

Contribution to the knowledge of the subfamily Malthininae (Coleoptera: Cantharidae) of Turkey

Příspěvek k poznání podčeledi Malthininae (Coleoptera: Cantharidae) Turecka

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Abstract. Four new species of the subfamily Malthininae from Turkey are described and illustrated: *Malthinus wittmeri* sp. n. (southern Turkey), *Malthodes rolciki* sp. n. (northwestern Turkey), *M. vavrai* sp. n. (northwestern Turkey) and *M. zahradniki* sp. n. (southwestern Turkey). *Malthodes debilis* Kiesenwetter, 1852 and *Malthodes montandoni* (Pic, 1922) are recorded for the first time from Turkey.

The most important papers dealing with the subfamily Malthininae of Turkey were published by Wittmer (1970, 1974a). The present paper contains further contribution to the knowledge of Turkish Malthininae.

MATERIAL AND METHODS

Most of the material, on which this study is based, were collected during an expedition to Turkey in 1996, organized by Jakub Rolčík.

Colour classification used in the descriptions follows Paclt (1958). The localities of the type material are quoted according to the original labels, while those of other material are transcribed.

RESULTS

Malthinus wittmeri sp. n.

(Figs 1, 2)

Description. Head sooty, frons and mouthparts lemon yellow, antennae sepia, antennomeres 1 and 2 egg-yolk yellow. Pronotum chestnut, very narrowly lemon yellow bordered. Legs yellow, base of anterior and middle tibiae, terminal third of middle femora and terminal half of posterior femora chestnut. Elytra chestnut, middle portion somewhat lighter, apex of each elytron with a lemon yellow spot. Prosternum and abdomen yellow, meso- and metasternum chestnut.

Male. Eyes large and vaulted, head across eyes more than 0.25 wider than pronotum. Antennae reaching base of apical spot of elytra. Surface of head very finely and sparsely punctate and pubescent, lustrous. Pronotum as long as wide, anterior margin and anterior angles rounded, lateral margins divergent in anterior 0.5, than subparallel, slightly sinuate. Posterior angles obtuse, posterior margin slightly rounded. Pronotal punctation and pubescence similar to head, surface lustrous. Posterior femur and tibia as in Fig. 2. Surface of elytra finely rugulose, with shallow punctures, lines of punctures only very slightly indicated in basal third of elytral length. Aedeagus as in Fig. 1.

Length: 3.8 mm.

Female unknown.

Type material. Holotype, ♂, "TR, prov. Mersin, Güzeloluk, 1200-1400 m, 11.-12.vi.1996, V. Švihla lgt.", deposited in the author's collection, National Museum, Praha.

Distribution. Southern Turkey.

Name derivation. This species is dedicated to † Walter Wittmer (Praha), who pioneered the modern approach to the study of the genus.

Differential diagnosis. *Malthinus wittmeri* sp. n. belongs to *M. longithorax* Pic, 1899 species group (Wittmer 1974a). Due to the form of the aedeagus, it is closely related to *M. brancuccii* Wittmer, 1978, from which it differs by the form of the laterophysae and by the more basally situated emargination on the hind tibia (cf. Wittmer 1978).

***Malthodes rolčiki* sp. n.**

(Figs 3, 5)

Description. Head black, antennae sooty, mandibles honey yellow. Pronotum black, posterior angles sometimes narrowly honey yellow to sooty, prosternum honey yellow, meso- and metasternum black. Legs chestnut brown to sooty, anterior tibiae sometimes somewhat paler. Abdomen chestnut brown, abdominal segments sometimes narrowly yellow bordered. Elytra sepia, each elytron with a yellow apical spot.

Male. Form of head as in Fig. 3. Antennae moderately exceeding abdomen. Surface of head sparsely and finely punctate and pubescent, semilustrous; pubescence brown. Pronotum slightly wider than long, anterior margin nearly straight, anterior angles moderately hook-shaped, lateral margins very slightly converging posteriad, roundly emarginate before base, posterior angles rounded, posterior margin widely rounded. Pronotum more sparsely punctate and pubescent than head, surface lustrous, with a pair of small gibbosities in its anterior half. Elytra finely rugulose, with fine brown pubescence, semilustrous, apical spots lustrous. Aedeagus as in Fig. 5.

Female. Eyes smaller than in male, head across eyes as wide as pronotum. Antenna shorter, not reaching elytral apex. Surface of head rugulose, matt.

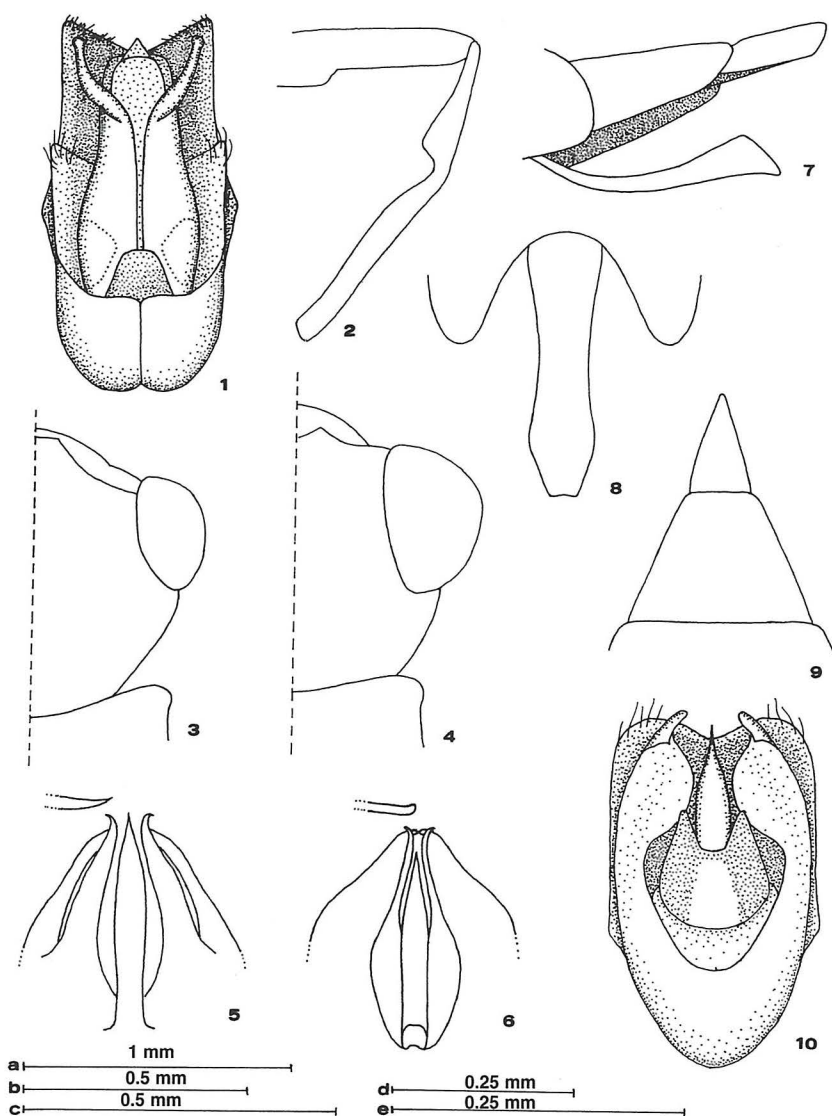
Length ♂♀: 3.5-7 mm.

Type material. Holotype, ♂, "TR, prov. Kastamonu, Agli, 56 km NNW Kastamonu, 22.vi.1996, V. Švihla lgt."; paratypes: the same data, J. Rolčík, V. Švihla, J. Vávra & P. Zahradník lgt., 40 ♂♂, 22 ♀♀; "TR, prov. Zonguldak: Safranbolu, 1000 m, 4.-5.vi.1996, V. Švihla & J. Vávra lgt.", 3 ♂♂, 2 ♀♀; "TR, 20 km E Karabük, 22.-23.vi.1996, V. Švihla lgt.", 1 ♂; "TR, prov. Bolu: Abant Golü, 1200 m, 3.-25.vi.1996, J. Rolčík & V. Švihla lgt.", 5 ♂♂; "TR, 8 km ENE Abant, 4.vi.1969, W. Wittmer lgt.", 1 ♂; "TR, Bafra, 19.v.1967, W. Wittmer lgt.", 7 ♂♂, 2 ♀♀. Holotype and numerous paratypes deposited in the author's collection, National Museum, Praha, some paratypes also in the collection of J. Rolčík (Praha), J. Vávra (Ostrava), P. Zahradník (Praha) and Naturhistorisches Museum, Basel.

Distribution. Northwestern Turkey.

Name derivation. This species is dedicated to one of its collectors, my friend and Cleridae specialist Jakub Rolčík (Praha).

Differential diagnosis. *Malthodes rolčiki* sp. n. is closely related and very similar to *Malthodes balfourbrownnei* Wittmer, 1966, from which it differs by the following characters: eyes smaller



Figs 1-10. 1-2: *Malthinus wittmeri* sp. n.: 1 - aedeagus; 2 - hind femur and tibia; 3-4: head, semischematically; 3 - *Malthodes rolciki* sp. n.; 4 - *M. balfourbrownei* Wittmer; 5-6: phallus and laterophysae, ventral view and ventral branch of laterophysae, caudal view (above): 5 - *M. rolciki* sp. n.; 6 - *M. balfourbrownei* Wittmer; 7-10: *M. vavrai* sp. n.: 7 - last abdominal segments, lateral view; 8 - last ventrite, ventral view; 9 - last tergites, dorsal view; 10 - aedeagus. Scale a - Figs 2, 4; b - 3-4; c - 1, 5, 6; d - 7-9; e - 10.

Obr. 1-10. 1-2: *Malthinus wittmeri* sp. n.: 1 - aedeagus; 2 - zadní stehno a holeň; 3-4: hlava, poloschematicky; 3 - *Malthodes rolciki* sp. n.; 4 - *M. balfourbrownei* Wittmer; 5-6: phalus a laterofýzy, ventrální pohled a spodní větev laterofýzy, zadní pohled (nahofe); 5 - *M. rolciki* sp. n.; 6 - *M. balfourbrownei* Wittmer; 7-10: *M. vavrai* sp. n.: 7 - poslední abdominální segmenty, laterální pohled; 8 - poslední ventrit, ventrální pohled; 9 - poslední tergity, dorzální pohled; 10 - aedeagus. Měřítka a - obr. 2, 4; b - 3-4; c - 1, 5, 6; d - 7-9; e - 10.

and less prominent (Figs 3-4), pronotum often entirely black, phallus slightly longer and under branch of laterophyse tapered apically (Figs 5-6).

Malthodes debilis Kiesenwetter, 1852

Material examined. Turkey, prov. Antalya, Elmalı env., Avlanbeli gec., 800-1600 m, 14.-17.vi.1996, V. Švihla lgt., 1 ♂ (author's collection).

Distribution. France, Switzerland, Austria, Moravia, Slovakia, Hungary, Croatia, Romania, Caucasus, southern Russia (Sarepta) (Wittmer 1970, 1992; Švihla 1978). New species for the fauna of Turkey.

Malthodes vavrai sp. n.

(Figs 7-10)

Description. Head black, rest of the body sepia.

Male. Eyes small, prominent, head across eyes as wide as pronotum. Antennae reach abdominal apex. Surface of head very sparsely and finely punctate and pubescent, lustrous. Pronotum about 0.25 wider than long, both anterior and posterior margin rounded, anterior angles slightly hook-shaped, lateral margins slightly converging posteriorly, posterior angles rounded. Pronotal punctation and pubescence similar to that of head, surface lustrous, with shallow, oval, median longitudinal impression occupying the length of pronotum. Elytra finely rugulose, sparsely and finely pubescent, semilustrous. Three last abdominal segments and aedeagus as in Figs 7-10.

Length: 2.6 mm.

Female unknown.

Type material. Holotype, ♂, "TR, prov. Bolu, Abant Gölü, 4.vi.1996, V. Švihla lgt.", deposited in the author's collection, National Museum, Praha.

Distribution. Northwestern Turkey.

Name derivation. This species is dedicated to my friend and Leiodidae specialist Jiří Vávra (Ostrava).

Differential diagnosis. The new species is closely related to *M. talyshensis* Wittmer, 1972, from which it differs by the form of the last tergite, which is slightly dilated apically in lateral view, by the form of the last ventrite, preapical sides of which are turned inwards, by the shallowly emarginate apex of the ventral plate of the aedeagus (rounded in *M. talyshensis*), by the form of the laterophysae as well as by the entirely brown antenna, pronotum and elytra (cf. Wittmer 1972).

Malthodes montandoni (Pic, 1922)

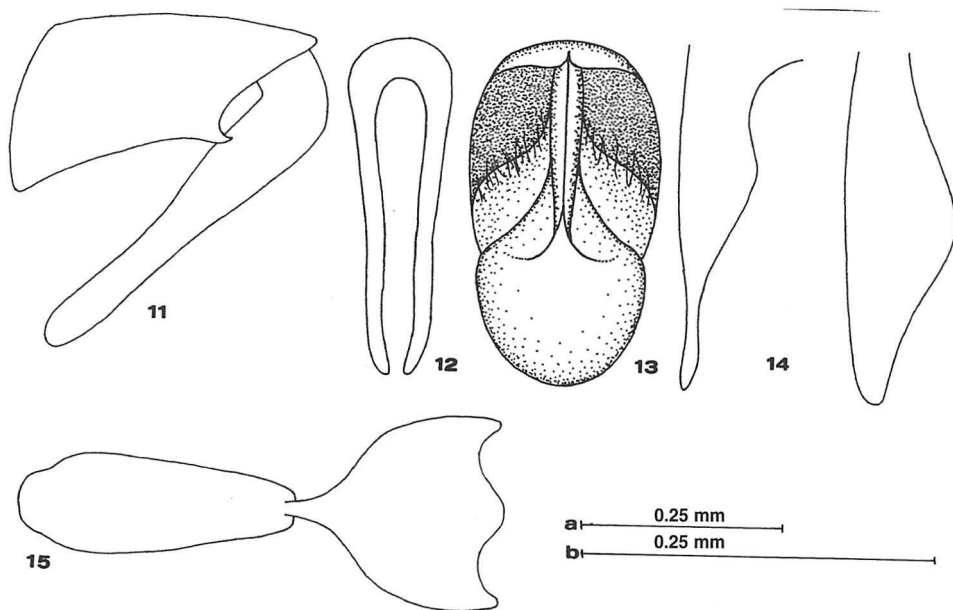
Material examined. Turkey, prov. Canakkale, Ortaca-Kirikale, 15.v.1983, Rausch & Ressler lgt., 10 ex. (coll. Naturhistorisches Museum, Basel).

Distribution. Described from Romania. New species for the fauna of Turkey.

Malthodes zahradniki sp. n.

(Figs 11-15)

Description. Head sepia, antennae, legs and elytra chestnut, antennomere 1 slightly lighter. Pronotum egg-yolk yellow with large, not sharply delimited, anterolateral chestnut spots. Ventral



Figs 11-15. *Malthodes zahradniki* sp. n.: 11 - last two tergites, lateral view; 12 - last tergite, ventral view; 13 - aedeagus; 14 - half of penultimate ventrite, ventral and lateral view; 15 - last ventrite, dorsal view. Scale a - Figs 11, 12, 14, 15; b - 13.

Obr. 11-15. *Malthodes zahradniki* sp. n.: 11 - dva poslední tergity, laterální pohled; 12 - poslední tergit, ventrální pohled; 13 - aedeagus; 14 - polovina předposledního ventritu, ventrální a laterální pohled; 15 - poslední ventrit, dorzální pohled. Měřítka a - obr. 11, 12, 14, 15; b - 13.

part of body chestnut, abdominal segments becoming progressively paler, so that last two ones are honey yellow.

Male. Eyes large and prominent, head across eyes slightly wider than pronotum. Antennae almost reach elytral apex. Surface of head very sparsely and very finely punctate and pubescent, lustrous. Pronotum about 0.25 wider than long, anterior margin straight, anterior angles form a small hook, lateral margins parallel-sided, posterior angles obtusely rounded, posterior margin widely rounded. Pronotal punctation and pubescence similar to that of head, surface lustrous. Elytra very finely punctate and pubescent, semilustrous. Two last abdominal segments and aedeagus as in Figs 11-15.

Length: 2.5 mm.

Female unknown.

Type material. Holotype, ♂, "TR, prov. Antalya, Elmali env., Avlanbeli gec., 800-1600 m, 14.-17.vi.1996, V. Švihla lgt.", deposited in the author's collection, National Museum, Praha.

Distribution. Southwestern Turkey.

Name derivation. This species is dedicated to my friend and Anobiidae specialist Petr Zahradník (Praha).

Differential diagnosis. *Malthodes zahradniki* sp. n. belongs to the *M. distinctithorax* Pic, 1901 species group, defined by Wittmer (1970). It closely resembles *Malthodes osellai* Wittmer, 1974 and *M. rydhi* Švihla, 1994, from which it differs by the different form of the last abdominal seg-

ments, especially of the last ventrite, apex of which is trilobate in *M. zahradniki* sp. n. (bilobate in two above mentioned species) and also by the form of aedeagus (cf. Wittmer 1974b, Švihla 1994).

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SOUHRN

V práci jsou popsány následující druhy podčeledi Malthininae: *Malthinus wittmeri* sp. n. (jižní Turecko), nejbliže příbuzný k *M. brancuccii* Wittmer, 1978; *Malthodes rolciki* sp. n. (severozápadní Turecko), příbuzný k *M. balfourbrownnei* Wittmer, 1966; *Malthodes vavrai* sp. n. (severozápadní Turecko) z příbuzenstva *M. talyshensis* Wittmer, 1972; a *Malthodes zahradniki* sp. n. (jihozápadní Turecko), patřící do druhové skupiny *M. distinctithorax* Pic, 1901, definované Wittmerem (1970). Druhy *Malthodes debilis* Kiesenwetter, 1852 a *M. montandoni* Pic, 1922 jsou poprvé hlášeny z Turecka.