 ♂♂ 7 ♀♀, ‘Cyprus, Limassol district, Kantou 2 km N, 34°42´N 32°53´E, 150 m, slopes near Limassol, 20.iv.1999, R. Constantin [lgt.] [white label, printed]’ (RCSF, NMPC).

**Description.** Coloration. Head black, antennae sooty, mandibles sepia. Prothorax saffron yellow, anterior corners and cross-shaped median longitudinal stripe sepia; the stripe not reaching posterior margin of pronotum. Meso- and metasternum and legs sepia; ventral part of abdomen sepia, sternites narrowly bordered with yellow. Scutellum and elytra sepia, each elytron with yellow apical spot.

Male. Head moderately elongate; eyes of medium size, slightly protruding; head across eyes approximately as wide as pronotum, temporal margins arcuately narrowing posteriorly; surface of head very finely punctate and yellow pubescent, lustrous. Antenna moderately exceeding abdominal apex. Pronotum slightly wider than long, anterior margin widely rounded; anterior corners obtuse, very slightly rounded; lateral margins moderately concave; posterior corners obtusely rounded; posterior margin protruding apicad, rounded; surface of pronotum sculptured and pubescent similarly to head, lustrous. Elytra finely rugulose-lacunose, finely yellow pubescent, semilustrous. Last abdominal segments as in Figs. 34–36, last sternite ventrally with median longitudinal groove starting in emargination of penultimate sternite and reaching base of apical bifurcation. Aedeagus as in Fig. 14.

Female unknown.

Length (♂): 3.1–3.4 mm.

**Differential diagnosis.** *Malthodes anadyomenae* sp. nov. is similar to *M. lysosensis* sp. nov., from which it differs by the more deeply emarginate last sternite with wider branches of bifurcation, longer median longitudinal groove present along the entire length of the ventral side of the last sternite, longer last tergite with laterally protruding inner portions, pair of protuberances at the base of the aedeagus, slightly longer laterophyses and slightly more emarginate ventral portion of the phallus.

**Etymology.** Αναδυόμενη (Anadyómenē, rising up, from ancient Greek) is one of the attributes (epiteton constans) of Aphrodite, the Goddess of Love of ancient Grecians, who according to the myth rose up from sea spum at the coast of Cyprus.

**Distribution.** Cyprus.

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**Malthodes cyprogenius sp. nov.**
(Figs. 15, 37–39)

**Type locality.** Southwestern Cyprus, hills north of Nikoklia, 16 km southeast of Paphos, 150 m a.s.l.

**Type material.** HOLOTYPE: ♂, ‘CYPRUS W, Paphos, 16 km SE, Nikoklea [= Nikoklia] N, Hügelland [= hills], 150 m, 9.iv.2006, Fritzlar leg. [white label, printed]’ (NMEG).

**Description.** Coloration. Head including antennae black, mandibles sienna. Prothorax sepia, posterior corners widely and posterior margin narrowly egg-yolk yellow. Meso- and metaster-
num, legs and ventral part of abdomen sepia, last sternite honey yellow with apical bifurcation sepia. Scutellum and elytra sepia, each elytron with apical honey-yellow spot.

Male. Head moderately elongate; eyes of medium size, slightly protruding; head across eyes approximately as wide as pronotum, temporal margins arcuately narrowing posteriorly; surface of head very finely punctate and yellow pubescent, semilustrous. Antenna moderately exceeding abdominal apex. Pronotum slightly wider than long, anterior margin widely rounded; anterior corners obtuse, very slightly rounded; lateral margins moderately concave, posterior corners obtusely rounded; posterior margin protruding apicad, rounded; surface of pronotum sculptured and pubescent similarly to head, semilustrous. Elytra finely rugulose-lacunose, finely yellow pubescent, semilustrous. Last abdominal segments as in Figs. 37–39. Aedeagus as in Fig. 15.

Female unknown.

Length (♂): 2.9 mm.

**Differential diagnosis.** *Malthodes cyprogenius* sp. nov. is similar to *M. fritzlari* sp. nov., from which it differs by the much shorter and latero-apically rounded last tergite, wider bifurcation of the last sternite, longer laterophyses of the aedeagus and somewhat different apex of the ventral part of the aedeagus. It is also similar to *M. lysosensis* sp. nov. and *M. anadyomenae* sp. nov., from which it differs by the absence of the median longitudinal groove on the ventral side of the last sternite.

**Etymology.** *Cyprogenius* is an adjective derived from Cyprus and Latin *genare* (to give birth), meaning born or created in Cyprus.

**Distribution.** Cyprus.

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**Malthodes denizlianus lesvosensis** ssp. nov.

*(Figs. 40–42)*

**Type locality.** Greece, Lesvos Island, 1 km east of Kato Stavros, 39°02.2′N 26°16.7′E, 175 m a.s.l.

**Type material.** HOLOTYPE: ♂, ‘GREECE – LESVOS, ca. 1 km E KATO STAVROS, 39°02.2′N, 26°16.7′E; 175 m, (field, pasture), 2.iv.2007, Jiří Hájek leg. [white label, printed]’ (NMPC).

**Differential diagnosis.** *Malthodes denizlianus lesvosensis* ssp. nov. does not differ in its habitus and coloration from the two already known subspecies, *M. denizlianus denizlianus* Wittmer, 1970 (Turkey: Denizli and Muğla Provinces) and *M. denizlianus bergamensis* Švihla, 2002 (Turkey: Izmir Province). The last abdominal segments of *M. d. lesvosensis* show a combination of characters of both subspecies: the last tergite is almost identical as in *M. d. bergamensis* in lateral view but is longer and more slender in dorso-caudal view, whereas the last sternite resembles more that of *M. d. denizlianus* except for being more deeply emarginate apically (cf. ŠVHLA 2002).

**Etymology.** Named according to the type locality.

**Distribution.** Greece: Lesvos Island.

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**Malthodes andreasi** sp. nov.

*(Figs. 16, 43–45)*

**Type locality.** Turkey, Antalya Province, pass 18 km northeast of Belen, 36°28′38″N 32°23′16″E, 1550 m a.s.l.

**Type material.** HOLOTYPE: ♂, ‘TURCIA m., Prov. Antalya, 18 km NE Demirtas [= Belen], Pass bei [= about] 1550 m, 36°28′38″N, 32°23′16″E, coniferous forest, shady grass, leg. A. Kopetz, KF [white label, printed]’ (NMEG).

**Paratypes: 11 ♀♀ 1 ♂, same data as holotype (AKKG, NMPC).**
Description. Coloration. Body entirely sooty, only mandibles, knees and sometimes very narrow posterior margin of pronotum slightly paler.

Male. Eyes of medium size, protruding; head across eyes moderately wider than pronotum, temporal margins almost straightly narrowing posteriorly; surface of head finely punctate and yellow pubescent, semilustrous. Antenna slightly exceeding abdominal apex. Pronotum by one fourth wider than long, anterior margin very slightly convex, nearly straight in middle portion, anterior corners obtusely rounded, lateral margins slightly concave, posterior corners obtusely rounded, posterior margin moderately protruding apicad, widely rounded; surface of pronotum finely rugose, finely and sparsely yellow pubescent, matt. Elytra finely rugulo-se-lacunose and yellow pubescent, matt, semilustrous basally. Last abdominal segments as in Figs. 43–45; last sternite with median longitudinal groove along entire length in ventral view. Aedeagus as in Fig. 16.

Female. Eyes smaller and less protruding than in male; head across eyes approximately as wide as pronotum, temporal margins arcuately narrowing posteriorly. Antennae much shorter, presumably not reaching apex of elytra (antennomeres 9–11 missing in the specimen examined). Lateral margins of pronotum straight and converging posteriorly. Wings strongly reduced or completely absent.

Length ($\varphi$): 2.7–3.5 mm.

Differential diagnosis. Malthodes andreasi sp. nov. is similar to M. denizlianus and M. kopetzi Švihla, 2002 but differs from both of them by the almost parallel-sided last tergite, presence of the median longitudinal groove on the ventral side of the last sternite and wider laterophyses of the aedeagus (cf. ŠVIHLA 2002).

Etymology. Dedicated to its collector, Andreas Kopetz (Erfurt-Kerspleben, Germany).

Distribution. Southern Turkey.

Malthodes paveli sp. nov.
(Figs. 17, 46–48)

Type locality. Iran, Lorestan Province, Do Rūd.


Description. Coloration. Head sepia, narrow median longitudinal line between eyes and mouthparts rusty, antennae chestnut brown. Prothorax egg-yolk yellow, narrow anterior portions of lateral margin and incomplete, indistinctly delimited, cross-shaped median spot on disc chestnut brown to sepia. Meso- and metasternum and legs sepia; abdomen egg-yolk yellow, each sternite excluding the last one with pair of median sepia spots. Scutellum and elytra sienna, each elytron with egg-yolk yellow apical spot.

Male. Head elongate; eyes small, only moderately protruding; head across eyes approximately as wide as pronotum; surface of head very finely imbricate-punctate, finely yellow pubescent, matt. Antenna presumably not reaching elytral apex (antennomeres 8–11 missing in the examined specimen). Pronotum as long as wide; anterior margin very slightly concave, nearly straight, anterior corners rounded; lateral margins straight, very slightly converging posteriorly; posterior corners rounded, posterior margin protruding apicad, rounded; surface of pronotum sparsely and finely punctate and yellow pubescent, semilustrous. Elytra finely
rugulose-lacunose, finely and sparsely yellow pubescent, semilustrous. Last abdominal segments as in Figs. 46–48. Aedeagus as in Fig. 17.

Female unknown.

Length (♂): 2.5 mm.

**Differential diagnosis.** *Malthodes paveli* sp. nov. appears to be similar in the structure of the aedeagus to *M. denizlianus*, *M. kopetzi* and *M. andreasi* sp. nov. It differs from these species by the slender, nearly parallel-sided last sternite and the presence of two pairs of very slender laterophyses of the phallus (cf. ŠVHLA 2002).

**Etymology.** Dedicated to its collector, Pavel Průdek (Brno, Czech Republic).

**Distribution.** Western Iran.

*Malthodes lycicus* sp. nov. (Figs. 18, 49–51)

**Type locality.** Turkey, Antalya Province, pass 18 km northeast of Belen, 36°28′38″N 32°23′16″E, 1550 m a.s.l.

**Type material.** **HOLOTYPE:** ♂ "TURCIA m., Prov. Antalya, 18 km NE Demirtas [= Belen], Pass bei [= about] 1550 m, 36°28′38″N 32°23′16″E, blühende Bäume, Kiefernwald [= flowering trees, pine forest], 26.v.2006, leg. A Kopetz [white label, printed]" (NMEG). **PARATYPE:** 1 ♂, same data as holotype (NMPC).

**Description.** Coloration. Head black, mouthparts rusty to sienna. Antennae black, antennomere 1, base of antennomere 2 narrowly or antennomeres 1–2 entirely honey yellow. Prothorax chestnut brown, both anterior and posterior margins narrowly egg-yolk to honey yellow, sometimes also indistinctly delimited, irregular median stripe egg-yolk to honey yellow. Meso- and metasternum black, their epimera lemon yellow; ventral part of abdomen sepia, sternites bordered with yellow, last abdominal segment entirely honey yellow. Legs sepia, knees somewhat paler. Scutellum and elytra sepia, each elytron with lemon-yellow apical spot.

Male. Head moderately elongate; eyes small but protruding; head across eyes approximately as wide as pronotum, temporal margins arcuately narrowing posteriorly. Surface of head very finely and sparsely punctate, finely and sparsely grey pubescent, lustrous. Antenna

![Figs. 49–51. Malthodes lycicus sp. nov. (holotype): 49 – last abdominal segments of male, lateral view; 50 – apical part of last sternite of male, ventro-caudal view; 51 – last tergite of male, dorso-caudal view.](image)
reaching abdominal apex. Pronotum moderately wider than long, anterior margin straight, anterior corners rounded, lateral margins straight, slightly converging posteriorly, posterior corners strongly rounded, posterior margin moderately protruding apicad, rounded. Surface of pronotum more densely punctate than that of head, finely grey pubescent, semilustrous. Elytra finely rugulose-lacunose, finely grey pubescent, semilustrous. Last abdominal segments as in Figs. 49–51. Aedeagus as in Fig. 18.

Female unknown.

Length (♂): 2.9–3.2 mm.

**Differential diagnosis.** *Malthodes lycicus* sp. nov. is similar to *M. dimidiaticollis* (Rosenhauer, 1847) from central and eastern Europe and the Near East and to *M. dilizhanus* Švihla, 1983 from Armenia in the shape of the last abdominal segments. It differs from both species by the longer and apically truncate branches of the bifurcation of the last tergite and narrower laterophyses of the aedeagus (cf. Wittmer 1978 and Švihla 1983).

**Etymology.** Named after Lycia, the ancient kingdom in southern Turkey, whose territory included the type locality.

**Distribution.** Southern Turkey.


(Fig. 20)


**Comments.** Differences in the shape of the last abdominal segments in males of *Malthodes besucheti besucheti* and *M. besucheti bucakensis* were described and illustrated already by Wittmer (1970), who wrote ‘[…] indem der Kopulationsaparat ein wenig in der Form abweicht und ca. 20/22 % grösser ist als bei dieser [M. besucheti]’. The aedeagus of *M. bucakensis* differs significantly from that of *M. besucheti* by the narrower and apically turned laterophyses and different apex of the ventral part of the aedeagus (Figs. 19–20). I consider these differences as being of specific value and raise *Malthodes besucheti bucakensis* to a separate species, *M. bucakensis*.

**Conclusions**

The species richness of the genera *Malthinus* and *Malthodes* in the western Palaearctic and particularly the Mediterranean Region is surprising. Both genera appear to be highly endemic in all ecosystems except semi-deserts and deserts, especially in mountain areas. The group is probably still poorly known and discovery of many additional new species may be expected in the future. For example, six species have been known from Cyprus (all but one endemic)
prior to this study; five new ones based on only two collecting trips to Cyprus are described in the present paper. For these reasons, no identification key is provided until more complete data on the western Palaearctic fauna are available.

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