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Contribution to the knowledge of the genus *Rhagonycha* Eschscholtz (Coleoptera, Cantharidae) II

by V. Švihla

Abstract: New *Rhagonycha* species are described and illustrated: *R. icelica* (Turkey), *R. dvoraki* (Turkey), *R. amaguensis* (Siberia), *R. mlikovskyi* (Siberia: Buryatia; Corea), *R. kazantsevi* (Siberia: Primorie), *R. gansuensis* (China: Gansu), *R. kanwonensis* (Corea), *R. dolini* (Siberia: Irkutsk reg., Sakhalin), *R. peteri* (Turkmenistan), *R. karsensis* (Turkey, Iran), *R. luristana* (Iran, Turkey), *R. nevadensis* (Spain), *R. fulvaliena* (Turkey, Aegean Is.). New name *R. berbera* n.n. is created for *R. marocana* Švihla, 1990 nec Pic, 1949. *R. carpathica* Ganglbauer, 1896 and *R. rassouli* Wittmer, 1981 are removed from synonymies and revalidated. *R. basarukini* Kazantsev n.stat. is raised to specific status from *R. nopporensis basarukini* Kazantsev. New synonymies are stated: *R. quadricollis* var. *fedjensis* Pic, 1901, n.syn. = *R. quadricollis* Kiesenwetter, 1851; *R. semilimbipennis* Pic, 1917, n.syn. = *R. hesperica* Baudi, 1859; *R. galiciana* Gougelet, 1859, n.syn. = *R. varians* (Rosenhauer, 1856). New data of distribution of 20 species are given.

Key words: Coleoptera Cantharidae – *Rhagonycha* – taxonomy – distribution – new species – new name – new status – new synonymies.

This work follows up my preceding publication on the genus *Rhagonycha* (ŠVIHLA, 1993b), giving evidence of the surprising specific richness of this genus.

Material

Material on which this study is based is deposited in the following institutions:

NHMB = Naturhistorisches Museum, Basel, Dr. Michel Brancucci

VSPC = author's collection deposited in the National Museum, Praha

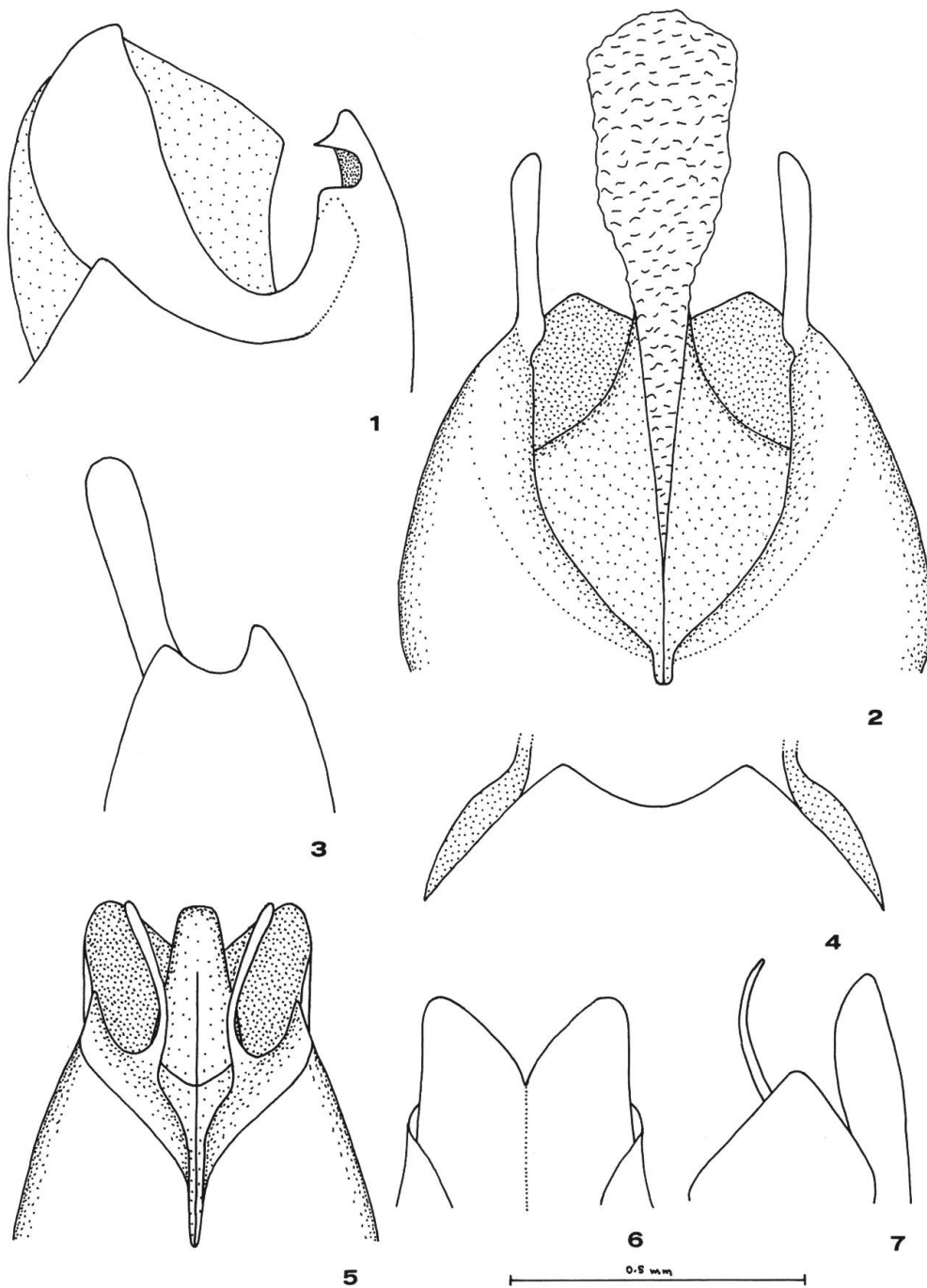
I am very obliged to Dr. Michel Brancucci for the loan of interesting material and to Dr. Walter Wittmer, who helped me to assemble the material.

A. Taxonomic part

***Rhagonycha icelica* n.sp.**

Fig. 1.

Head antennae, pronotum, scutellum, legs and ventral part of body black, elytra yellowish brown. Head matt, pronotum and elytra semilustrous.



Figs 1–7: 1, *Rhagonycha icelica* n.sp., aedeagus, lateral view. 2–4: *R. dvoraki* n.sp.: 2, aedeagus, ventral view. 3, aedeagus, lateral view. 4, dorsal part of aedeagus. 5–7: *R. amaguensis* n.sp.: 5, aedeagus, ventral view. 6, dorsal part of aedeagus. 7, aedeagus, lateral view.

Male: Eyes large and convex, head with eyes very slightly narrower than pronotum. Antenna reaches 3/4 of elytral length. Pronotum moderately wider than long, anterior margin and anterior angles rounded, lateral margins sinuately diverging posteriorly, posterior angles obtusely tapered, posterior margin almost straight. Elytra slightly dilated posteriorly. Aedeagus Fig. 1.

Female unknown.

Length ♂: 10.0 mm.

Holotype ♂ (NHMB): Türkei: Icel: W Hortu, 36°23'N, 33°12'E, 1300 m, 6.VI.1985, Aspöck et Rausch.

Distribution: S Turkey.

Name derivation: Named after its type locality.

The new species is by its habitus and the form of aedeagus very similar to *Rhagonycha lundbergi* Švihla, but differs by the rounded apex of paramera and, especially, by the central tooth on the inner part of apex of the dorsal portion of the aedeagus (cf. ŠVIHLA, 1993). The last character is similar to that of *R. prijutensis* Kazantsev, but the other parts of the aedeagus, as well as the colouration of the body are different in both species.

***Rhagonycha dvoraki* n.sp.**

Figs 2–4.

Head black, from antennal pits anteriorly yellow, maxillary palpi brown. Antenna dark brown, antennal segments 1 and base of segment 2 yellow. Pronotum and legs yellow, tarsi brown. Scutellum, meso- and metasternum and abdomen excluding yellow last segment black. Elytra yellow with darkened apex. Surface of head matt, pronotum and elytra semilustrous.

Male: Eyes relatively small, convex, head across eyes slightly narrower than pronotum. Antenna reaches elytral midlength. Pronotum distinctly wider than long, anterior margin widely rounded, anterior angles rounded, lateral margins moderately converging anteriorly, slightly sinuate, posterior angles almost rectangular, obtuse, posterior margin sinuate. Elytra dilated posteriorly. Aedeagus Figs 2–4.

Female unknown.

Length ♂: 7.5 mm.

Holotype ♂ (VSPC): Turc. or.: Antakya, 23.IV.1992, M. Dvořák

Distribution: S Turkey.

Name derivation: This species is named after its collector, my friend Mr Miroslav Dvořák, specialist in the families Staphylinidae and Meloidae.

The new species is by its colouration somewhat similar to *R. lutea* (Müller), but according to the type of aedeagus it is related to *R. diversipes* Pic, from which it differs especially by the extremely shortened dorsal part of the aedeagus.

Rhagonycha amaguensis n.sp.

Figs 5–7.

Body blackish brown, semilustrous, antennae and legs dark brown.

Male: Eyes convex, head including eyes slightly but distinctly wider than pronotum. Antenna reaches elytral midlength. Pronotum slightly wider than long, lateral margins straight, slightly converging anteriorly, anterior angles rounded, posterior ones obtusely tapered, both anterior and posterior margin very slightly rounded. Elytra moderately wider than pronotum, slightly dilated posteriorly. Aedeagus Figs 5–7.

Female: Eyes smaller than in male, head including eyes very slightly narrower than pronotum. Antenna shorter, almost reaches elytral midlength. Pronotum moderately wider than in male, its lateral margins rounded.

Length ♂♀: 4.5 mm.

Holotype ♂ and 1 paratype ♀ (NHMB): Kudia River (? = Kuda river, tributary stream of Angara river, near Irkutsk), Amagu Siberia, July 1923.

Distribution: Russia: Siberia, ?Irkutsk region.

Name derivation: Named according to its type locality.

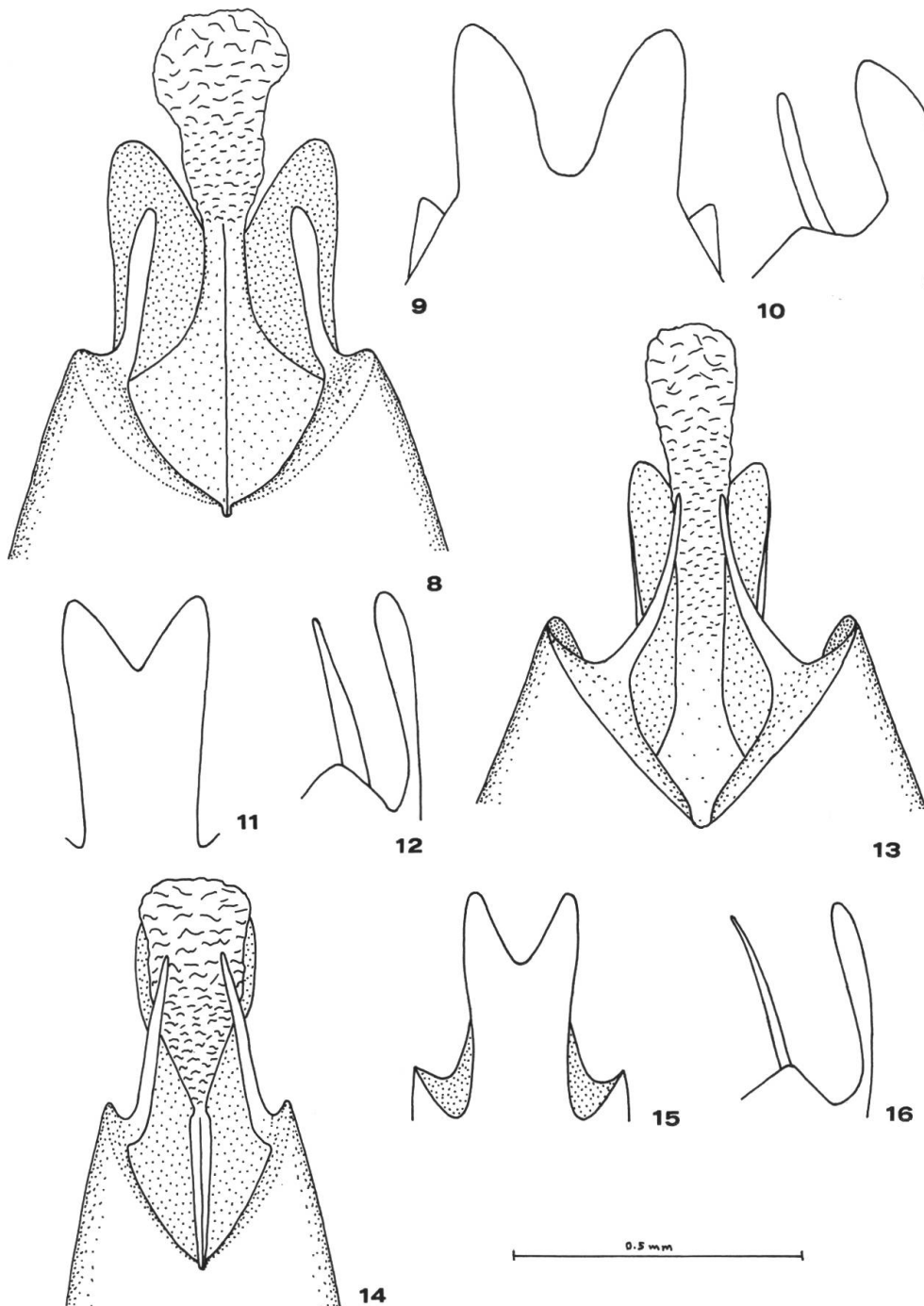
This species is related to *R. planicollis* Kazantsev, form which it differs by narrower paramera and by shorter and less deeply emarginate dorsal part of aedeagus (cf. KAZANTSEV, 1994).

Rhagonycha mlikovskyi n.sp.

Figs 8–10.

Head, pronotum and elytra black, semilustrous, first two antennal segments light brown, rest of antenna and femora dark brown to black, knees, tibiae and tarsi lighter.

Male: Eyes convex, head including eyes as wide or very slightly wider than pronotum. Antenna reaches elytral midlength. Pronotum slightly to distinctly wider than long, lateral margins moderately rounded, slightly converging anteriorly, both anterior and posterior margins and angles slightly rounded. Elytra very slightly dilated posteriorly. Aedeagus Figs 8–10.



Figs 8–16: 8–10: *Rhagonycha mlikovskyi* n.sp.: 8, aedeagus, ventral view. 9, dorsal part of aedeagus. 10, aedeagus, lateral view. 11–13: *R. gansuensis* n.sp.: 11, dorsal part of aedeagus. 12, aedeagus, lateral view. 13, aedeagus, ventral view. 14–16: *R. kanwonensis* n.sp.: 14, aedeagus, ventral view. 15, dorsal part of aedeagus. 16, aedeagus, lateral view.

Female unknown.

Length ♂: 5.1–6.1 mm.

Holotype ♂ (VSPC): Sib., Buryatia: Amut lake, VI.1994, J. Mlíkovský. Paratype ♂ (NHMB): Korea, Ryanggang Prov.: Paekdu-san-mi yong, 1500 m, no. 1353, 27.VI.1988, O. Merkl et Gy. Szél.

Distribution: Russia: Buryatia; Coreia.

Name derivation: This species is named after one of its collectors, my friend Dr. Jiří Mlíkovský, well-known ornitologist, whom I am indebted for providing of very interesting material from Buryatia.

This species is nearly related to *R. sibirica* Wittmer, from which it differs by the form of paramera, which is narrower from lateral view and by shorter and more widely emarginate dorsal part of aedeagus (cf. WITTMER, 1971 and KAZANTSEV, 1994).

Rhagonycha kazantsevi n.sp.

Rhagonycha lederi sensu KAZANTSEV, 1994, Zool. Zhurnal 73: 196.

Body brownish black to black, semilustrous, first two antennal segments and knees yellow, rest of antennae and legs brown.

Male: Eyes convex, head across eyes approximately as wide as pronotum. Antenna reaches 3/4 of elytral length. Pronotum very slightly wider than long, almost quadrate, lateral margins straight, anterior and posterior ones moderately rounded, anterior angles rounded, posterior ones obtusely rectangular. Elytra very slightly wider than pronotum, very slightly dilated posteriorly. Aedeagus see KAZANTSEV (1994) under *R. lederi* Pic.

Female unknown to me.

Holotype ♂ and 1 ♂ paratype (VSPC): Russia: S Primorje (Ussuri), 30 km E Ussurijsk, env. Kamenushka, 31 May – 6 June 1990, S. Kazantsev / *Rhagonycha lederi* Pic, Kazantsev det. 93.; USSR, Primorskij kr., Arsenev env., 27.V.–5.VII.1991, O. Sausa, 1 ♂ paratype (NHMB).

Distribution: Russia: Primorie.

Name derivation: This species is named after Dr. Sergej V. Kazantsev, who intensively examined *Rhagonycha* species from Siberia and adjacent regions, who kindly provided me with Siberian material.

Through the kind loan of material I was given a chance to examine Wittmer's collection of black *Rhagonycha* species of Eastern Palaearctic, including material of *R. lederi* Pic, compared by WITTMER (1971) with the holotype. The examined specimens significantly differ both from the illustration by KAZANTSEV (1994) and from

specimens determined by himself. *R. kazantsevi* n.sp. is more slender, with longer antenna, the paramera is shorter, wider and less longitudinally concave than in *R. lederi* Pic and the dorsal part of the aedeagus is parallel-sided in the new species (cf. WITTMER, 1971).

Rhagonycha gansuensis n.sp.

Figs 11–13.

Body completely black, semilustrous, knees and tarsi sometimes dark brown.

Male: Eyes convex, head across eyes very slightly narrower than pronotum. Antenna very slightly exceeds over elytral midlength. Pronotum slightly wider than long, its lateral margins sinuately converging anteriorly, both anterior and posterior margin rounded, anterior angles rounded, posterior ones rectangular, sharp. Elytra slightly dilated posteriorly. Aedeagus Figs 11–13.

Female unknown.

Length ♂: 5.6 mm.

Holotype ♂ (VSPC): China, Gansu reg.: Luqu, 2500 m, 11.VII.1990, M. Nikodým.

Distribution: China: Gansu.

Name derivation: Named after its type locality.

Very nearly related to *R. coreana* Pic, from which it differs by entirely black colouration of antenna and, especially, by the form of dorsal part of aedeagus (cf. WITTMER, 1971 and KAZANTSEV, 1994). Form of paramera is very similar in both species, but it is very slightly curved dorsally in *R. coreana* Pic, while it is straight in *R. gansuensis* n.sp.

Rhagonycha kanwonensis n.sp.

Figs 14–16.

Body brown, semilustrous, first two antennal segments and legs light brown.

Male: Eyes convex, head across eyes distinctly wider than pronotum. Antenna reaches elytral midlength. Pronotum slightly wider than long, anterior margin and anterior angles rounded, lateral margins slightly sinuate, very slightly converging anteriorly, posterior angles almost rectangular, obtuse, posterior margin almost straight. Elytra very slightly dilated posteriorly. Aedeagus Figs 14–16.

Female unknown.

Length ♂: 4.5 mm.

Holotype ♂ (NHMB): Korea, Prov. Kanwon: Kum-gang san, Man-mul sar, 30 May 1970, Hung. Zool. Exp. I. in Korea, No. 66, Dr. S. Mahunka et Dr. H. Steinmann.

Distribution: Corea.

Name derivation: Named after its type locality.

R. kanwonensis n.sp. is closely related to *R. gansuensis* n.sp., from which it differs by different colouration, by the antennal segment 2 2.5 times shorter than the antennal segment 1 (about 1/3 shorter in *R. gansuensis* n.sp.), by the form of paramera, which is narrower and almost acute apically in *R. kanwonensis* n.sp. and by the moderately different form of emargination of the dorsal part of aedeagus.

Rhagonycha dolini n.sp.

Figs 17–19.

Body dark brown, semilustrous, first two antennal segments and knees yellow, rest of antennae and legs brown.

Male: Eyes convex, head across eyes slightly narrower than pronotum. Antenna reaches 2/3 of elytral length. Pronotum distinctly wider than long, lateral margins almost parallel-sided, anterior angles and anterior margin rounded, posterior angles obtusely tapered, posterior margin rounded. Elytra very slightly dilated posteriorly. Aedeagus Figs 17–19.

Female: Eyes smaller than in male, antennae slightly shorter.

Length ♂♀: 5.6–6.0 mm.

Holotype ♂ and 1 ♀ paratype (NHMB): Siberia or.: Bajkal, Listvjanka, 30.VI.1974, Exp. Inv. Zool. Cr.; S: Sachalin, Gornoavodsk, 17.VI.1971, V. Dolin, 1 ♂ paratype (VSPC).

Distribution: Russia: Irkutsk reg., Sakhalin.

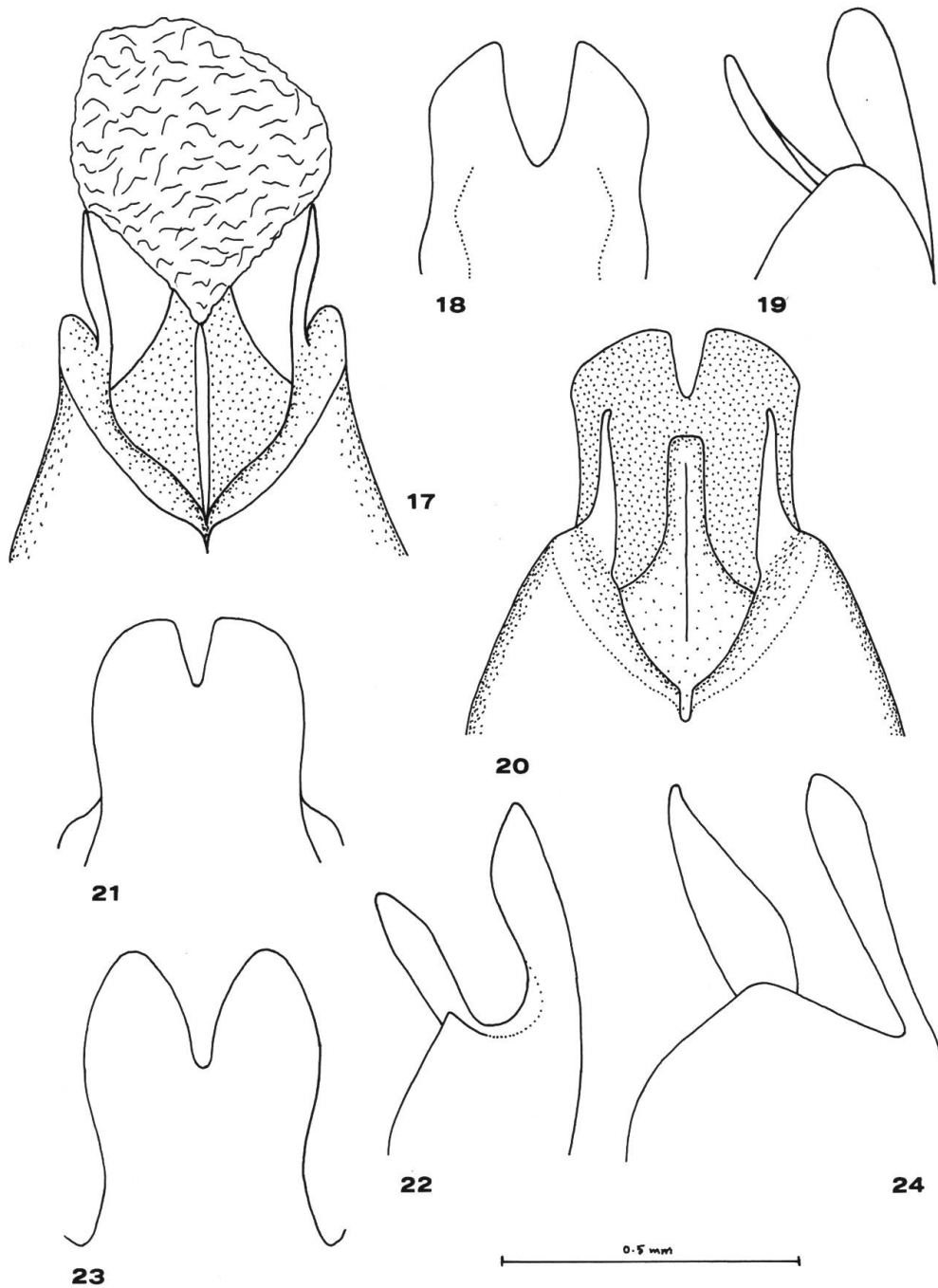
Name derivation: This species is named after its collector, Prof. Vladimir Dolin, specialist in the family Elateridae.

R. dolini n.sp. is related to *R. fonticola* Kazantsev and *R. flavotibialis* Medvedev et Ryvkin. From the former it differs by the more curved paramera from lateral view, from the latter by narrower paramera from lateral view. The dorsal part of aedeagus is also remarkably different and the paramerae are nearly parallel-sided from ventral view in *R. dolini* n.sp. (cf. KAZANTSEV, 1994).

Rhagonycha basarukini Kazantsev n.stat.

Rhagonycha nopporensis basarukini KAZANTSEV, 1994, Zool. Zhurnal 73: 94.

I had the possibility to examine both type materials of *R. nopporensis* Wittmer and two males of *R. nopporensis basarukini* Kazantsev



Figs 17–24: 17–19: *Rhagonycha dolini* n.sp.: 17, aedeagus, ventral view. 18, dorsal part of aedeagus. 19, aedeagus, lateral view. 20–22: *R. karsensis* n.sp.: 20, aedeagus, ventral view. 21, dorsal part of aedeagus. 22, aedeagus, lateral view. 23–24: *R. peteri* n.sp.: 23, dorsal part of aedeagus. 24, aedeagus, lateral view.

from Sakhalin (all NHMB). The differences in the form of paramera found were big enough to justify elevation to specific status.

Rhagonycha carpathica Ganglbauer good species

Rhagonycha carpathica GANGLBAUER, 1896, Ann. Naturhist. Hofmus. 11: 183.

DAHLGREN (1972) synonymised *R. carpathica* Ganglbauer with *R. morio* Kiesenwetter. Material of both species was examined and it was found, that they differ significantly in the form of the paramera. In *R. morio* Kiesenwetter the paramera is flat and sometimes slightly concave basally, while that of *R. carpathica* is apically thickened and so oval in cross section. Other parts of the aedeagus are practically identical.

Material examined: *R. carpathica*: Slovakia: Mlýnský p., VII.1974, 1 ex.; B. Karpaty Mts. V. Lopeník, 22.V.1993, Cunev, 1 ex. (all VSPC); *R. morio*: France, Mt. Dore, Pic, 2 ex. (NHMB).

Rhagonycha peteri n.sp.

Figs 23–24.

Head, pronotum, scutellum, pro- and mesosternum, last two abdominal segments, legs excluding tarsi and first two antennal segments yellowish brown, metasternum, basal abdominal segments, tarsi, most of antenna and elytra black. Surface of head semilustrous, pronotum and elytra lustrous.

Male: Eyes relatively small, convex, head across eyes very slightly wider than pronotum. Antenna reaches 3/4 of elytral length. Pronotum nearly quadrate, anterior margin slightly rounded, anterior angles rounded, lateral margin parallel-sided, very slightly converging anteriorly in front of posterior angles, which are obtusely tapered, posterior margin sinuate. Elytra slightly dilated posteriorly. Aedeagus Figs 23–24.

Female unknown.

Length ♂: 5.5–6.7 mm.

Holotype ♂ and 5 ♂ paratypes (VSPC): Turkmenistan: W Kopet Dag, Tutli Kala pass, 2.–3.V.1993, P. Cate.; Turkmenistan: Kara-Kala Bezirk, Aj-Dere Pass, 1800 m, 28.IV.1993, V. Dolin, 1 ♂; Turkmenien: Tschandyr Gebirge, Umg. Kara-Kala, 1400–1600 m, 1.V.1993, V. Dolin, 1 ♂ all paratypes (NHMB).

Distribution: W Turkmenistan.

Name derivation: This species is named after one of its collectors, my friend, Dr. Peter Cate, specialist in the family Elateridae.

R. peteri n.sp. is closely related to *R. persica* Pic, from which it differs by quite another colouration of the body, by the more tapered apex of the paramera and by the form of the dorsal part of aedeagus, apices of which are not bent ventrally.

***Rhagonycha karsensis* n.sp.**

Figs 20–22.

Head blackish brown, between antennal pits brown, antennae blackish brown, bases of antennal segments 1–5 lighter. Pronotum yellow with central, oval to longitudinal spot, which reaching both anterior and posterior margin. Scutellum blackish brown, elytra yellow with darkened apices. Femora blackish brown, tibiae yellow with darkened tips, tarsi dark brown. Ventral part of body dark brown, last two abdominal segments yellow. Upper surface of body semilustrous.

Male: Eyes small but convex, head across eyes distinctly narrower than pronotum. Antenna slightly exceeds over elytral midlength. Pronotum distinctly transverse, anterior margin and anterior angles rounded, lateral margins converging anteriorly, shallowly emarginate in front of posterior angles, which are obtusely rounded, posterior margin sinuate. Elytra distinctly dilated posteriorly. Aedeagus Figs 20–22.

Female: Eyes smaller than in male, pronotum wider, its lateral margins rounded, elytra relatively wider.

Length ♂♀: 5.8–6.7 mm.

Holotype ♂ and 1 paratype ♀ (NHMB), paratype 1 ♂ (VSPC): Anatolien, Prov. Kars: 10 km südöstl. Karakurt, 1400 m, 9.V.1976, Holzschuh et Ressler; Iran, Luristan: 50 km S Khorramabad, 1700 m, 15.V.1975, Holzschuh et Ressler, 1 ♂ paratype (NHMB).

Distribution: E Turkey, W Iran.

Name derivation: Named after its type locality.

It is related to *R. carolusi* Švihla, from which it differs by another form of paramera and the dorsal part of the aedeagus (cf. ŠVIHLA, 1993) and by another colouration.

***Rhagonycha luristana* n.sp.**

Figs 25–26.

Head black, mouthparts and antennae dark brown. Pronotum completely brown or with widely lighter anterior and posterior corners or yellow with not sharply delimited, brown, mediolongitudinal spot. Legs brown, bases of tibiae sometimes lighter. Scutellum

dark brown, elytra yellow, ventral part of body dark brown. Head and pronotum semilustrous, elytra lustrous.

Male: Eyes large and strongly convex, head across eyes very slightly wider than pronotum. Antenna moderately exceeds over 3/4 of elytral length. Pronotum slightly wider than long, anterior margin and anterior angles rounded, lateral margins sinuately converging anteriorly, posterior angles tapered, posterior margin rounded. Elytra almost parallel-sided. Aedeagus Figs 25–26.

Female: Eyes smaller and less convex than in male, head across eyes distinctly narrower than pronotum. Antenna reaches elytral midlength, elytra more dilated posteriorly.

Length ♂♀: 6.5–7.0 mm.

Holotype ♂ and paratypes 2 ♂, 1 ♀ (NHMB), paratype 1 ♂ (VSPC): Iran, Luristan: 30 km südöstl. Khorramabad, 1700 m, 17.V.1976, Holzschuh et Ressler; Anatolien, Prov. Kars: 10 km südöstl. Karakurt, 1400 m, 9.V.1976, Holzschuh et Ressler, 1 ♂ paratype (NHMB).

Distribution: E Turkey, W Iran.

Name derivation: Named after its type locality.

The new species is related to *R. delagrangi* Pic, *R. elbursiaca* Wittmer, *R. richteri* Wittmer and *R. zwicki* Wittmer, from which it differs by the different form of dorsal part of aedeagus.

Rhagonycha nevadensis n.sp.

Figs 27–29.

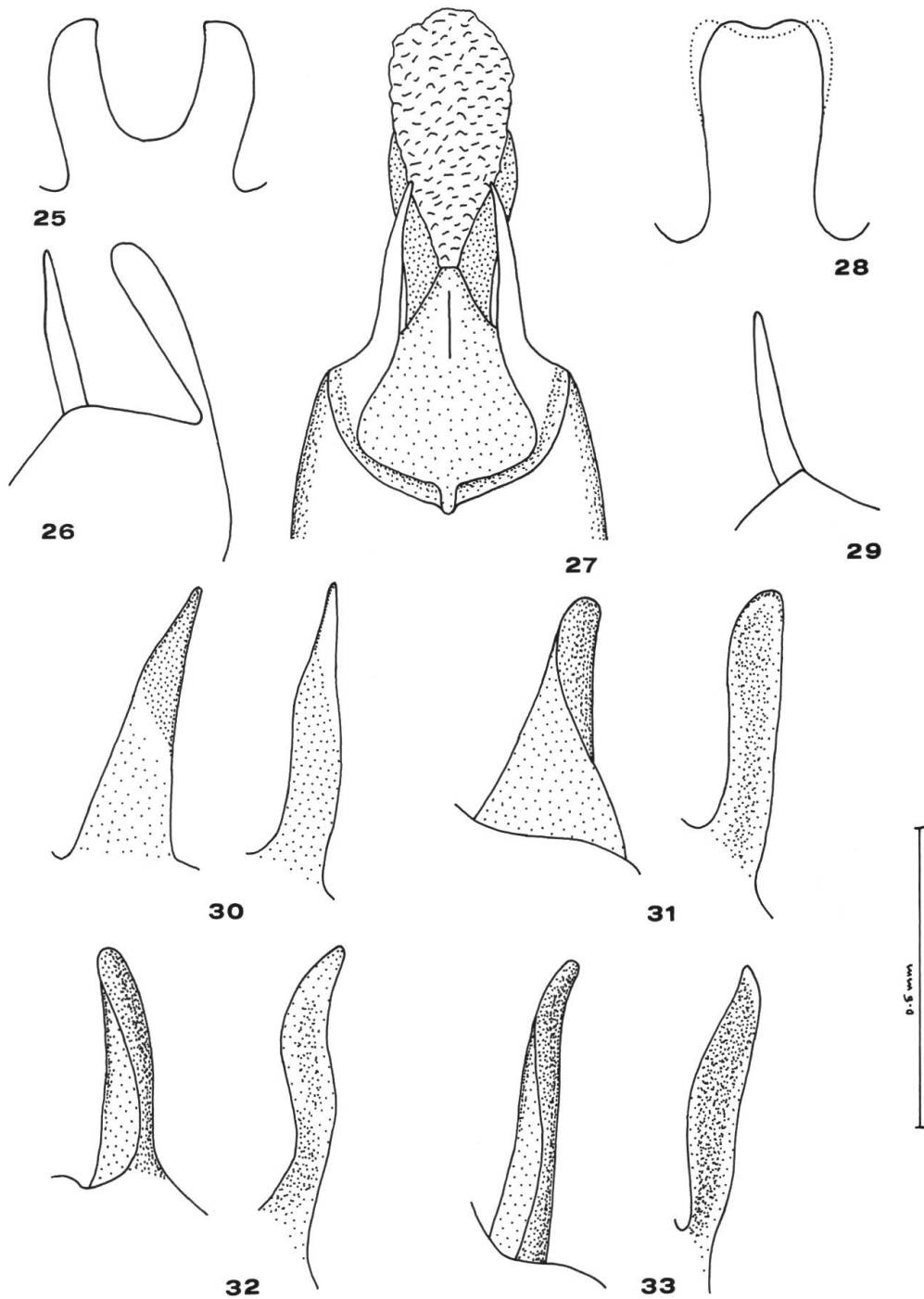
Head black, in front of eyes including mouthparts yellow. Pronotum yellow, sometimes with small, mediolongitudinal, not sharply delimited brown spot. Scutellum brown, meso- and metasternum and abdomen black, legs and elytra yellow.

Male: Eyes convex, head across eyes very slightly wider than pronotum. Antenna reaches 3/4 of elytral length. Pronotum very slightly wider than long, dilating posteriorly, anterior margin and anterior angles rounded, lateral margins slightly sinuate, posterior angles almost rectangular, posterior margin slightly sinuate. Elytra very slightly dilated posteriorly. Aedeagus Figs 27–29.

Female: Eyes smaller than in male, head across eyes slightly narrower than pronotum. Antenna shorter, reaches 2/3 of elytral length. Pronotum slightly wider than in male, elytra almost parallel-sided.

Length ♂♀: 6.5–7.7 mm.

Holotype ♂ and 2 paratypes ♀ (NHMB), 1 paratype ♀ (VSPC): Hispania, Granada: Sierra Nevada, Veletstrasse, 1700 m,



Figs 25–33: 25–26: *Rhagonycha luristana* n.sp.: 25, dorsal part of aedeagus. 26, aedeagus, lateral view. 27–29: *R. nevadensis* n.sp.: 27, aedeagus, ventral view. 28, variability of dorsal part of aedeagus. 29, paramera, lateral view. 30–33: paramera, lateral and ventral view: 30, *R. fulva* (Scopoli). 31, *R. fulvaliena* n.sp. 32, *R. aliena* Dahlgren. 33, *R. rassouli* Wittmer.

7.–18.VI.1971, Arenberger; Spanien, Granada Umg.,
19.–24.VI.1960, Sattler–Remane, 1 ♂ paratype (VSPC).

Distribution: S Spain.

Name derivation: Named after its type locality.

This new species is by its colouration similar to *R. patricia* Kiesenwetter, but the aedeagus is quite different. *R. nevadensis* n.sp. is most related to *R. gilvipennis* (Rosenhauer), but the dorsal part of the aedeagus and also the colouration of the antennae and pronotum are different (cf. DAHLGREN, 1972).

Rhagonycha hesperica Baudi

Rhagonycha hesperica BAUDI, 1859, Berl. Entomol. Zeitschr. 3: 296.

Rhagonycha semilimbipennis PIC, 1917, Echange 33: 17, n.syn.

Already DAHLGREN (1972) mentioned the possible synonymy of these two species. They are both mentioned (DAHLGREN, 1972) from the locality of Manzanal and the original description very well agrees with the darker form of *R. hesperica* Baudi, so that the synonymy can be established. The second species mentioned by DAHLGREN (1972), *R. opaca* Mulsant was hitherto not known from the type locality of *R. semilimbipennis* Pic.

Rhagonycha varians (Rosenhauer)

Podabrus varians ROSENHAUER, 1856, Thiere Andalusiens: 140.

Rhagonycha galiciana GOUGELET, 1859, Bull. Soc. Entomol. France 7: 238, n.syn.

DAHLGREN (1972) differentiated these two species only by the colouration of the pronotum and by the small differences in the form of the aedeagus. The former character is variable, I examined specimens with only the anterior angles of the pronotum brown, which is a transition to forms, mentioned by DAHLGREN (1972) in *R. varians* (Rosenhauer). The aedeagus is very slightly sclerotized, what can cause slightly different forms in the dry state. Besides, DAHLGREN (1972) quoted both species from the same localities (Spain: Manzanal; Portugal: Guarda, Covilha).

Rhagonycha quadricollis Kiesenwetter

Rhagonycha quadricollis KIESENWETTER, 1851, Ann. Soc. Entomol. France 9: 607.

Rhagonycha quadricollis var. *fedjensis* PIC, 1901, Echange 17: 25, n.syn.

Material examined: Algeria, Lambessa, 1875, Oberthür, 1 ♂ 5 ♀;
Tunisia, Fedja, Dr. Martin, 4 ♀ (all NHMB).

The specimens from Algeria have the same colouration like lighter forms from Spain, while in specimens from Fedja the colouration of the elytra are within four specimens at the disposal transitional: from yellow elytron with subhumeral brown stripe and narrow sutural brown stripe to entirely yellow elytron (like in some specimens from Algeria). Other characters quite agree with *R. quadricollis* Kiesenwetter. It seems, that there exists clinal variability in colouration.

Rhagonycha berbera n.n.

Rhagonycha marocana ŠVIHLA, 1990, Acta Entomol. Bohemoslov. 87: 196 nec *Rhagonycha lindbergi* var. *marocana* PIC, 1949, Echange 65: 16.

Name derivation: Derived from Berber, the name of original inhabitants of Morocco.

Rhagonycha fulvaliena n.sp.

Fig. 31.

By its habitus and colouration this species does not differ from entirely yellowish orange form of *R. fulva* (Scopoli). The paramera from the ventral view is very similar to *R. aliena* Dahlgren, but it is almost straight and from lateral view it is much shorter (cf. Figs 31–32).

Length ♂♀: 6.5–10.5 mm.

Holotype ♂ and 20 paratypes (VSPC): S Turkey: Oludeniz (Fethiye env.), 8.V.1991, Z. Jindra; Efesos, 2.V.1990, Strnad, 6 ex.; Antalya: Kemer, 19.–23.V.1991, G. Gillerfors, 1 ex. all paratypes (VSPC); vil. Manisa: Bolu Dag, 1500 m, VII.1973, G. Osella, 2 ex.; Prov. Izmir: Izmir-Efes, 22.–23.V.1968, C. Holzschuh, 1 ex.; 20 km S Aydin, 27.IV.1969, W. Wittmer, 1 ex.; Sindirgi, 22.V.1968, Wewalka, 1 ex.; Makri, Hauser, 1 ex.; Smyrna, 2 ex.; 32 km w. Salihi, 23.V.1973, D. Bernhauer, 5 ex.; Rhodos: Rhodus, Plason, 1 ex.; Charakion, 1963, Paget et Kritscher, 1 ex. all paratypes (NHMB); Lindos, 16.–30.IV.1981, Köstlin, 2 paratypes (NHMB), 1 paratype (VSPC); Samos, Ag. Konstantinos, 26°49'N 37°48'E, 27.V.1979, H. Malicky, 4 paratypes (NHMB), 1 paratype (VSPC).

Distribution: Greece – Aegean Is.: Samos, Rhodos; SW Turkey.

Name derivation: The name was created by combination of specific names of related species *R. fulva* (Scopoli) and *R. aliena* Dahlgren.

Rhagonycha rassouli Wittmer good species Fig. 33.

Rhagonycha rassouli WITTMER, 1981, Entomol. Basiliensia 6: 406.

In my preceding paper (ŠVIHLA, 1993b) this species was synonymised with *R. aliena* Dahlgren. After examination of larger material from diverse localities, it was found, that it is a distinct species which differs from the related ones by the form of the paramera as in Figs 30–33.

Material examined: W Iraq, Western desert, Bir-er-Rah, 70 km N of Rutba, III.1978, J. Macek, 18 ex.; E Turkey, Nemrut Dag, 7.VI.1992, Z. Švec, 1 ex. (all VSPC).

Distribution: Iraq, E Turkey.

B. Faunistic part

Rhagonycha caucasica Wittmer

Material examined: Georgia, Abkhasia: Tchenalta, VII.1981, Kadlec, 1 ex.; Armenia, Dilizhan, 1200 m, 21.VI.1979, Švihla, 7 ex. (all VSPC).

Distribution: S Russia: Caucasus Mts. (WITTMER, 1971), new species for Georgia and Armenia.

Rhagonycha lutea (Müller)

Material examined: Bosnia, Shipovo, 5.VII.1984, Hladil, 1 ex. (VSPC).

Distribution: France, Switzerland, Germany, Poland, Bohemia, Slovakia, Austria, Italy, Hungary, Romania, Slovenia, Serbia (DAHLGREN, 1968). New species for Bosnia.

Rhagonycha angulosa Kazantsev

Material examined: Siberia, Baikal lake, Davsha, 27.VII.1989, M. Knížek, 3 ex. (VSPC).

Distribution: Yakutia (KAZANTSEV, 1994). New species for the Baikal region.

Rhagonycha elongata (Fallén)

Material examined: Buryatia, Baikal lake, Sv. Nos, 30.VII.1989, M. Knížek, 1 ex. (VSPC).

Distribution: N and C Europe, Ural Mts., Altai Mts. (KAZANTSEV, 1994). New species for Baikal region.

Rhagonycha atrovarya atrovarya Wittmer

Material examined: E Kazakhstan, S Tarbagatai Mts., Mt. Range, 20.–26.V.1991, Tselikov, 3 ex. (NHMB, VSPC).

Distribution: Mongolia; Russia: Tuva, S Primorie, Baikal lake (WITTMER, 1971, ŠVIHLA, 1993a, KAZANTSEV, 1994). New species for Kazakhstan.

Rhagonycha mandibularis siberiana Kazantsev

Material examined: Siberia, Baikal lake, Sv. Nos, 30.VI.–3.VII.1993, J. Mlíkovský, 1 ex. (VSPC).

Distribution: Russia: Magadan reg., Tchita reg., Kamtchatka (KAZANTSEV, 1994). New species for Baikal region.

Rhagonycha transita Wittmer

Material examined: Corea, N Pyongan Prov., Myohyang-san, 21.V.1985, A. Vojnits et L. Zombori, 2 ex. (NHMB).

Distribution: Russia: Buryatia, Amur reg., Primorie (KAZANTSEV, 1994). New species for Corea.

Rhagonycha indistincta Medvedev et Ryvkin

Material examined: Corea: Prov. Hamajong punkto: Kjongsong Distr., Mehjang-ri, 4.VI.1965, 1 ex.; Prov. Phjongan-namdo, Musan-rjong, ca. 60 km N Khongdzhin, 2.VI.1965, 1 ex., all M. Mrockowski et A. Riedel; Prov. Kanwon: Kum-gang san, Man-mul san, 30.V.1970, S. Mahunka et H. Steinmann, 1 ex.; 22.V.1985, A. Vojnits et L. Zombori, 1 ex. (all NHMB).

Distribution: Russia: Transbaikalia, Amur reg., Primorie, Magadan reg., Kamtchatka (KAZANTSEV, 1994). New species for Corea.

Rhagonycha kurilica Wittmer

Material examined: China, Gansu prov.: Ponggartang, 120 km SW Lanzho, 30.VI.–2.VII.1992, J. Turna, 4 ex. (NHMB, VSPC).

Distribution: Kuriles (WITTMER, 1971). New species for China.

Rhagonycha testacea (Linnaeus)

Material examined: Siberia, Baikal lake, Davsha, 800 m, 24.VII.1989, M. Knížek, 1 ex. (VSPC).

Distribution: N and C Europe, C Ural Mts., Orenburg, Evenkia (KAZANTSEV, 1994). New species for Baikal region.

Rhagonycha maculicollis Märkel

Material examined: Macedonia, Kaimaktchalan, VII.1925, Purkyně, 1 ex. (VSPC).

Distribution: E France, N Italy, Switzerland, Austria, Slovakia, Romania, Bulgaria, N Greece (ŠVIHLA, 1993b). New species for Macedonia.

Rhagonycha nigriventris limbata Thomson

Material examined: SE Kazakhstan: Tushkan-Tau Mts., Kubai lake, 3100 m, 21.VII.1990, V. Dolin, 4 ex. (NHMB, VSPC); Tarbagatai Mts., Kette range, Urdzhar, 1400–1750 m, 26.–30.V.1991, V. Dolin, 1 ex. (NHMB).

Distribution: N and C Europe, Crimea, W and C Siberia (KAZANTSEV, 1994), N Mongolia (ŠVIHLA, 1993a). New species for Kazakhstan.

Rhagonycha kurdistana Švihla

Material examined: Iran: 6 km E Qu. e Shirin, 17.V.1975, F. Ressler, 6 ex.; Kermanshahan: N of Gilan-e ghart, 18.V.1975, C. Holzschuh et F. Ressler, 3 ex. (NHMB, VSPC).

Distribution: NE Iraq (ŠVIHLA, 1983). New species for Iran.

Rhagonycha xanthochroina Fairmaire

Material examined: S Turkey, vill. Icel: Uzuncaburc, 10.–11.V.1994, V. Průdek et J. Kovalovský, 3 ex. (VSPC).

Distribution: Syria, Lebanon (DAHLGREN, 1968). New species for Turkey.

Rhagonycha nigratarsis (Brullé)

Material examined: Greece, Lemnos Is., Kastron, 19.IV.1952, 1 ex. (VSPC).

Distribution: Greece, Crete (DAHLGREN, 1968). New species for Aegean Is.

Rhagonycha aliena Dahlgren

Material examined: Lebanon, Beyruth, Winkler, 3 ex. (NHMB).

Distribution: S Turkey, Samos Rhodos, Cyprus, Syria, Algeria (ŠVIHLA, 1993a). New species for Lebanon.

Rhagonycha chevrolati Marseul

Material examined: Jordan, Amman, 800 m, 7.VI.1957, Klapperich, 49 ex. (NHMB, VSPC).

Distribution: Syria, Israel, Cyprus, Turkey, S Russia (ŠVIHLA, 1993b). New species for Jordan.

Rhagonycha kiesenwetteri kiesenwetteri (Marseul)

Material examined: Greece, Samos, Ag. Konstantinos, 27.V.1979, H. Malicky, 10 ex. (NHMB, VSPC).

Distribution: SW and S Turkey, Cyprus (DAHLGREN, 1968). New species for Aegean Is.

Rhagonycha kiesenwetteri piciana Dahlgren

Material examined: Turkey, vill. Hatay, Harbiye, 22.V.1993, P. Průdek, 1 ex. (VSPC); Lebanon: E of Saida, 9.–16.V.1963, Kasy et Vartian, 1 ex.; Chtaura, Jureček, 1 ex. (all VSPC); Ainab, 13.V.1956, Klapperich, 2 ex. (NHMB); Jordan: Wadi Schaib, 13.IV.1956, 3 ex.; Balac nr. Tulkarem, 27.III.1956, 2 ex., all Klapperich (NHMB, VSPC).

Distribution: Syria, Israel (ŠVIHLA, 1993b). New species for Turkey, Lebanon and Jordan.

Rhagonycha lignosa (Müller)

Material examined: Turkey, vill Kütahya: western foothill of Bugdan Dag Mts., 900–1000 m, 22.V.1985, Aspöck et Ressler, 3 ex. (NHMB, VSPC); Bulgaria, Sofia-Knjazhevo, VI.1974, Strejček, 2 ex. (VSPC).

Distribution: C Europe, England, France, Romania, Italy, Montenegro, Albania, Greece (DAHLGREN, 1968). New species for Bulgaria and Turkey.

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