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Revision of the Subfam. Cantharinae without Podabrus (Coleoptera, Cantharidae) from Soviet Central Asia, Afghanistan and Chinese Turkestan

by **V. Švihla**

Abstract: Species of the Subfam. Cantharinae without Podabrus from Soviet Central Asia, Afghanistan and Chinese Turkestan are revised, illustrated and keyed in this work. *Prothemellus* n. gen. is established for *Absidia afghana* Wittm. The following new taxa are described and illustrated: *Silicantharis walteri* n. gen., n. sp. (Kazakhstan), *Rhagonycha stusaki* n. sp. (Mongolia), *Cantharis oculimarginalis ferganica* n. ssp. (Uzbekistan), *C. brancuccii* n. sp. (W. China), *C. voriseki* n. sp. (Kazakhstan), *C. podistroides* n. sp. (Uzbekistan), *C. lateralis afghana* n. ssp. (Afghanistan), *C. emilieae* n. sp. (Uzbekistan), *C. schoeni* n. sp. (Kirgizia), *Metacantharis wittmeri* n. sp. (Afghanistan, Pakistan), *M. wittmeri brachyelytrata* n. ssp. (Afghanistan). *Metacantharis attalia* (Pic) is transferred from *Cantharis* and *C. pumilio reductipennis* (Wittm.) is reduced to a subspecies and transferred from *Podistra*. *Cantharis oculimarginalis* Hick. is raised to species status (from *C. submarginalis* var. *oculimarginalis* Hick.). *Cantharis rufa tenuelimbata* (Ball.) and *C. forticornis nigropubescens* Bar. are reduced to subspecific level. The following new synoymies are proposed: *Rhagonycha alpicola* Barovskij, 1928 = *R. shavrovi* Barovskij, 1928, n. syn. and *R. kiritshenkoi* Barovskij, 1929, n. syn.; *Themus kaschmirensis* (Pic, 1909) = *Cantharis biliturata* Barovskij, 1909, n. syn.; *Cantharis rufa tenuelimbata* (Ballion, 1870) = *C. turkestanica* Pic, 1913, n. syn.; *C. forticornis forticornis* Heyden, 1885 = *C. arisi* Pic, 1906, n. syn. and var. *andischanensis* Pic, 1914, n. syn., *C. biplagiata* (Ballion, 1870) = *C. forticornis* var. *bimaculifera* Heyden, 1888, n. syn., *C. dia* Reitter, 1898, n. syn., *C. funestula* Pic, 1906, n. syn., *C. chianschanensis* Pic, 1913, n. syn., *C. musarti* Pic, 1906, n. syn.; *C. biplagiata* varr. *auliensis* Pic, 1914, n. syn. and *uniplagiata* Pic, 1914, n. syn., *C. biplagiaticollis* Pic, 1914, n. syn., *C. kiritshenkoi* Barovskij, 1926, n. syn.; *C. jacobsoni* Barovskij, 1926 = *C. heptapotamica* Barovskij, 1928, n. syn.; *C. lucida* Pic, 1906 = *C. klapperichi* Wittmer, 1956, n. syn.; *Metacantharis raptor* (Ballion, 1870) = *Telephorus submarginalis* Ballion, 1870, n. syn., *Cantharis raptor* var. *samarkandensis* Pic, 1913, n. syn.; *M. attalia* (Pic, 1902) = *Cantharis senckenbergi* Pic, 1913, n. syn. and *var diversenotata* Pic, 1913, n. syn., *C. bucharica* Pic, 1914, n. syn. and *M. korzhinskii* Barovskij, 1926, n. syn.; *Bactrocantharis ciliatocollis* (Pic, 1906) = *C. kuchleri* Pic, 1913, n. syn. and *B. kaznakovi* Barovskij, 1926, n. syn.

Key words: Coleoptera Cantharidae – taxonomy – zoogeography – new genera – new species – new subspecies – new status – new combinations – keys – lectotypes.

The fauna of the Subfam. Cantharinae of Central Asia had been revised to a very small extent so far. The work on the genus *Cantharis* L. by PIC (1914) cannot be used, because of its briefness. He made many mistakes because the characters of the male copulatory organs were not used. The only recent works available are revisions of the genera *Themus* Motsch. by WITTMER (1973) and of *Bactrocantharis* Bar. by KASANTZEV (1989). 51 species were formerly reported from the examined region, 25 of them are synoymised in this work, 12 species and subspecies

are described and 4 species are newly recorded from this region, so that, now 42 species and subspecies belonging to 9 genera are known from Soviet Central Asia, Afghanistan and Chinese Turkestan.

Material

Types and other material, on which this study is based were loaned from the following institutions:

DEI = Institut für Pflanzenforschung, Eberswalde, Dr. L. Zerche
MHNP = Muséum d'Histoire Naturelle, Paris, Dr. J. C. Menier
MMB = Moravské Museum, Brno, Dr. P. Lauterer
NHMB = Naturhistorisches Museum, Basel, Dr. M. Brancucci
NMP = Národní Muzeum, Praha, Dr. J. Jelínek
TMB = Természettudományi Muzeum, Budapest, Dr. O. Merkl
VS = author's collection
ZIL = Zoological Institute of AN USSR, Petersburg, Dr. M. Volkovitsh
ZMVA = Zoologisch Museum, Universiteit van Amsterdam, Dr. B. Brugge.

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All locality data are copied from the original labels, only those of Barovskij's species are copied from the original descriptions.

Key to the genera of the Subfam. Cantharinae of Soviet Central Asia, Afghanistan and Chinese Turkestan[1]

1. Mandibles with subapical tooth . . . . . .**Bactrocantharis** Bar.
– Mandibles simple 2

1. Key can be used only for examined region.

2. At least one claw with basal apodeme or tooth, or it is longitudinally doubled 3
– All claws simple, at most enlarged basally 7
3. Outer claw of all tarsi longitudinally doubled
Metacantharis Bourg.♂
– Claws not longitudinally doubled 4
4. Both claws of all tarsi with sharp basal tooth
Rhagonycha Eschsch.
– Outer claw at least on anterior tarsus with basal apodeme, inner claw simple or with very small basal tooth 5
5. Outer claw of anterior tarsus with basal apodeme, inner claw with small tooth **Pakabsidia** Wittm.
– Outer claw of anterior tarsus with basal apodeme, inner claw simple 6
6. Pronotum with pair of small corners on anterior portion of disc (Fig. 72) **Silicantharis** n. gen.
– Pronotum without any corners **Cantharis** L.
7. Larger species, over 13 mm. **Themus** Motsch.
– Smaller species, under 11 mm. 8
8. Lateral margins of pronotum slightly emarginated before posterior angles, which are almost sharp (Fig. 10); male: aedeagus with deeply incised dorsal part; female: apex of the last sternite roundly emarginate (Fig. 11) **Prothemellus** n. gen.
– Lateral margins of pronotum not emarginated before posterior angles; male: dorsal part of aedeagus at most shallowly emarginate; female: apex of the last sternite sinuate
Absidiella Wittm.[1], **Metacantharis** Bourg.♀

Female unknown: *Silicantharis* n. gen.

1. Female of *A. kaszabi* Wittm. is included in the key of females of the genus *Metacantharis* Bourg.

Rhagonycha Eschscholtz, 1830

Key to species

1. Head, pronotum and elytra orange yellow, aedeagus (Figs 1, 2).
R. fulva (Scop.)
– Colouration not uniformly orange yellow 2
2. Tibiae brown, at most with lighter bases, aedeagus (Fig. 3).
R. reflexa Wittm.
– Tibiae yellow, at most with darker apexes, aedeagus (Figs 4-6).
R. alpicola Bar.

Rhagonycha fulva (Scopoli) Figs 1, 2.

Cantharis fulva Scopoli, 1763, Entomol. Carniol.: 39.

Body orange yellow, tarsi and antennae towards apex somewhat darkened, head and elytra semilustrous, pronotum lustrous.

Male: Eyes small but convex, head across eyes very slightly narrower than pronotum. Antennae reaching 2/3 of elytral length. Pronotum nearly as long as wide, lateral margins converging anteriorly, anterior margin and angles widely rounded, posterior angles almost sharp, with slight emargination before them, posterior margin very slightly rounded, almost straight. Elytra very slightly wider than pronotum, moderately enlarged posteriorly. Aedeagus (Figs 1, 2).

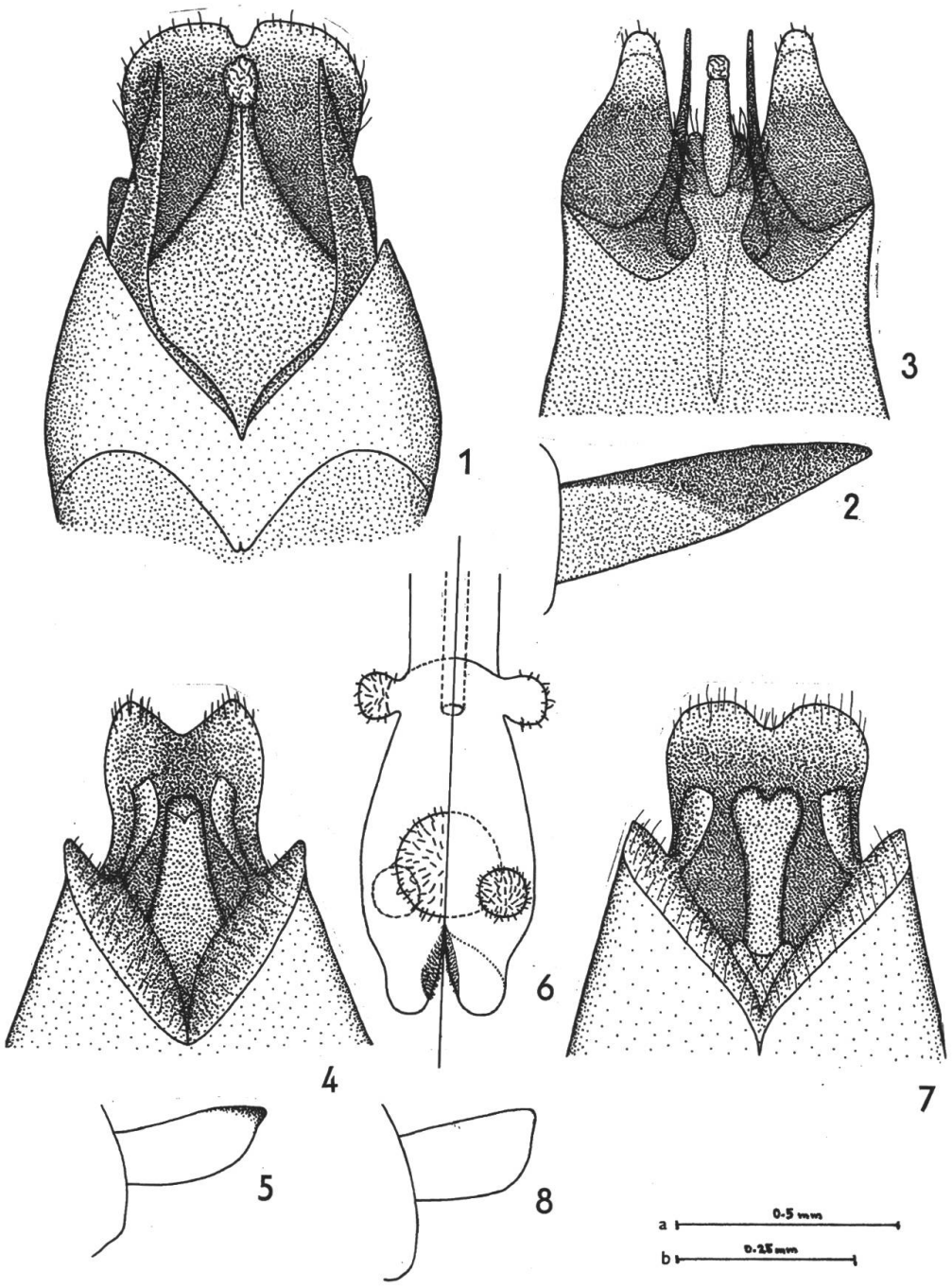
Female: Eyes smaller than in male, head across eyes distinctly narrower than pronotum, antennae shorter, hardly reaching 2/3 of elytral length, pronotum slightly wider than long, elytra more enlarged posteriorly.

Length ♂♀: 7.4 – 8.2 mm.

Material examined: USSR, Turkmenia: Kopet-Dag, Firjuza, 5. vi. 1979, Švihla, 4 ex.; Kara-Kala, 29.iv.–3.v.1989, Bečvář, 3 ex.

Distribution: Morocco, Europe to Ural Mts., Caucasus, Transcaucasia, Turkey, Syria, N. Iran (Dahlgren, 1968, 1975), SW Turcmenia.

Specimens from Turcmenia differ from European ones by absence of dark apex of elytra.



Figs 1-8. 1-2: *Rhagonycha fulva* (Scop.): 1 – aedeagus; 2 – paramera, lateral view; 3 – *R. reflexa* Wittm., aedeagus; 4-6: *R. alpicola* Bar.: 4 – aedeagus; 5 – paramera, lateral view; 6 – endophallus (left dorsally, right ventrally); 7-8: *R. stusaki* n. sp.: 7 – aedeagus; 8 – paramera, lateral view. Scale a – Figs 1, 3, 4, 7; b – Figs 2, 5, 8.

Rhagonycha reflexa Wittmer Fig. 3.

Rhagonycha reflexa WITTMER, 1972, Mitt. Schweiz. Entomol. Ges. 45: 71.

Head black, frons yellow, first two antennal segments yellow, rest of antenna darkened, pronotum yellow with large, central, dark brown to black spot. Scutellum black, elytra yellow. Legs brown, apexes of femora and bases of tibiae somewhat lighter. Prosternum yellow, meso, metasternum and abdomen black, last abdominal segment yellow. Head matt, pronotum and elytra semilustrous.

Male: Eyes convex, head across eyes as wide as pronotum. Antennae reaching 2/3 of elytral length. Pronotum as long as wide, anterior angles and anterior margin rounded, lateral margins slightly converging anteriorly with very slight emargination before posterior angles, posterior margin almost straight, posterior angles sharp. Elytra only slightly wider than pronotum, moderately enlarged towards apex. Aedeagus (Fig. 3).

Female unknown.

Length ♂: 7.0 mm.

Type material examined: holotype, ♂, Transkaspia, Saramsakli, vi.1907, coll. Hauser (NHMB).

Other material examined: SSR, SO Turcmens, Aj-Dese, Kara-Kala, 1.v.1981, Dolin, 1 ex. (NHMB).

Distribution: USSR: SW Turcmenia.

Rhagonycha alpicola Barovskij Figs 4-6.

Rhagonycha alpicola BAROVSKIJ, 1928, Rev. Russe Entomol. 22: 98.
Rhagonycha shavrovi BAROVSKIJ, 1928, 1.c.: 99, n. syn.
Rhagonycha kiritshenkoi BAROVSKIJ, 1929, 1.c. 23: 267, n. syn.

Head dark brown to black, mouthparts yellowish brown, first two antennal segments yellow, following segments brown with lighter bases. Pronotum from orange yellow to blackish, scutellum dark brown, elytra from yellow to dark brown or blackish, femora brown with lighter apexes, tibiae yellowish brown, tarsi darker. Ventral part of body dark brown. Head and pronotum matt to semilustrous, elytra lustrous.

Male: Eyes small but convex, head across eyes very slightly wider than pronotum. Antennae reaching 2/3 of elytral length. Pronotum very slightly wider than long, almost quadrate, lateral margins very slightly converging anteriorly, both anterior and posterior margins almost straight, only very moderately rounded, anterior angles rounded, posterior ones almost sharp, in front of posterior angles is very slight

emargination. Elytra somewhat wider than pronotum, slightly enlarged posteriorly. Aedeagus (Figs 4-6).

Female: Eyes smaller than in male, head across eyes very slightly narrower than pronotum. Antennae shorter, only slightly exceeding over midlength of elytra. Pronotum distinctly wider than long, elytra more enlarged posteriorly.

Length ♂♀: 4.7 – 6.0 mm.

Type material examined: *Rhagonycha alpicola* Bar.: syntypes: 2♂ 1♀: Prov. Heptapotamica, distr. Taldy-Kurgan, mons Sary-Gura, 24.vi.1926, Dobzhansky, lectotype, ♂ and paralectotypes ♂♀ here designated. *Rhagonycha shavrovi* Bar.: holotype ♂, Prov. Heptapotamica, Kopal, Shavrov; paratype, the same data, 1♂ (all ZIL).

Other material examined: Uzbekistan: Tian-Schan, Čatkalskij chr., Čimgan, 25.-27.vi.1980, Schön, 2 ex.; Kirgizia: Kirghiz Mts., Ala-archa vall., 60 km S Frunze, 1800-2800 m, 30.vi.–3.vii.–1981, Majer, 1 ex.; 30.vi.1980, Schön, 2 ex. (all VS); 27.vi.1984, Muche, 1 ex.; 6.vii.–13.vii.1985, Muche, 2 ex. (all NHMB); 8.vii.1876, Jelínek, 3 ex. (NMP); 50 km östlich Chaidarken, 1500 m, 16.vii.1983, Muche, 1 ex.; Semirjetschensk, Burchan, 1 ex. (all NHMB); Kazakhstan: Dsungaria, Borochoro-Gb., 2 ex.; Alatau, Alma-Arasan, 1900-2100 m, 25.-26.vi.1981, Muche, 3 ex.; 23.-24.vi.1979, Muche, 1 ex. (all NHMB); vii.1976, Bílý, 1 ex. (VS); Tujuk-Su-Tal, 20.-22.vii.1983, Muche, 5 ex. (NHMB); Turkestan, Burchan, 22.vi.1906, Almásy, 1 ex. (TMB); Transilien Ala-Tau Mts., Medeo, 30 km S Alma-Ata, 2500-3200 m: 26.vi.1981, Muche, 2 ex.; 29.vi.1982, Muche, 3 ex. (all NHMB); 7.vii.1981, Majer, 8 ex. (VS); Berg Modatka, 2400 m, 27.vi.-1.vii.1979, Muche, 2 ex. (NHMB).

Distribution: USSR: western and northern slopes of the Tian-Schan Mts., Dzhungarskij Alatau Mts., Borochoro Mts. – E Uzbekistan, N Kirgizia, SE Kazakhstan; ? Mongolia.

Aedeagus and endophallus of all three Barovskij's species are the same. Darker forms, described as *R. alpicola* and *R. shavrovi* occur probably in higher mountain altitudes and in northern part of areal, the lighter ones, described as *R. kiritshenkoi* in warmer part of areal and lower altitudes. In some regions both forms occur together (e.g. Burchan) or transitional forms occur in some localities (Borochoro Mts.). WITTMER (1968 and following works) reported this species also from Mongolia. All the specimens from Mongolia, which were revised belong to another species, here described, so the occurence in Mongolia must be verified.

R. alpicola Bar. is, by the type of endophallus, nearly related to *R. limbata* Thoms., from which it differs by the presence of a pair of subapical cushions of thorns on the ventral side of the endophallus.

I am adding the description of one species from Mongolia closely related to *R. alpicola* Barovskij.

Rhagonycha stusaki n. sp. Figs 7, 8.

Head black, mouthparts brown to dark brown, first two antennal segments yellowish brown, rest of antenna dark brown to black. Pronotum yellowish brown, sometimes with not sharply limited, central brown spot. Femora dark brown with lighter terminal portion, tibiae yellowish brown, tarsi dark brown. Scutellum black, elytra yellowish brown, ventral part of body dark brown to black.

Male: Eyes small but convex, head across eyes approximately as wide as pronotum. Antennae reaching 3/4 of elytral length. Surface of head finely microshagreened, semilustrous. Pronotum slightly wider than long, lateral margins distinctly converging anteriorly, both anterior and posterior margins rounded, anterior angles rounded, posterior ones obtusely tapered. Surface of pronotum sparsely and finely punctate, microshagreened anteriorly, lustrous. Elytra slightly wider than pronotum, moderately enlarged posteriorly, lustrous. Aedeagus Figs 7, 8.

Female: Eyes smaller than in male, head across eyes distinctly narrower than pronotum, antennae shorter, reaching 2/3 of elytral length, pronotum distinctly wider than long, elytra shorter and wider than in male.

Length ♂♀: 4.8 – 7.4 mm.

Holotype ♂ (NMP): Mongolia or., Chentej aimak, Mörön-gol vall., v.1985, Malec; paratypes: the same data, 5♂ 3♀; Mongolia, Central aimak: Šarga Mort, 16.vi.1979, Štusák, 1♂; N. slopes of Bogdo-ul Mts. nr. Ulan-bator, 14.vii.1967, Emeljanov et Zajcev, ♂♀; Archangai aimak: 10 km NNE Charcharin, 9.vii.1973, 1♀; Urd-Tamir riv., 13.vii.1974, 1♀; 15 km SW of Tevšrulech, 20.vi.1975, Kozlov, 1♂; 48 km S Tevšrulech, 2.-3.vii.1975, Gurjeva, 1♂; 30 km E Cecerleg, 2.-4.vii.1975, Sugonjaev, 1♂; Chövsgol aimak, 45 km NE Chatgal, 1♀; Mongolia, Baga-Tenger, 22.vii.1965, Dlabola, 1♀. Holotype and paratypes deposited in author's collection to be deposited in NMP; paratypes also in NHMB and in NMP.

Distribution: N Mongolia.

Name derivation: Named after one of the collectors, my friend, Dr. Josef M. Štusák, well-known heteropterologist.

Rhagonycha stusaki n. sp. resembles by its colouration light forms of *R. alpicola* Bar., from which it differs by the larger body, by longer

antennae and by the form of paramera, which are wider and not terminally bent inwards.

Prothemellus n. gen.

Type species: *Absidia afghana* WITTMER, 1956.
Name derivation: *Prothemellus*, masculine in gender, derived from *Prothemus* Champ., nearly related genus.

Mandibles simple, antennal segments without lustrous impressions, pronotum subquadrate, lateral margins very slightly converging on posterior portion, slightly emarginated before posterior angles, which are almost sharp (Fig. 10). All claws simple in both sexes. Aedeagus with deeply incised dorsal portion, inner part of emargination with teeth. Laterophysae developed.

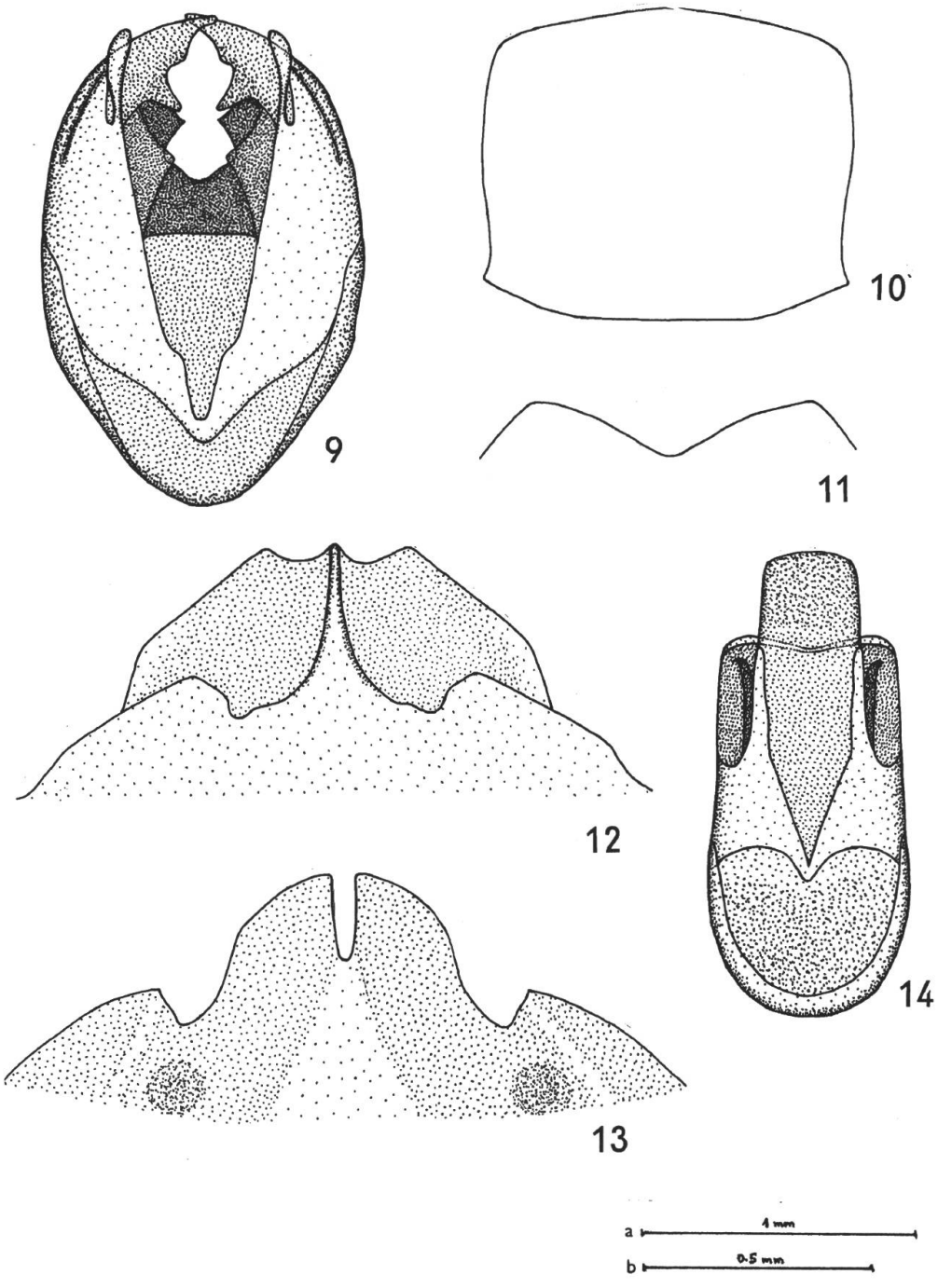
This new genus is closely related to *Prothemus* Champ. according to the type of aedeagus (cf. WITTMER, 1987), from which it differs by the form of pronotum, which is not rounded in *Prothemellus* n. gen. and by the absence of the basal apodeme of the outer claws in male. It differs from other genera with simple claws in both sexes and with antennal segments without lustrous impressions (e.g. *Athemellus* Wittm., *Themus* Motsch., *Absidiella* Wittm. and *Bisadia* Wittm.) by the type of aedeagus (cf. WITTMER, 1972).

Prothemellus afghanus (Wittmer) n. comb. Figs 9-11.

Absidia afghana WITTMER, 1956, Rev. Suisse Zool. 63: 157.
Pseudoabsidia afghana: WITTMER, 1969, Mitt. Schweiz. Entomol. Ges. 42: 128.
Absidiella afghana: WITTMER, 1972, Entomol. Arb. Mus. Frey 1972: 131.

Head, prothorax, scutellum and abdomen orange yellow, meso, metasternum and tarsi brown, first two antennal segments orange yellow, the others brown, elytra blackish brown. Pronotum lustrous, head and elytra semilustrous.

Male: Eyes strongly convex, head behind eyes strongly narrowed posteriorly, head across eyes distinctly wider than pronotum, antennae reaching 3/4 of elytral length. Pronotum very slightly wider than long, subquadrate, anterior margin and anterior angles rounded, lateral margins slightly converging in posterior portion, slightly emarginate before posterior angles, which are almost sharp (Fig. 10). There is a pair of elevations, with sligth longitudinal groove between them at the posterior half of pronotum. There is a transverse groove behind them and



Figs 9-14. 9-11: *Prothemellus afghanus* (Wittm.): 9 – aedeagus; 10 – pronotum; 11 – apex of female last sternite; 12-13: female last sternite: 12 – *Themus glazunovi* (Bar.); 13 – *T. kaschmirensis* (Pic); 14 – *Absidiella kaszabi* (Wittm.), aedeagus. Scale a – Figs 10-13; b – Figs 9, 14.

the base of pronotum. Elytra distinctly wider than pronotum, very slightly enlarged posteriorly, their surface corrugated, with relatively long, semisparse white pubescence, lustrous. Aedeagus (Fig. 9).

Female: Eyes smaller, head across eyes very slightly narrower than pronotum, antennae shorter, reaching 2/3 of elytral length, pronotum distinctly wider than long, lateral margins only very slightly converging in posterior portion. The last abdominal sternite Fig. 11.

Length ♂♀: 6.0 – 7.6 mm.

Material examined: Pakistan: Kagan-Tal, Umg. Shogran, 2300-3000 m, 24.-25.vii.1982, Erber et Heinz, 3 ex.; Dir, Lawaral Pass, 2700-3300 m, 17.-19.vii.1981, Heinz, 2 ex.; Prov. Swat, Umg. Shangla, 2400 m, 4.vii.1979, Heinz, 1 ex., all Wittmer det. (VS).

Distribution: N Afghanistan, N Pakistan.

Themus Motschulsky, 1857

The species occuring in the studied region were recently revised by WITTMER (1973) and a key to males was provided, so in this work only the characters are added distinguishing the females.

Themus (s. str.) **maximus afghanus** Wittmer

Themus (s. str) *maximus afghanus* WITTMER, 1973, Entomol. Arb. Mus. Frey 22: 215.
Female unknown.
Distribution: Afghanistan.

Themus (s. str.) **safedkoensis** Wittmer

Themus (s. str) *safedkoensis* WITTMER, 1973, Entomol. Arb. Mus. Frey 22: 221.
Female unknown.
Distribution: Afghanistan.

Themus (s. str.) **kabakovi** Wittmer

Themus (s. str) *kabakovi* WITTMER, 1979, Entomol. Arb. Mus. Frey 28: 133.
Female unknown.
Distribution: Afghanistan.

Themus (s. str.) **glazunovi** (Barovskij)

Cantharis glazunovi BAROVSKIJ, 1909, Rev. Russe Entomol 9: 325.
Themus glazunovi: WITTMER, 1970, Mitt. Schweiz. Entomol. Ges. 43: 98.

Head yellowish brown, behind eyes sometimes somewhat darker, antennae yellow to yellowish brown, pronotum and scutellum yellow-

ish brown. Legs yellowish brown, elytra dark grey to brown (especially on basal portion), ventral part of body yellowish brown. Head and pronotum semilustrous to lustrous, elytra mat.

Male: Eyes strongly convex, head across eyes distinctly wider than pronotum, antennae reaching 4/5 of elytral length, antennal segments 4-8 with longitudinal lustrous impression. Pronotum slightly wider than long, lateral sides moderately rounded. Elytra distinctly wider than pronotum, long, parallel-sided.

Female: Antennae probably shorter (missing in examined specimens), pronotum wider, head across eyes distinctly narrower than pronotum. Angles and lateral margins of pronotum widely rounded. Last abdominal sternite (Fig. 12).

Length ♂♀: 14.7 – 21.0 mm.

Type material examined by WITTMER (1973).

Material examined: Tajikistan, Hissar Mts., Ziddi, 26.vi.1976, Bílý, 1 ex.; Afghanistan: Nuristan, Baschgaltal, 2700 m, Ahmede Dewane, 23.vi.1952, Klapperich, 2 ex.; Paghman, 30 km NW Kabul, 2500 m, 12.-15.vi.1965, Kasy et Vartian, 1 ex.; Nuristan, 25 km N Barikot, 1800 m, 12.-17.vii.1963, Kasy et Vartian, 1 ex. (all VS).

Distribution: USSR: Tadzhikistan; N Afghanistan, NW Pakistan, India: Kashmir (WITTMER, 1973).

Themus (Haplothemus) kaschmirensis Pic Fig. 13.

Cantharis (Telephorus) kaschmirensis PIC, 1909, l'Échange 25 (February): 108.
Cantharis (Ancystronycha) kaschmirensis: WINKLER, 1925, Cat. Col. Reg. Pal. 5: 498.
Themus (s. str.) *kaschmirensis*: WITTMER, 1973, Entomol. Arb. Mus. Frey 24: 216.
Cantharis biliturata BAROVSKIJ, 1909, Rev. Russe Entomol. 9 (3) (November): 326, n. syn.
Cantharis subannulicornis PIC, 1915, Mél. Exot. Entomol. 13: 3.
Themus nuristanus HICKER, 1937, Arb. Morph. Tax. Entomol. Berlin 4: 180.

Head yellowish brown with a pair of black spots linking up from inner margin of eyes posteriorly. First two antennal segments yellowish brown, rest of segments dark brown to black with narrowly lighter bases. Pronotum yellowish brown with a pair of dark, longitudinal spots, scutellum yellow. Legs yellowish brown, tibiae sometimes in its middle portion darkened. Elytra dark grey, ventral part of body yellowish brown, abdominal segments sometimes with darker lateral spots. Head and pronotum semilustrous to lustrous, elytra mat.

Male: Eyes strongly convex, head across eyes as wide or slightly wider than pronotum. Antennae reaching 3/4 of elytral length. Pronotum slightly wider than long, lateral sides moderately converging anteriorly, very slightly rounded, anterior and posterior angles of pronotum moderately rounded. Elytra distinctly wider than pronotum, long, very slightly enlarged posteriorly.

Female: Antennae shorter, reaching elytral midlength, eyes slightly smaller. Pronotum wider than in male, head across eyes slightly narrower than pronotum. Last abdominal sternite Fig. 13.

Length ♂♀: 14.2 – 19.0 mm.

Type material examined: *Cantharis biliturata* Bar.: lectotype and paralectotype, Buchara or. Chargovat-Kala et Kum, 15.vi.1897, Kaznakov legt., 2♂ (ZIL). Type material of other synonyms was revised by WITTMER (1973).

Other material examined: Pakistan: Dir, Lawarai-Pass, 2700-3300 m, 17.-19.vii.1981, Heinz, 1 ex.; Kagan-Tal, Umg. Shogran, 2300-3000 m, 24.-25.vii.1982, Erber et Heinz, 4 ex.; Afghanistan, Nuristan, Baschgaltal, 2700 m, Ahmede Dewane, 23.vii.1952, Klapperich, 2 ex. (all VS).

Distribution: USSR: Tadzhikistan; N Afghanistan, NW Pakistan. The type material of *C. biliturata* Bar. does not differ from material of *T. kaschmirensis* (Pic), kindly sent me by Dr. W. Wittmer, so this synonymy is established. I did not find any lustrous impressions on antennal segments and therefore this species is transferred to the subgenus *Haplothemus* Wittm.

Absidiella Wittmer, 1972

Absidiella kaszabi (Wittmer) Fig. 14.

Pseudoabsidia kaszabi WITTMER, 1971, Ann. Hist. Natur. Mus. Nat. Hungar. 63: 192.
Absidiella kaszabi: WITTMER, 1972, Entomol. Arb. Mus. Frey 1972: 131.

Head, pronotum and legs yellow, tarsi sometimes somewhat infuscate, first two antennal segments always yellow, following ones yellowish brown to brown with lighter bases. Prosternum and scutellum yellow, meso and metasternum dark brown, elytra blackish brown, humeral portion usually lighter, narrow lateroapical margins and sometimes very narrow sutural one yellowish brown. Head semilustrous, pronotum lustrous, elytra matt.

Male: Eyes small but convex, head across eyes very slightly wider than pronotum, antennae reaching 2/3 of elytral length. Pronotum very

slightly wider than long, almost rectangular, anterior margin and all angles moderately rounded, lateral margins very slightly converging posteriorly. Elytra slightly wider than pronotum, parallel-sided. Aedeagus Fig. 14.

Female: Eyes smaller than in male, head across eyes as wide as pronotum, antennae much more shorter, not reaching midlength of elytra, pronotum distinctly wider than long, elytra also wider than in male. Last abdominal segment like in the genus *Metacantharis* Bourg.

Length ♂♀: 5.5 – 6.4 mm.

Material examined: USSR, Kazakhstan: Akkol-Ujuk steppe nr. Džambul, 9.v.1981, Brodský, 8 ex.; Kara-Tau Mts., Džambul env., 8.v.1978, Víša, 1 ex.; Kara-Tau Mts., Kujuk, 11.v.1981, Olexa, 1 ex. (all VS).

Distribution: USSR: S Kazakhstan; C and S Mongolia (WITTMER, 1971, 1976).

Pakabsidia Wittmer, 1972

Pakabsidia testaceitincta Wittmer

Pakabsidia testaceitincta WITTMER, 1979, Entomol. Arb. Mus. Frey 28: 136.
Distribution: Afghanistan.

Cantharis Linnaeus, 1758

Key to species

1. Elytra entirely blackish brown or black 10
– Elytra at least partly yellowish brown or brown 2
2. Elytra entirely yellowish brown, aedeagus (Figs 50-51). **C. emilieae** n. sp.
– Elytra bicolorous 3
3. Elytra lighter only around scutellum. **C. biocellata** (Frm.) ♀
– Elytra of different colouration 4
4. Elytra lustrous 5
– Elytra mat 6
5. Elytra brownish black, with a very narrow lateral margin and sometimes also suture brown, legs mostly dark brown, aedeagus (Figs 34-35). **C. kugartensis** Bar.

– Elytra yellowish brown, each elytron with wide, longitudinal stripe, legs mostly yellowish brown, aedeagus (Figs 52-53).

6. Suture of elytra yellowish brown or brown
C. rufa tenuelimbata (Ball.)

– Suture of elytra blackish brown or black 7

7. Larger (over 7.5 mm), elytra without small glabrous areas 8

– Smaller (under 7.5 mm), elytra with small glabrous areas 9

8. Pronotum unicolorous, each elytron blackish brown with a narrow yellowish brown lateral margin, dorsal part of aedegus with triangular lateroapical elevation (Figs 23-24)
C. oculimarginalis oculimarginalis Hick.

– Pronotum with markings, each elytron black with wide, longitudinal subhumeral stripe and narrow yellowish brown lateral margin, dorsal part of aedeagus without lateroapical elevations (Figs 21-22). **C. fallaciosa** Bar.

9. Posterior portion of head black. **C. lateralis lateralis** L.

– Head entirely yellow. **C. lateralis afghana** n. ssp.

10. Elytra mat 11

– Elytra lustrous 18

11. Pubescence of elytra black, aedeagus (Figs 19-20).
C. forticornis nigropubescens Bar.

– Pubescens of elytra light (grey or yellowish) 12

12. Elytra with small glabrous areas 13

– Elytra without small glabrous areas 14

13. Pronotum with markings, laterophysae overlapping aedegal apex (Figs 48-49) **C. biocellata** (Frm.) ♂

– Pronotum unicolorous, laterophysae not reaching aedeagal apex (Figs 44-45) **C. inforticornis** Pic

14. ♂: head entirely yellowish brown, aedeagus (Figs 25-26).
C. brancuccii n. sp.

– ♂: head partly black 15

15. Larger (over 11 mm), dorsal part of aedeagus extremely shortened (Figs 15-16) **C. oculata** Gebl.

– Smaller (under 10 mm), dorsal part of aedeagus normally developed 16

16. ♂: dorsal part of aedeagus with lateroapical elevation (Figs 23-24)
C. oculimarginalis ferganica n. ssp.

– ♂: dorsal part of aedeagus without lateroapical elevation 17

17. Pronotum never with markings; ♂: paramerae wider (Figs 19-20); ♀: head entirely yellowish brown.

C. forticornis forticornis Heyd.

– Pronotum often with markings; ♂: paramerae narrower (Figs 27-29); ♀: head at least with darker spot on vertex.
C. biplagiata (Ball.)

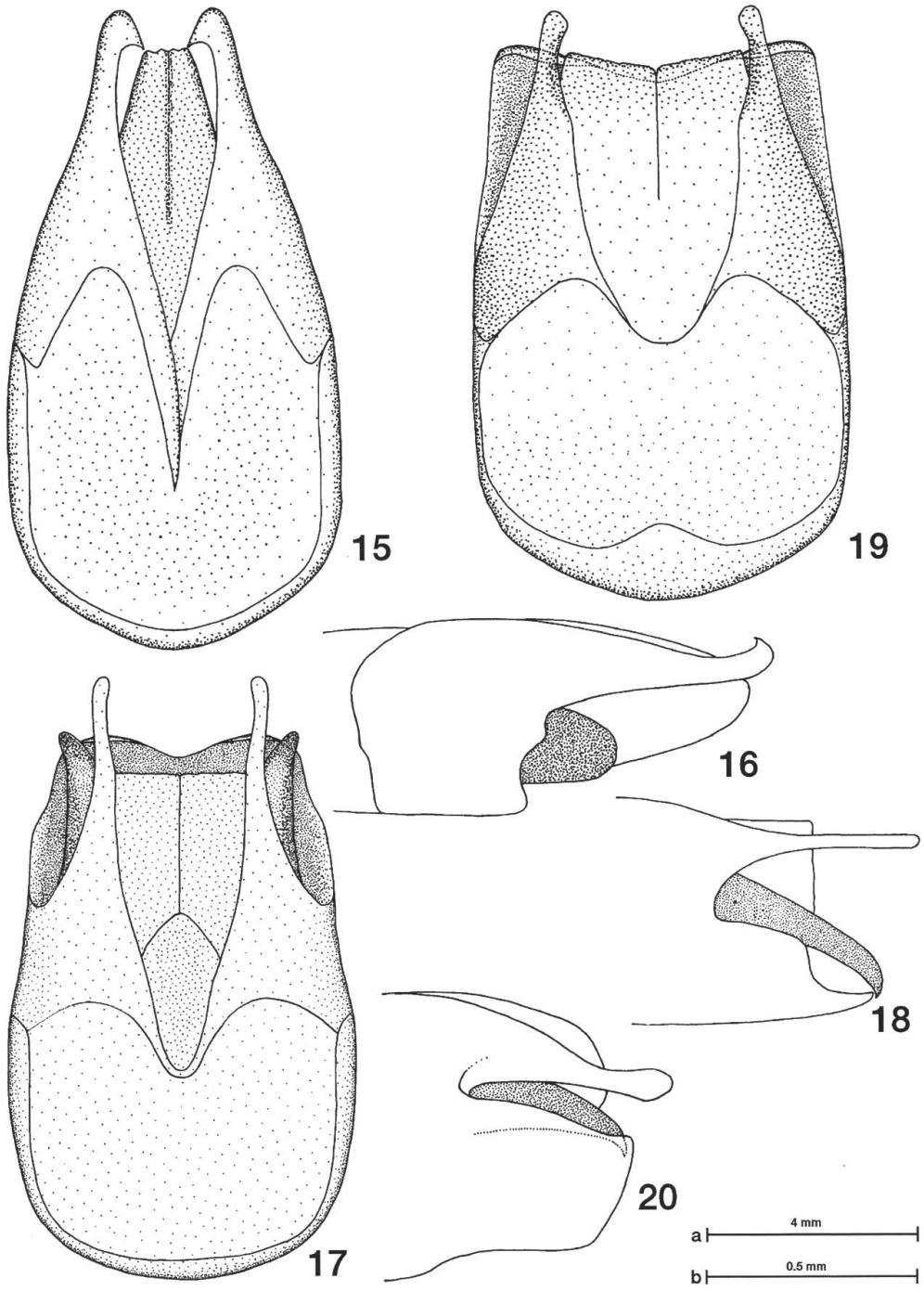
18. Head entirely yellow, aedeagus Figs 42-43... **C. lucida** Pic
– Head at least partly dark brown to black 19
19. Legs entirely yellow, wingless species, aedeagus (Figs 40-41)
C. podistroides n. sp.
– At least femora dark brown 20
20. Pronotum with central spot, aedeagus (Figs 32-33).
C. voriseki n. sp.
– Pronotum unicolorous or with pair of small spots 21
21. Pubescence of elytra dark brown, aedeagus (Figs 30-31).
C. jacobsoni Bar.
– Pubescence of elytra light grey 22
22. ♂: dorsal part of aedeagus turned up in lateroapical portion, laterophysae diverging (Figs 38-39), antennae not reaching apex of elytra
C. dobrzhanskii Bar.
– ♂: dorsal part of aedeagus not turned up in lateroapical portion, laterophysae nearly parallel-sided (Figs 36-37), antennae reaching apex of elytra 23
23. ♂: hind wings developed, elytra not shortened.
C. pumilio pumilio Heyd.
– ♂: wingless, elytra shortened, not covering the last three abdominal segments. **C. pumilio reductipennis** (Wittm.).

Female unknown: *C. emilieae* n. sp., *C. brancuccii* n. sp., *C. oculimarginalis ferganica* n. ssp.; *C. dobrzhanskii* Bar. and *C. pumilio pumilio* Heyd.

Cantharis oculata Gebler Figs 15-16.

Cantharis oculata GEBLER, 1827, Mém. Soc. Imp. Nat. Moscow 5: 316.

Head black, in front of eyes including mouthparts yellowish brown, antennae yellowish brown, segments towards end of antenna becoming darker to quite black. Pronotum yellowish brown with pair of small dark brown to black spots on disc. Legs completely yellowish brown, ventral part of prosternum yellowish brown, rest of ventral side of body blackish, abdominal segments brown bordered, elytra black.



Figs 15-20: aedeagus, ventral and lateral view: 15-16: *Cantharis oculata* Gebl.; 17-18: *C. rufa tenuelimbata* (Ball.); 19-20: *C. forticornis forticornis* Heyd. Scale a – Figs 15-16; b – Figs 17-20.

Male: Eyes relatively small but convex, head across eyes much narrower than pronotum, behind eyes moderately narrowing posteriorly. Antennae hardly reaching elytral midlength, antennal segments without impressions. Surface of head very finely microshagreened, punctate and pubescent, semilustrous to mat. Pronotum distinctly wider than long, anterior and lateral margins almost semicircular, posterior angles rounded. Surface of pronotum sparsely and finely punctate and pubescent, lustrous. Basal apodeme of outer claw of all tarsi well developed. Elytra parallel-sided, their surface finely corrugated and pubescent, mat. Aedeagus (Figs 15-16).

Female: Eyes smaller than in male, antennae shorter, hardly reaching 1/4 of elytral length, elytra very slightly enlarged posteriorly.

Length ♂♀: 11.9 – 14.8 mm.

Material examined: USSR, Kazakhstan: Kara-Tau chr., Kujuk per., 5.v.1981, Brodský, 16 ex. (VS); Bergen Uly-Tau, 24.v.1970, Skopin, 1 ex.; Karkaralinsk, 15.-25.vi.1971, Skopin, 1 ex. (all TMB).

Distribution: ? Greece; USSR: Ukraine, Crimea, Caucasus, S Rossia, Kazakhstan (partly according to HORION, 1953).

Cantharis rufa tenuelimbata (Ballion) *n. stat.* Figs 17-18.

Telephorus tenuelimbatus BALLION, 1870, Bull. Soc. Imp. Nat. Moscow 43: 352.
Cantharis tenuilimbata (sic!): JAKOBSON, 1905, Žuki Ross. Zap. Evr.: 678.
Cantharis turkestanica PIC, 1913, l'Échange 29: 187, n. syn.

Head, pronotum and scutellum yellowish brown, antennae brown, first two segments yellowish brown. Legs yellowish brown, tibiae and tarsi sometimes darkened. Elytra from yellowish brown with lateral longitudinal stripe starting subhumerally and not reaching both lateral margin and apex on each elytron to almost completely blackish brown, where only suture and very narrow subhumeral margin remain yellowish brown. Extremely dark colouration of elytra is connected with darker tibiae and tarsi.

Male: Eyes relatively large and strongly convex, head across eyes slightly narrower than pronotum, behind eyes narrowing posteriorly. Antennae reaching 3/4 of elytral length, antennal segments with longitudinal impressions. Surface of head very finely microshagreened, finely and sparsely punctate and pubescent, mat. Pronotum slightly wider than long, sides very slightly rounded, almost parallel-sided, anterior margin and angles widely rounded, posterior angles almost rectangular, obtusely tapered. Posterior margin slightly arcuate, almost

straight. Surface of pronotum very finely and sparsely punctate and pubescent, lustrous. Basal apodeme of outer claw large, developed on all tarsi. Elytra parallel-sided, corrugated, finely pubescent, mat. Aedeagus (Figs 17-18).

Female: Eyes smaller, head across eyes distinctly narrower than pronotum, head behind eyes less narrowing posteriorly. Antennae shorter, hardly reaching elytral midlength. Basal apodeme of outer claw smaller than in male, but visible. Pronotum and elytra wider than in male.

Length ♂♀: 8.5 – 11.0 mm.

Type material examined: *C. turkestanica* Pic: syntypes: Süd-Turkestan, 1913, K. Küchler S.G., 2♂ (MHNP, DEI).

Other material examined: Transcaspia, 4 ex. (NHMB); Transcaspia, Bodemeyer, 70 ex. (NMP); Samarkand, Reitter, 2 ex. (NMP); Turkestan, Samarkand, 1 ex. (NHMB); Syr-Darja, Kazalinsk, Jureček, 1 ex. (NMP); Margelan, Aris, 1 ex. (NMP); Margelan, Staudinger, 2 ex. (DEI); Syr-Darja, Perowsk, Bodemeyer, 2 ex. (NHMB); Syr-Darja, Staudinger, 1 ex. (NMP); Syr-Darja, Faust, 1 ex. (DEI); Syr-Darja, 5 ex. (NMP, NHMB); Ost Turkestan, 1 ex. (DEI); Turkestan, 6 ex. (NMP, DEI); Syr-Darja, Aulie-Ata, 3 ex. (NMP); Ost Turkestan, Aksu-Wüste, Hauser, 4 ex.; Chan-Tengri Mont. merid., 1 ex.; Turkestan, Kyndyr T., 1 ex. (all MHNP); Turkestan, Narin, Kricheldorf, 1 ex.; Talass-Thal, Fischer, 2 ex.; Taschkent, Hauser, 1 ex.; Talas-Thal, Semirjetschensk, Kricheldorf, 1 ex.; Prov. Kuldscha, Ak-sou-Thal, 1898, Hauser, 1 ex.; Süd-Turkestan, Küchler, 1913, 1 ex. (all DEI); Turkestan, Mts. Ghissar, 1898, Hauser, 1 ex.; Mts. Karateghin, Baldschuan, 924 m, 1898, Hauser, 1 ex.; Ost-Buchara, Tschitschantan, 1898, Hauser, 2 ex. (all NMP); Kirgizia: Kul-kul lake, Chamza-Abad env., 7.v.1977, Brodský, 1 ex.; Dolinka, vi.1987, Pokorný, 1 ex.; Chok-Tal, vi.1987, Pokorný, 1 ex.; Kazakhstan: Džambul env., 8.v.1978, Strejček et Víša, 2 ex.; Kujuk Pass (Kara-Tau Mts.), 5.v.1981, Brodský, 3 ex.; Uzbekistan: Zeravšanskij chr., Aman-Kutan, nr. Samarkand, 1000 m, 2.v.1977, Strejček, 3 ex.; Jordon Mts., 22.v.1980, Vilímová, 5 ex.; Turkestanskij chr. Mts., Džum-džum-sai, vi.1989, Růžička, 2 ex.; Zaaminskij zap., vi.1989, Růžička, 1 ex.; Tadzhikistan: Pendžikent, 800 m, 28.iv.1979, Kubáň, 1 ex.; Hissar Mts.: Takob, 24.vi.1976, Bílý, 1 ex.; Javroz, 2000 m, 24.iv.-3.v.1981, Dvořák et Brodský, 3 ex.; Semiganč, 27.iv.1981, Dvořák et Jelínek, 3 ex. (all VS); Transbaikal., 1 ex.; Transbaicalia, Selenga Tal, 1 ex.; Thibet, Kuku-Nor, 3200 m, 1898, Hauser, 3 ex.; C. Afghanistan, Prov. Kabul, Kabul, 1900 m, 20.-21.v.1967, Povolný, 1 ex.; Korea: Seishin, 1 ex.; Prov. Phjon-gan-namdo, Džame-ri Distr., Sunčhan, 27.v.1965, Mroczkowski et Riedel, 1 ex. (all NHMB); Korea, Sievers, 1 ex.; Gensan, 1 ex. (all DEI).

Distribution: USSR: SE Siberia (Baical env.), Kazakhstan, Kirgizia, SE Uzbekistan, Tadzhikistan, Afghanistan, China: Tibet; Korea.

It differs from the nominotypical subspecies by more or less darker colouration of the elytra. The aedeagus shows no differences. *C. turkestanica* Pic is an extreme dark form, occuring mainly in Tadzhikistan and Afghanistan, but similarly dark forms were found also in Kazakhstan and Kirgizia and continuous interstages between clinal forms were ob-

served in the examined material. Maybe, that continuous interstages will be found in the future also between *C. rufa rufa* and this subspecies, but more material from southern Siberia is necessary to solve this problem. Now it seems that the border between these subspecies goes somewhere in southern Siberia North of lake Baical.

Cantharis forticornis forticornis Heyden Figs 19-20.

Cantharis (Telephorus) forticornis HEYDEN, 1885, Deutsche Entomol. Zeitschr. 29: 287.
Cantharis arisi PIC, 1906, l'Échange 22: 82, n. syn.
Cantharis arisi var. *andischanensis* PIC, 1914, l.c. 30: 4, n. syn.

Anterior portion of head including mouthparts yellowish brown, between eyes and vertex yellow, laterally behind eyes brown in male, in female head completely yellowish brown. First antennal segment and basal portion of the second one yellowish brown, following segments brown to dark brown. Prothorax and legs yellowish brown, sometimes tips of tibiae darkened, tarsi brown. Elytra, meso and metasternum blackish brown to black, abdomen yellowish brown, with pair of small, darker lateral spots on sternites.

Male: Eyes small but strongly convex, head across eyes distinctly narrower than pronotum, behind eyes narrowing posteriorly. Antennae slightly exceeding over elytral midlength, antennal segments with longitudinal impressions. Surface of head very finely microshagreened, mat. Pronotum about 1/4 wider than long, margins widely rounded, only posterior angles sometimes very slightly, obtusely tapered. Surface of pronotum like the head microshagreened, mat. Elytra very slightly wider than pronotum, parallel-sided, their surface corrugated, covered by sparse grey pubescence, mat. Basal apodeme of outer claw developed on all tarsi. Aedeagus (Figs 19-20).

Female: Eyes smaller and less convex, head behind eyes very slightly narrowing posteriorly, head across eyes much narrower than pronotum. Antennae much shorter than in male, hardly exceeding over humeral portion. Pronotum wider, distinctly transverse, elytra wider than in male.

Length ♂♀: 7.4 – 9.0 mm.

Type material examined: *C. forticornis* Heyd.: holotype, ♂, Turkst., Namangan, Staudgr., 1885 (DEI); *C. arisi* Pic: syntypes: Andischan, C. Aris lgt., 2♂ (MHNP), 1♂ (TMB); *C. arisi* var. *andischanensis* Pic: the same data, 1♀ (MHNP).

Other material examined: Turkestan, Andischan, Aris, 1 ex. (MHNP); Andis-

chan, 2 ex. (NHMB); Turk. Sussamyr-Gb., Ketmen-Tjube, 3 ex. (NHMB, MHNP); Prov. Fergana, Namangan, 4 ex. (NHMB); Ost-Turkestan, Kok-teke-Gegb., vi.1902, Hauser, 2 ex. (DEI); Margelan, Reitter, 2 ex. (MHNP); Turkestan, Staudgr., 1 ex. (DEI); Turcmenien, Reitter-Leder, 1 ex. (MHNP); Turkest., Alai, Staudinger, 1 ex. (DEI); Osch, 1 ex. (MHNP); Fergana, Namangan env., 1.-10.v.1903, Jankovskij, 1 ex. (ZIL); Buchara occ., Tschardschui, 1 ex. (NMP). The last locality as well as «Turcmenien, Reitter-Leder» are probably caused by mislabelling and occurence in Turcmenia must be verified.

Distribution: USSR: E Uzbekistan (Fergana basin), W Kirgizia, ? Turcmenia.

Cantharis forticornis nigropubescens Barovskij, *n. stat.*

Cantharis nigropubescens Barovskij, 1926, Rev. Russe Entomol. 20: 239.

This subspecies differs from the nominotypical one especially by the black pubescence of the elytra and also by the tendency of generally darker coloration of the body. Aedeagus like in nominotypical subspecies.

Male: Head behind eyes dorsally completely black, sometimes black coloration expanded also to area in front of and between eyes. Colouration of antennae like in nominotypical subspecies, in extremely dark forms also upper half of first antenall segment black, in these forms pronotum with two small dark spots, which can be connected one another. Femora and tibiae yellowish brown to completely black.

Female: Head completely yellowish brown or with two small black spots on vertex or vertex with large black spot expanding between eyes. Pronotum entirely yellowish brown, legs yellowish brown or tibiae and knees in diverse degree darkened.

Length ♂♀: 8.5 – 11.5 mm.

Type material examined: syntype, ♂, Fergana, fl. Kugart-su, 6.v.1925, Dobrzhanskij (ZIL), here designated as lectotype.

Other material examined: Uzbekistan: Aktaš nr Taškent: 30.iv.1925, Dobrzhanskij, 1 ex. (ZIL); 7.v.1978, Víša, 4 ex.; 22.iv.1980, Hladil, 1 ex.; Taškent, iv.1972, Olexa, 1 ex.; Čimgan (nr. Taškent), 2000-2400 m, Bílý et Víša, 5 ex. (all VS).

Distribution: USSR: NE Uzbekistan (Chatkal Mts.), W Kirgizia.

This subspecies seems to represent forms from higher altitudes, while the nominotypical one is distributed especially in lower altitudes in the Fergana basin. Extremely dark forms were all collected in Čimgan Mts.

Cantharis fallaciosa Barovskij Figs 21-22.

Cantharis fallaciosa BAROVSKIJ, 1926, Rev. Russe Entomol 20: 237.
Cantharis fallaciosa var. *spoliata* BAROVSKIJ, 1926, 1.c.: 237.
Cantharis fallaciosa var. *semispoliata* BAROVSKIJ, 1926, 1.c.: 237.
Cantharis fallaciosa var. *angustiplaga* BAROVSKIJ, 1926, 1.c.: 237.

Head yellowish brown, black behind eyes in male, yellowish brown with only small black spot or completely yellowish brown in female, first two antennal segments yellowish brown, following 4-5 segments yellowish only in basal portion, rest of segments blacks. Prosternum yellowish brown, pronotum mostly with pair of small, dark brown spots, which sometimes coalesce, meso and metasternum black. Legs yellowish brown with tarsi and basal portion of femora brown, or middle and posterior femora completely dark brown. Elytra black, wide longitudinal subhumeral stripe and narrow lateral margin on each elytron yellowish brown. Abdomen black, last segment and narrow lateral margins yellowish brown.

Male: Eyes small, convex, head across eyes very slightly narrower than pronotum, behind eyes slightly narrowing posteriorly. Surface of head finely microshagreened and pubescent, mat. Antennae reaching 2/3 of elytral length, antennal segments with longitudinal impressions. Pronotum slightly wider than long, both anterior and lateral margins widely rounded, posterior angles obtusely tapered. Surface of pronotum, like that of head, mat. Apodemes of outer claws of all tarsi well developed. Elytra somewhat wider than pronotum, parallel-sided, their surface roughly corrugated, finely pubescent, mat. Aedeagus (Figs 21-22).

Female: Eyes smaller, less convex, than in male, pronotum distinctly wider than long, elytra slightly wider than pronotum.

Length ♂♀: 7.8 – 8.5 mm.

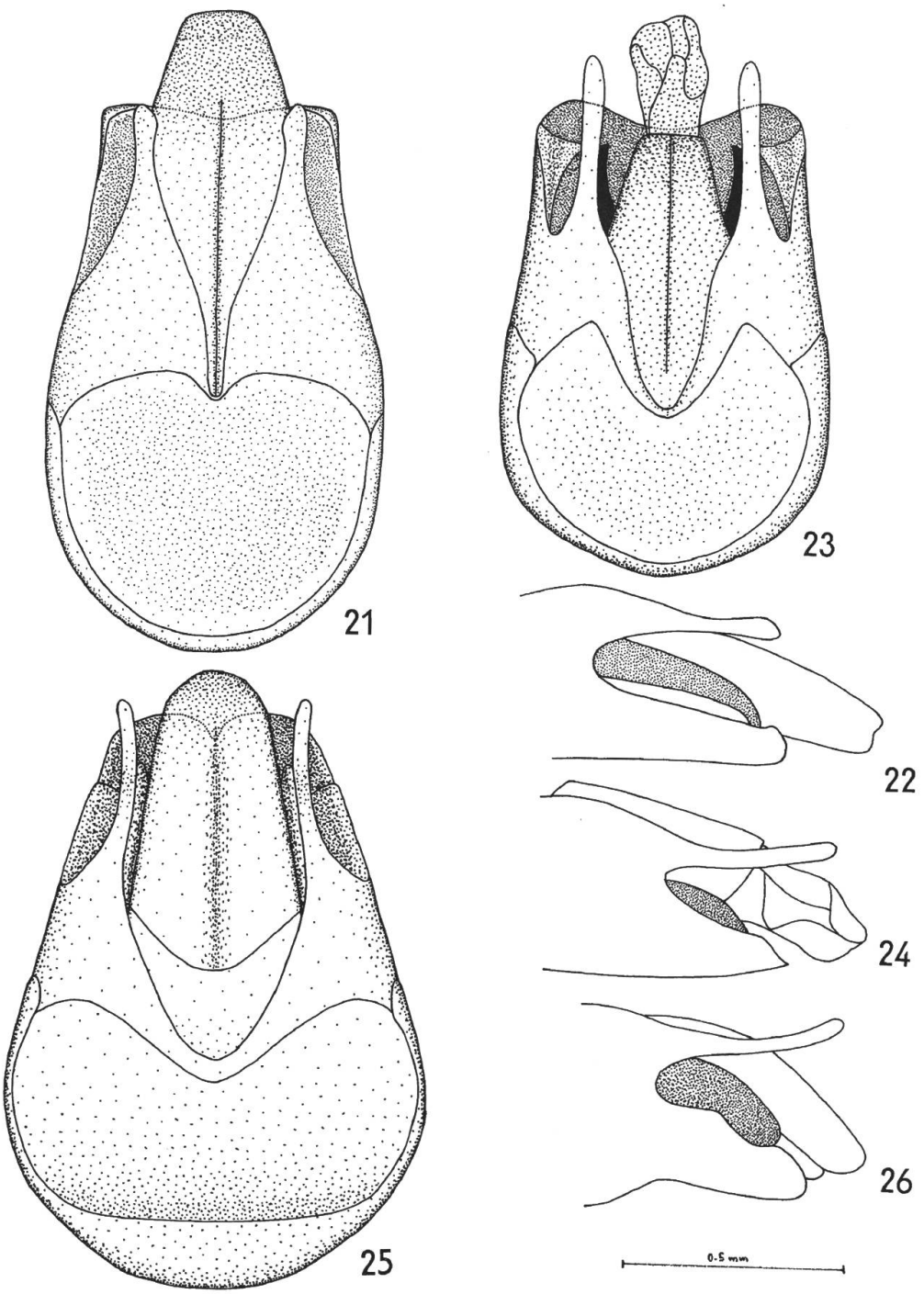
Type material examined: syntypes: Fergana, montes ad fl. Kara-Alma, accursum fl. Kugart-su, Dobrzhanskij, 6.v.1925, 2♂, I hereby designate one of them as lectotype; 27.v.1925, ♂♀, designated as paralectotypes (ZIL).

Distribution: USSR: Kirgizia.

Cantharis oculimarginalis oculimarginalis Hicker *n. stat.*

Figs 23-24.

Cantharis submarginalis var. *oculimarginalis* Hicker, 1935, Wiss. Ergebn. Niederl. Exped. Karakorum 1:292.



Figs 21-26: aedeagus, ventral and lateral view: 21-22: *Cantharis fallaciosa* Bar.; 23-24: *C. oculimarginalis oculimarginalis* Hick.; 25-26: *C. brancuccii* n. sp.

Head black, frons and mouthparts yellowish brown, first antennal segment completely yellowish brown, following segments dark brown or brown with lighter bases. Prothorax and legs yellowish brown, tarsi infuscate, elytra blackish brown, narrow lateral margin of elytron yellowish brown (in female mostly not reaching apex of elytron). Meso and metasternum dark, abdomen completely yellow or yellow with brown markings.

Male: Eyes small but convex, head across eyes slightly narrower than pronotum, antennae slightly exceeding over elytral midlength, antennal segments with small, oval impressions. Surface of head and pronotum microshagreened, sparsely pubescent, mat. Pronotum slightly wider than long, rounded, only posterior angles slightly obtusely tapered. Basal apodeme of anterior outer claw small but distinct, those of middle and posterior ones very small, hardly visible. Elytra slightly wider than pronotum, parallel-sided, their surface corrugated, sparsely grey pubescent, mat. Aedeagus (Figs 23-24).

Female: Eyes smaller, not so convex, than in male, head behind eyes very slightly narrowing posteriorly, antennae shorter, not reaching 1/3 of elytral length. Pronotum distinctly wider than long, elytra wider than in male.

Length ♂♀: 7.8 – 8.6 mm.

Type material examined: syntypes: Yarkand, 1300 m, 8.-27.iv.1930, ♂ (last abdominal segments and tarsi missing); between Sanju Bazar and Suget-Karaul, 1800-3600 m, 19.-31.v.1930, ♀, all Nederlandsche Karakorum Expeditie, Sillem (ZMVA). Female here designated as lectotype, male as paralectotype.

Other material examined: Ost-Turkestan, Aksu, 1067 m. v.1903, Hauser, ♂♀ (DEI).

Distribution: W China (Turkestan).

Cantharis oculimarginalis ferganica n. ssp.

This subspecies differs from the nominotypical one by dark brown to black antennae, by black legs (only knees dark brown) and by completely blackish elytra. Aedeagus identical in both subspecies.

Length ♂: 7.5 mm.

Type material: holotype, ♂, Turkestan, Fergana, in NHMB.

Distribution: USSR: Uzbekistan (Fergana basin).

Name derivation: named according to its occurence.

Cantharis brancuccii n. sp. Figs 25-26.

Head, pronotum and legs yellowish brown, antennal segments towards end darkening to dark brown. Meso, metasternum, scutellum and elytra blackish brown, abdomen yellowish brown. Pubescence of body light grey.

Male: Eyes convex, head across eyes distinctly narrower than pronotum, behind eyes narrowing posteriorly. Antennae short, not reaching elytral midlength, antennal segments with very small, round impressions. Head very finely microshagreened, finely punctate and pubescent, mat. Pronotum transverse, anterior margin rounded, anterior angles and lateral margins widely rounded. Surface of pronotum like that of head, mat. Basal apodeme of outer claw in all tarsi distinct, the largest one in anterior claws. Elytra parallel-sided, their surface finely corrugated and pubescent, mat. Aedeagus (Figs 25-26).

Female unknown.

Length ♂: 7.5 mm.

Holotype ♂ (NHMB): Chan-Tengri Mont. merid.

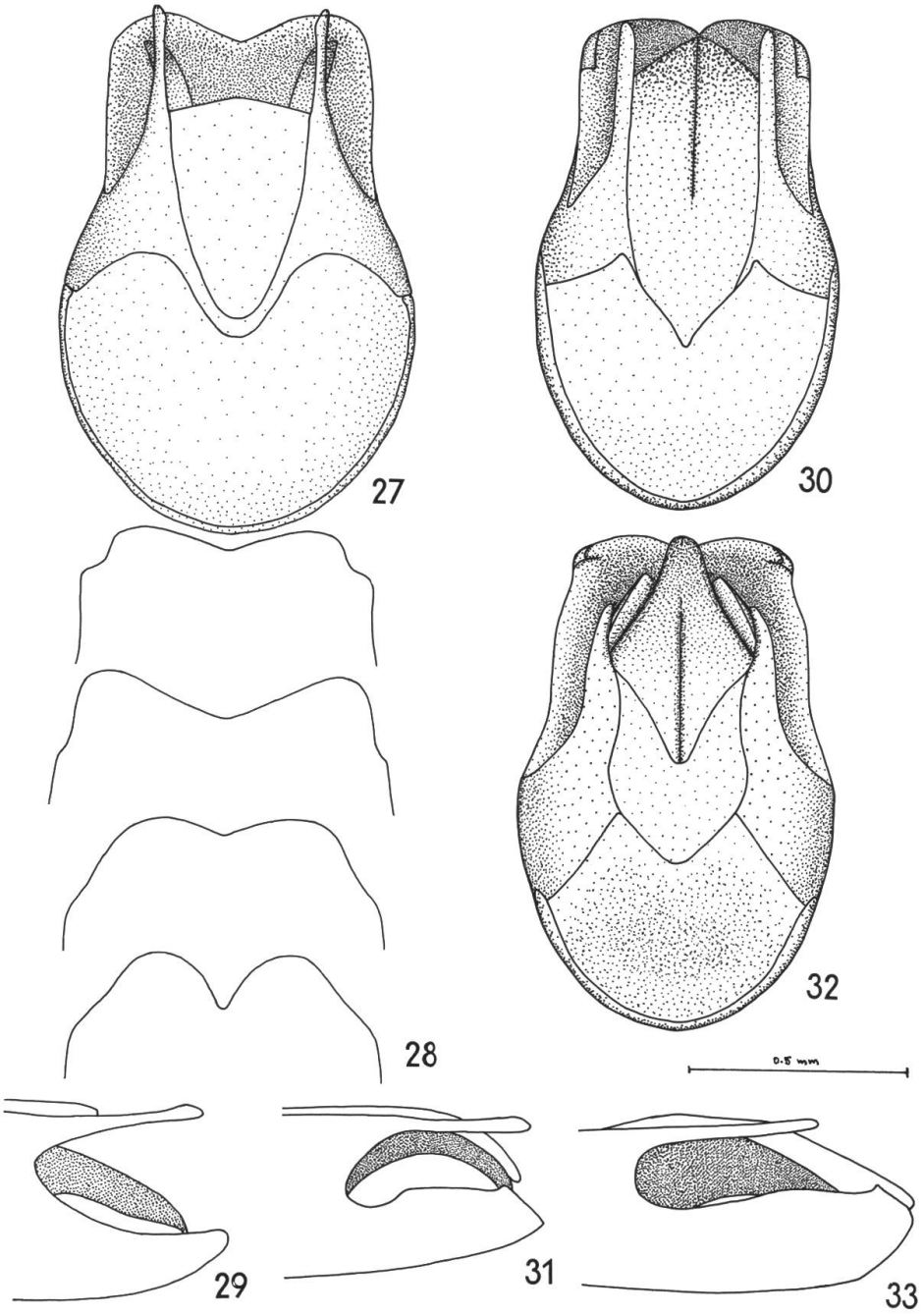
Distribution: W China (Turkestan).

Name derivation. Named after my friend, Dr. Michel Brancucci, well-known specialist in the families Cantharidae and Dytiscidae.

It is closely related to *C. oculimarginalis* Hick., from which it differs by the smaller eyes, wider pronotum, shorter antennae and by the colouration of the head. The dorsoapical part of the aedeagus narrows towards apex.

Cantharis biplagiata (Ballion) Figs 27-29.

Telephorus biplagiatus BALLION, 1870, Bull. Soc. Imp. Natur. Moscou 43: 351.
Cantharis biplagiata: PIC, 1914, l'Échange 30: 5.
Cantharis forticornis var. *bimaculifera* HEYDEN, 1888, Deutsch. Entomol. Zeitschr. 1888: 41, n. syn.
Cantharis dia REITTER, 1898, Wien. Entomol. Zeit. 17: 123, n. syn.
Cantharis funestula PIC, 1906, l'Échange 22: 82, n. syn.
Cantharis chianschanensis PIC, 1913, l.c. 29: 187, n. syn.
Cantharis musarti PIC, 1913, l.c.: 187, n. syn.
Cantharis biplagiata var. *auliensis* PIC, 1914, l.c. 30: 6, n. syn.
Cantharis biplagiata var. *uniplagiata* PIC, 1914, l.c.: 6, n. syn.
Cantharis biplagiaticollis PIC, 1914, l.c.: 6, n. syn.
Cantharis kiritshenkoi BAROVSKIJ, 1926, Rev. Russe Entomol. 20: 240, n. syn.



Figs 27-33. 27-29: *Cantharis biplagiata* (Ball.): 27 – aedeagus (Embek); 28 – variability of dorsoapical part of aedeagus (from above Embek, Ala Archa, Lepaisaj fl., Embek); 29 – aedeagus, lateral view; 30-33: aedeagus, ventral and lateral view: 30-31: *C. jacobsoni* Bar.; 32-33: *C. voriseki* n. sp.

Head completely black with brown mandibles to yellowish brown with darker spot on vertex. Antennae dark brown to black, bases of antennal segments lighter, first two antennal segments sometimes completely yellowish brown to dorsally infuscate. Pronotum completely yellowish brown or with a pair of discal spots of diverse size or these spots are connected, forming a large, transverse stripe or spot so large, that only lateral margins remains yellowish brown. In female occur only the first two possibilities. Legs completely black or black with lighter knees or black with distal portion of femora and tibiae yellowish brown or legs completely yellowish brown (found in females only). Elytra and ventral surface of meso and metasternum black, abdomen completely yellowish brown or sternites with pair of black spots or black with brown lateral margins.

Male: Eyes small but convex, head across eyes distinctly narrower than pronotum. Antennae reaching elytral midlength, antennal segments with small, oval impressions. Surface of head microshagreened with indistinct punctures, pubescent, mat. Pronotum distinctly wider than long, widely rounded to moderately transverse, only posterior angles very slightly obtusely tapered. Surface of pronotum more finely than head microshagreened, with sparser pubescens, mat. Elytra slightly wider than pronotum, parallel-sided, their surface corrugated, sparsely grey pubescent, matt. Basal apodeme of anterior outer claw small but distinct, those of middle and posterior ones almost indistinct. Aedeagus Figs 27-29. In some specimens pair of pubescent elevations can be observed in front of apex of dorsal part of aedeagus, especially from caudal view, but both forms and interstages were found in material from the same locality.

Female: Eyes less convex and pronotum more strongly transverse than in male, so that head across eyes much narrower than pronotum. Antennae much shorter, only very slightly exceeding over humeral portion of elytra. Elytra relatively wider. Basal apodeme of anterior outer claw hardly visible, those of middle and posterior ones absent.

Length ♂♀: 7.3 – 9.5 mm.

Variability. This largely distributed species shows also a large variability. Three clines can be observed: 1. tendency to forming pair of elevations on apex of dorsal part of aedeagus – towards South; 2. tendency to yellowish brown tibiae – towards South; 3. tendency to darker coloration of pronotal disc – towards North and higher altitudes. These tendencies are not dependent on each other and also interstages between forms occur in one locality.

Type material examined: *C. forticornis* var. *bimaculifera* Heyd.: syntypes: Turkest., Alai, Staudinger, 1♂ 2♀ (DEI); *C. dia* Rtt.: syntypes: Thian-Shan, 2♀ (MHNP, TMB); *C. funestula* Pic: syntypes: Thian-S., Musart, 2♀ (MHNP); Thian-Schan, Musart, vi.1894, Hauser, ♀ (MHNP); Thian-Schan, ♂ (TMB); *C. chianschanensis* Pic: holotype, Thian-Schan, Musart, vi.1894, Hauser, ♀ (MHNP); *C. musarti* Pic: holotype, Thian-Schan, Musart, vi.1894, ♂ (MHNP); *C. biplagiata* var. *auliensis* Pic: holotype, Aulie-Ata, ♀ (MHNP); *C. biplagiata* var. *uniplagiata* Pic: syntypes: without data, ♂; Aulie-Ata, ♂ (all MHNP); *C. biplagiaticollis* Pic: syntypes: Aulie-Ata, 1♂ 2♀ (MHNP); *C. kiritshenkoi* Bar.: syntypes: Turkestan ross., jug. Alexandri, Tshaj-Sandyk, 2700 m, 20.vi.1910, ♂; 26.vi.1910, ♀; all Kiritshenko (ZIL).

Other material examined: Turkestan, 1 ex. (TMB); Transcaspia, Bodemeyer, 49 ex. (NMP); Thian-S., Naryn-Kol., 1 ex.; Thian-S., Tekesthal, 2 ex. (all NHMB); Thian S., Musart, 13 ex. (NHMB, TMB, NMP); Semirjetschensk: Kamenajaret., Winkler, 1 ex. (MHNP); Pestschanaya, Winkler, 6 ex.; Kirgis-sai, Winkler, 1 ex.; Djarkent, Winkler, 1 ex.; Chan-Tengri merid., 1 ex.; Ost-Turkestan, Kok-teke-Gebg., vi.1902, Hauser, 3 ex. (all NHMB); Turk., Sussamyr-Gb., Ketmen Tjube, 10 ex. (NHMB, MHNP); Issyk-kul, 3 ex. (NHMB, DEI); Tokmak, 1899, 1 ex. (DEI); Turkestan, Dongus-tau, viii.1901, Hauser, 2 ex. (DEI); Aulie-Ata, 32 ex. (NMP, NHMB, DEI, MHNP, TMB); Transcaspia, Karakum, 1 ex.; Iuldus, 1 ex.; Dsungaria, Borochoro Gb., vi.1905, Hauser, 1 ex.; Mongolia, Chovd aimak, 20 km N Chovd gol, Ongozijn ulaan uu, 13.vi.1975, Piechocki, 1 ex. (all NHMB); Kazakhstan: Alma Arasan (Alma Ata env.), 28.-30.v.1974, Pfeffer, 1 ex.; Kirgiz chr., Makbal, 7.v.1981, Brodský et Dvořák, 3 ex.; Alma Ata, 28.v.1974, Olexa, 1 ex.; Saryesik-atyrau des., Embek, 1.v.1990, Beneš et Voříšek, 3 ex.; Ketmeň Mts., Lepaisaj fl., 10.v.1990, Beneš et Voříšek, 2 ex.; Kirgizia: Ala Arča (nr. Frunze), 27.v.1974, Příhoda, 10 ex.; 24.v.1980, Vilímová et Tonner, 14 ex.; Uzbekistan: Chamza-abad, 7.v.1977, Strejček, 6 ex.; Kuk-kul lake, 21.v.1980, Vilímová, 1 ex.; Turkestanskij chr. Džum-džum-sai, vi.1989, 1 ex.; Zaaminskij zap., vi.1989, 1 ex. all Růžička (all VS).

Distribution: USSR: E Uzbekistan, Kirgizia, SE Kazakhstan, NW China, W Mongolia.

Cantharis jacobsoni Barovskij Figs 30-31.

Cantharis jacobsoni BAROVSKIJ, 1926, Rev. Russe Entomol. 20: 237.
Cantharis heptapotamica BAROVSKIJ, 1928, l.c. 22: 97, n. syn.

Head black, front and mouthparts brown to dark brown. Antennae black, first two antennal segments more or less infuscate. Pronotum orange, sometimes with pair of small, not sharply limited brown spots on disc. Femora black, tibiae and tarsi brown to blackish, knees always lighter. Elytra and abdomen black, sternites with yellow lateral margins, last two abdominal segments completely yellow.

Male: Eyes small but convex, head across eyes approximately as wide as pronotum, head behind eyes narrowing posteriorly. Surface of head very finely microshagreened, with sparse pubescence, mat to semilustrous. Antennae reaching 2/3 of elytral length, antennal segments with small oval impressions. Pronotum slighty wider than long, lateral margins nearly parallel-sided, anterior angles widely rounded, the posterior ones obtuse, almost rounded. Surface of pronotum with very sparse puncturation and pubescence, lustrous. Outer claw of all tarsi with well developed basal apodeme. Elytra slightly wider than pronotum, parallel-sided, completely covering abdomen or shortened, maximally not covering last three abdominal segments. Hind wings developed. Surface of elytra corrugated, sparsely pubescent, lustrous. Aedeagus (Figs 30-31), apex of dorsal part of aedeagus slightly variable.

Female: Eyes smaller than in male, head across eyes distinctly narrower than pronotum, antennae shorter, not reaching 1/3 of elytral length. Basal apodeme of outer claws smaller but distinct. In extreme forms with shortened elyctra the apical part of elytron is distinctly narrowed, so that the lateroapical portion of abdomen is not covered.

Length ♂♀: 5.7 – 7.7 mm.

Variability. Forms with shortened elytra occur probably in more harsh climatic zones, but complete cline of this character was observed, in smaller extent also in the same locality.

Type material examined: *C. jacobsoni* Bar.: sytypes: Prov. Heptapotamica, montes Alatau transiliense, angustae fl. Kargalinka, 1400-2350 m, l.iv.1907, ♀; 5.iv.1907, ♀; 27.v.1907, 2♀; all Jacobson (ZIL). First mentioned specimen is here designated as lectotype, the other ones as paralectotypes. *C. heptapotamica* Bar., syntype, ♂, Prov. Heptapotamica, fl. Almatinka prope Vernyj, 22.v.1926, Dobržanskij (ZIL).

Other material examined: Kazakhstan: Alma Ata env., Medeo: 2000 m, 11.v.1978, Víša, Olexa, Strejček, Bílý et Muche, 39 ex. (VS, NHMB); Alma Ata env., 29.v.1974, Olexa, 1 ex.; Zailijskij Ala-Tau: Alma Arasan, 6.vii.1979, Dvořák, 1 ex.; 1.vi.1974, Příhoda, 2 ex.; 30.v.1980, Vilímová, 5 ex.; Issyk, 1750 m, 29.v.1974, Pfeffer et Olexa, 2 ex.; Tujukau, 2150-2550 m, Matějíček, 3 ex.; Kara-tau Mts., Kujuk pass, 1300 m, vi.1980, Tonner, 1 ex. (all VS).

Distribution: USSR: SE Kazakhstan.

Cantharis voriseki n. sp. Figs 32-33.

Head black, mouthparts dark brown, antennae black, basal two antennal segments more or less infuscate. Prothorax orange, with central, transverse, pentagonal dark brown spot on disc. Legs black, knees dark

brown. Elytra black, abdomen black, sternites with yellow lateral margins.

Male: Eyes small but convex, head across eyes very slightly narrower than pronotum, behind eyes narrowing posteriorly. Antennae reaching 2/3 of elytral length, antennal segments with small oval impressions. Surface of head very finely microshagreened, very finely, sparsely punctate and pubescent, semilustrous. Pronotum distinctly wider than long, lateral margins almost parallel-sided, anterior angles rounded, posterior ones obtusely rounded. Basal apodeme of outer claw of all tarsi small but distinct. Elytra slightly wider than pronotum, parallel-sided, their surface corrugated, sparsely pubescent, lustrous. Aedeagus (Figs 32-33).

Female: Eyes smaller, not so convex as in male, head across eyes distinctly narrower than pronotum, which is transverse. Elytra relatively wider than in male.

Length ♂♀: 7.0 – 7.5 mm.

Holotype ♂ and paratypes (NMP): Kazachstan m. or.; Ketmeň Mts., Lepaisaj fl., 10.v.1990, Beneš et Voříšek; Ketmen Geb., Umg. Podgornoje, 1680 m, 26.v.1990, V. Dolin, 2♂ 2♀ (NHMB).

Distribution: USSR: SE Kazakhstan (Ketmen Mts.).

Name derivation: named after one of the collectors, my friend Mr Jiří Voříšek.

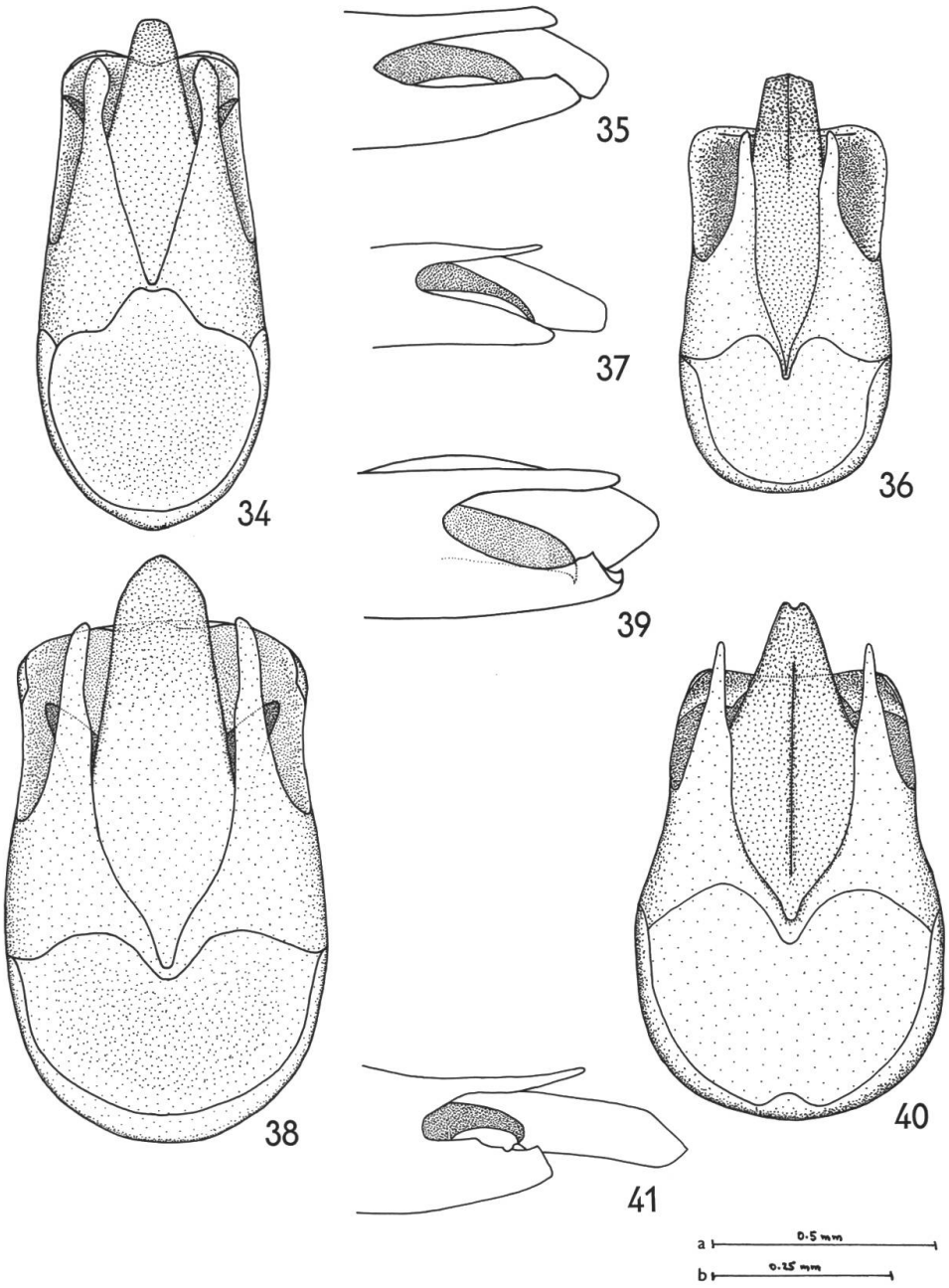
Closely related to *C. jacobsoni* Bar., from which it differs by the spot on the pronotum, by shorter, slightly inwards bent paramerae and by wider laterophysae seen from lateral view.

Cantharis kugartensis Barovskij Figs 34-34.

Cantharis kugartensis BAROVSKIJ, 1926, Rev. Russe Entomol. 20: 239.

Head dark brown, yellowish brown between and before eyes (male), entirely yellowish brown (female). Antennae dark brown, segment 1 yellowish brown, segments 2-4 more or less basally yellowish brown. Prothorax yellow to yellowish brown, legs dark brown, apices of femora and bases of tibiae yellowish brown to brown. Elytra brownish black, very narrow lateral margin and sometimes also suture yellowish brown. Abdomen dark brown, two last segments completely yellowish brown, other ones more or less light bordered.

Eyes small but convex, head across eyes approximately as wide as pronotum, behind eyes narrowing posteriorly. Antennae slightly exceeding over elytral midlength. Antennal segments with shortly oval



Figs 34-41: aedeagus, ventral and lateral view: 34-35: *Cantharis kugartensis* Bar.; 36-37: *C. pumilio pumilio* Heyd.; 38-39: *C. dobrzhanskii* Bar.; 40-41: *C. podistroides* n. sp. Scale a – Figs 34-37, 40-41; b – Figs 38-39.

impressions. Surface of head finely microshagreened and pubescent, semilustrous. Pronotum slightly wider than long, anterior angles rounded, lateral margins slightly rounded, nearly parallel-sided, posterior angles obtusely tapered. Surface of pronotum only very sparsely punctate and pubescent, lustrous. All outer claws with very small but visible apodeme. Elytra very slightly wider than pronotum, parallel-sided, surface of elytra corrugated, covered by sparse grey pubescence, lustrous. Aedeagus (Figs 34-35).

Female: Eyes smaller than in male, head across eyes narrower than pronotum, less narrowing posteriorly behind eyes. Antennae missing in examined specimens. Pronotum distinctly wider than long, lateral margins more rounded. All claws missing in examined specimens.

Length ♂♀: 5.9 – 7.6 mm.

Type material examined: syntypes: Fergana, trajectus Kugart, 21.-22.v.1925, ♂, here designated as lectotype; 24.v.1925, ♂ 2♀, designated here as paralectotypes (ZIL).

Distribution: USSR: Kirgizia.

Cantharis pumilio pumilio Heyden Figs 36-37.

Cantharis pumilio HEYDEN, 1885, Deutsch. Entomol. Zeitschr. 29: 288.

Head black, mouthparts yellowish brown, first antennal segment yellowish brown, darkened on its upper surface, rest of segments dark brown with lighter bases. Prothorax yellowish brown, femora and tarsi dark brown, tibiae yellowish brown, darkened terminally. Meso and metathorax dark brown, abdominal segments dark brown with lighter margins, last segment yellowish brown. Elytra blackish brown.

Male: Eyes relatively large, strongly convex, head across eyes as wide as pronotum, behind eyes narrowing posteriorly. Antennae reaching apex of elytra, antennal segments with very small, almost invisible round impressions. Surface of head finely microshagreened and finely grey pubescent, mat. Pronotum slightly wider than long, anterior angles rounded, lateral margins almost straight, slightly converging posteriorly, posterior angles obtusely tapered. Surface of pronotum very finely punctate, sparsely pubescent, lustrous. Apodeme of outer claw distinct in anterior tarsi, not developed in middle and posterior ones. Elytra very slightly wider than pronotum, parallel-sided, corrugated, finely grey pubescent, lustrous. Aedeagus (Figs 36-37).

Female unknown.

Length ♂: 4.8 mm.

Type material examined: holotype, ♀, Turkest., Namangan, Staudgr., 1885 (DEI).

Distribution: USSR: Uzbekistan (Fergana basin).

Cantharis pumilio reductipennis (Wittmer) *n. comb., n. stat.*

Podistra (s. str.) *reductipennis* WITTMER, 1966, Ann. Mag. Nat. Hist. 13, 9: 491.

Male: It differs from the nominotypical subspecies by following characters: antennal segments and tibiae somewhat lighter, pronotum as long as wide, with pair of not sharply limited, small brown spots, elytra shortened, not covering last three abdominal segments, humera very slightly developed, hind wings absent.

Female: Eyes smaller than in male, not so convex, antennae yellowish brown, first three segments completely yellow, pronotum without any spot, slightly wider than long, lateral margins more arcuate than in male, elytra more shortened, reaching about abdominal midlength.

Length ♂♀: 4.5 – 7.0 mm.

Type material examined: paratypes, ♂♀, Kirgisa, Sary-Čeleg, Arkit, 18.v.1962 (NHMB).

Distribution: USSR: Kirgizia.

Cantharis dobrzhanskii Barovskij Figs 38-39.

Cantharis dobrzhanskii BAROVSKIJ, 1926, Rev. Russe Entomol. 20: 238.
Cantharis dobrzhanskii var. *monticola* BAROVSKIJ, 1926, l.c.: 239.

Very similar to preceding species, from which it differs by the following characters: pronotum sometimes anteriorly and posteriorly infuscate with a pair of small dark spots on disc, legs completely dark brown, surface of head almost lustrous, antennae shorter, not reaching apex of elytra, aedeagus Figs 38-39.

Female unknown.

Length ♂: 4.0 – 4.2 mm.

Type material examined: syntypes: Fergana, montes ad fl. Kara-Alma, accursum fl. Kugart-su, 27.v.1925, Dobrzhanskij, 2♂, one of them designated here as lectotype, the second one as paralectotype.

Distribution: USSR: Kirgizia.

Cantharis podistroides n. sp. Figs 40-41.

Head dark brown to black, frons and vertex posteriorly yellow. Antennae, prothorax and legs completely yellow, scutellum yellow to brown. Elytra black, mesosternum yellow, metasternum dark brown; male: abdomen completely ventrally and last four segments dorsally yellow, basal abdominal segments dorsally dark brown; female: only last three abdominal segments dorsally yellow, rest of segments both dorsally and ventrally dark brown.

Male: Eyes small, moderately convex, head across eyes approximately as wide as pronotum, behind eyes narrowing posteriorly. Antennae reaching apex of shortened elytra. Antennal impressions present, but small and hardly visible. Surface of head very finely microshagreened, finely and sparsely punctate and pubescent, mat. Pronotum very slightly wider than long, parallel-sided, anterior margin almost straight, anterior angles rounded, posterior ones obtusely tapered. Surface of pronotum very sparsely and finely punctate and pubescent, lustrous. Basal apodeme of outer claw of all tarsi distinctly developed, those of middle and posterior tarsi in smaller extent. Elytra strongly shortened, slightly enlarging posteriorly, not covering last four to five abdominal segments, humeral bulge slightly developed, hind wings absent. Surface of elytra corrugated, very sparsely pubescent, lustrous. Aedeagus (Figs 40-41).

Female: Eyes less convex, head with eyes distinctly narrower than pronotum, antennae shorter, not reaching apex of elytra, pronotum distinctly wider than long, sides of pronotum slightly rounded. Basal apodeme of outer claw slightly developed, distinct only on anterior tarsus. Elytra more shortened than in male, not covering last five to six abdominal segments, more enlarging posteriorly.

Length ♂♀: 5.8 – 6.7 mm.

Holotype ♂ and paratypes (NMP): USSR, Uzbekistan, Ťan-šan Mts., Mt. Aktaš (nr. Taškent), 1000 m, 7.v.1978, Strejček; paratypes: the same locality: 30.iv.1978, Strejček, 3♂; 7.v.1978, Víša, ♂♀; iv.1980, Olexa, ♀; 30.iv.1981, Čechovský, ♂.

Distribution: USSR: N Uzbekistan.

Name derivation. Name according to the similarity with the genus *Podistra* Motsch.

This new species differs from the others, possessing shortened elytra, by completely yellow legs and by aedeagal characters.

Cantharis lucida Pic Figs 42-43.

Cantharis lucida PIC, 1906, l'Échange 22: 89.
Cantharis klapperichi WITTMER, 1956, Rev. Suisse Zool. 63: 156, n. syn.

Head yellow, antennal segments towards end darkening to dark brown, bases of segments remain lighter. Prothorax and legs yellow, tarsi more or less darker. Meso, metasternum and elytra black, abdominal sternites dark brown to black, widely yellow bordered, last two or three abdominal segments completely yellow.

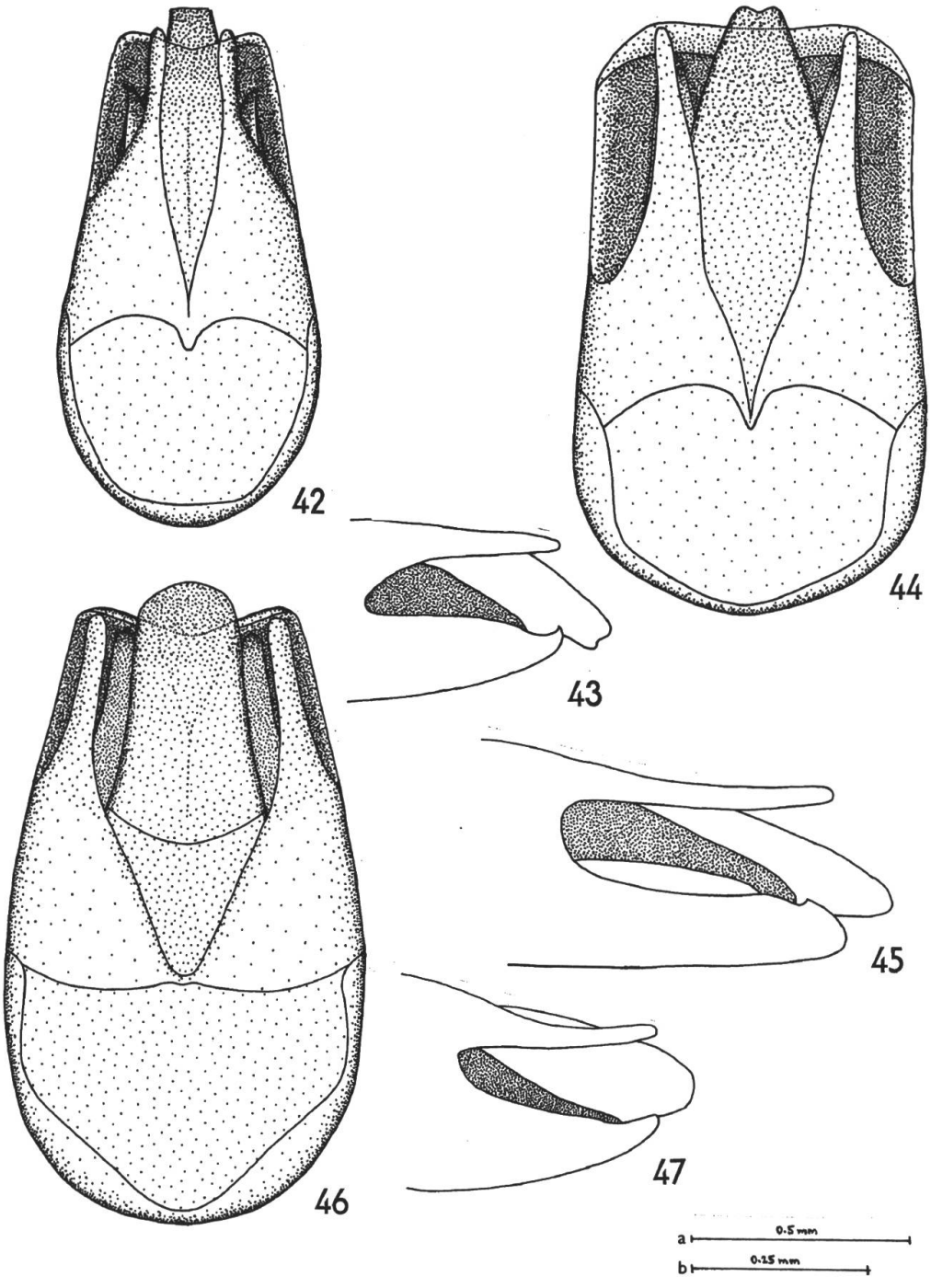
Male: Eyes relatively large and convex, head across eyes slightly narrower than pronotum, behind eyes narrowing posteriorly. Antennae slightly exceeding over elytral midlength, antennal segments with small oval impressions. Surface of head very sparsely and finely punctate and pubescent, lustrous. Pronotum distinctly wider than long, anterior margin almost straight to slightly rounded, anterior angles and lateral margins moderately rounded, posterior angles obtusely tapered. Surface of pronotum like the head punctate and pubescent, lustrous. Basal apodeme of outer claw small but well developed on all tarsi. Elytra parallel-sided, corrugated, covered by semierect hairs, lustrous. Aedeagus (Figs 42-43).

Female: Eyes smaller than in male, head across eyes distinctly narrower than pronotum. Antennae shorter, reaching 1/3 of elytral length. Head finely microshagreened, semilustrous. Elytra moderately enlarging posteriorly.

Length ♂♀: 7.0 – 8.5 mm.

Type material examined: *C. lucida* Pic: syntypes: Buchara, Staudinger, ♂, here designated as lectotype (MHNP); Karataek, Buchara, Staudinger, ♀, designated as paralectotype (DEI); *C. klapperichi* Wittm.: holotype, ♂, NO Afghanistan, Badakschan, Schiva, Hochsteppe, 2800 m., 7.vii.1953, Klapperich (NHMB).

Other material examined: USSR, Tadzhikistan: Pamir-Alai geb., ca. 2200 m, 65 km N Duschanbe, 2.vi.1976, Muche, 1 ex. (NHMB); Hissar Mts., Anzob, 23.vi.1981, Soják, leg.; Hissar Mts., 1800 m, confl. Varzob et Sioma riv., 60 km N Dushabe, 17.vi.1981, Majer et Kubáň, 5 ex. (all VS).



Figs 42-47: aedeagus, ventral and lateral view: 42-43: *Cantharis lucida* Pic; 44-45: *C. inforticornis* Pic; 46-47: *C. lateralis lateralis* L. Scale a – Figs 42-43; b – Figs 44-47.

Distribution: USSR: Tadzhikistan; NE Afghanistan.

Cantharis inforticornis Pic Figs 44-45.

Cantharis inforticornis PIC, 1913, l'Échange 29: 187.

Head dark brown to black, before eyes including mouthparts yellowish brown. Antennae yellowish brown, segments towards end darkening to dark brown. Prothorax yellowish brown, meso and metasternum dark brown to black. Legs yellowish brown, tarsi and posterior tibiae on middle portion more or less darker. Elytra dark brown to black, basal abdominal segments dark brown, widely yellow bordered, two or three last segments completely yellow.

Male: Eyes small but convex, head across eyes slightly wider than pronotum, behind eyes moderately narrowing posteriorly. Antennae slightly exceeding over elytral midlength, antennal segments with small oval impressions. Surface of head very finely punctate and pubescent, very feebly microshagreened, semilustrous. Pronotum slightly wider than long, anterior margin and anterior angles moderately rounded, lateral margins almost straight, slightly converging posteriorly, posterior angles obtusely tapered. Surface of pronotum very sparsely and finely punctate and pubescent, lustrous. Basal apodeme of outer claw small but distinct in all tarsi. Elytra parallel-sided, their surface corrugated and densely pubescent with small glabrous areas, matt. Aedeagus Figs 44-45.

Female: Eyes less convex than in male, head across eyes slightly narrower than pronotum, antennae shorter, not reaching 1/3 of elytral length, pronotum distinctly wider than long, basal apodeme of outer claw developed only on anterior tarsus, very small, hardly visible. Elytra wider than in male, slightly enlarging posteriorly.

Length ♂♀: 6.5 – 8.0 mm.

Type material examined: syntypes: Samarkand, 4♂. Lectotype (MHNP) and paralectotypes (DEI, NHMB) are here designated.

Other material examined: Transcaspia, Saramsakli, Hauser, 9 ex. (NHMB, MHNP); Turkestan, Samarkand, 1 ex. (NHMB); Transcaspia, Merw, v.1900, Hauser, 3 ex. (NMP); Persia, Kopetdagh, 3 ex. (MHNP, TMB); N Afghanistan, Prov. Herat, Bala Murghab, 470 m, 20.iii.-1.iv.1964, Jakeš, 1 ex. (NHMB).

Distribution: USSR: Turcmenia, Uzbekistan; NE Iran, N Afghanistan.

Cantharis lateralis lateralis Linnaeus Figs 46-47.

Cantharis lateralis LINNAEUS, 1758, Syst. Nat. ed. 10: 402.

Head black, from the midlength of eyes anteriorly including mouthparts yellow. Antennae yellow, segments terminally becoming brown, pronotum yellow, sometimes with pair of small longitudinal dark brown spots on posterior half. Legs yellow, middle part of posterior tibiae brown. Elytra black, narrowly yellow bordered including tips. Prosternum yellow, meso and metasternum black, abdominal segments yellow with large central black spot.

Male: Eyes relatively large, convex, head across eyes slightly wider than pronotum, behind eyes narrowing posteriorly. Antennae reaching 1/3 of elytral length, antennal segments with small oval impressions. Surface of head very finely punctate and pubescent, lustrous. Pronotum very slightly wider than long, anterior margin very slightly rounded, lateral ones straight to feebly rounded, both anterior and posterior angles more or less angular but rounded, sides of pronotum slightly converging posteriorly. Surface of pronotum very sparsely and finely punctate and pubescent, lustrous. Outer claw of all tarsi with well developed basal apodeme. Elytra parallel-sided, finely corrugated and pubescent, with small glabrous areas, mat. Aedeagus (Figs 46-47).

Female: Eyes slightly smaller than in male, head across eyes slightly narrower than pronotum. Pronotum distinctly wider than long, margins and angles more rounded than in male. Elytra very slightly elarging posteriorly.

Length ♂♀: 5.7 – 6.9 mm.

Material examined: USSR: Kasakhstan, Akkol-Ujuk steppe (Džambul env.), 9.v.1981, Brodský, 1 ex. (VS); N Kasachstan, Korgasyn, 3.vi.1970, Skopin, 1 ex. (TMB); Kirgiz SSR, Frunze env., 28.v.1980, Vilímová, 1 ex. (VS).

Distribution: Europe, Caucasus, Asia Minor (HORION, 1953); USSR: Kazakhstan, N Kirgizia.

Cantharis lateralis afghana n. ssp.

It differs from the nominotypical subspecies by entirely yellow head and by lighter abdomen, with only central part longitudinally darkened, last segment completely yellow. Aedeagus quite identical.

Length ♂♀: 6.3 – 7.1 mm.

Holotype ♂ (NHMB): Afghanistan: Paghman NW Kabul, 2200 m,

15.v.1970, Kabakov, paratypes; the same data, ♂ (VS); Afghanistan, Tokana, Maydan, 2800 m, 28.vi.1972, Kabakov, ♀(NHMB).

Distribution: NE Afghanistan.

Cantharis biocellata (Fairmaire) Figs 48-49.

Telephorus biocellatus FAIRMAIRE, 1891, Compt. Rend. Soc. Entomol. Belg. 35: 130.
Cantharis biocellata: CHAMPION, 1926, Entomol. Monthly Mag. 62: 200.
Telephorus bipuncticollis GORHAM, 1895, Ann. Soc. Entomol. Belg. 39: 312.

Head yellowish brown, more or less dark brown spot is on vertex, antennae yellowish brown, segments towards end darkening to brown. Pronotum yellowish brown with central pair of dark brown to black spots, legs yellowish brown, tarsi darker. Elytra completely dark brown to black in male, in female near scutellum lighter (brown to yellowish brown). Prosternum yellow, meso and metasternum black, abdominal segments black, yellow bordered.

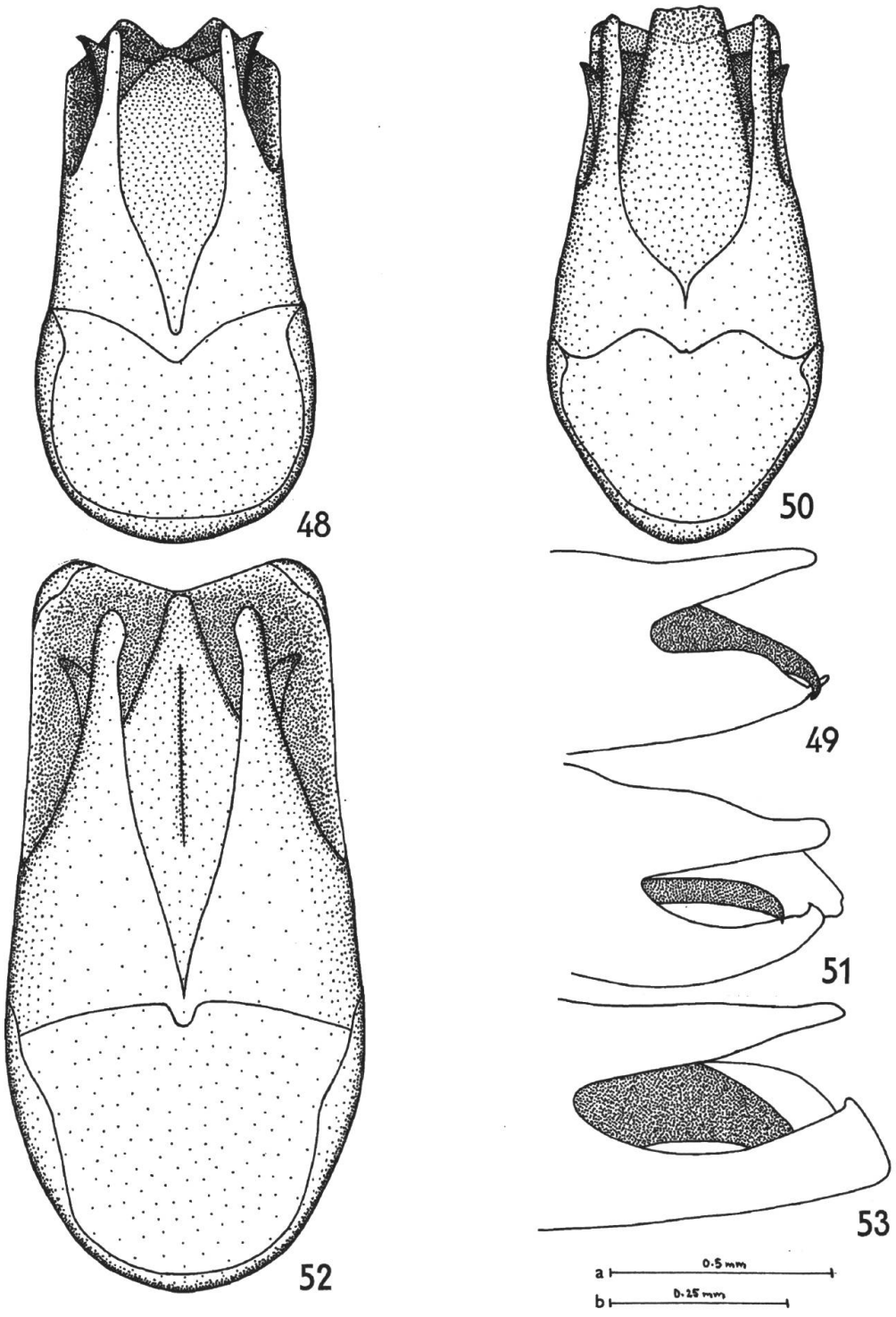
Male: Eyes small but convex, head across eyes slightly wider than pronotum, behind eyes narrowing posteriorly. Antennae slightly exceeding over elytral midlength, antennal segments with small oval impressions. Surface of head very finely and sparsely punctate and pubescent, lustrous. Pronotum wider than long, anterior margin, anterior angles and lateral margins slightly rounded, posterior angles obtusely rounded. Surface of pronotum more sparsely punctate and pubescent than the head, lustrous. Basal apodeme of outer claw of all tarsi small but visible. Elytra parallel-sided, their surface corrugated, densely pubescent with small glabrous areas, some hairs are longer and semierect. Aedeagus (Figs 48-49).

Female: Antennae shorter than in male, reaching only 1/3 of elytral length, pronotum wider, head across eyes distinctly narrower than pronotum. Elytra slightly enlarging posteriorly.

Length ♂♀: 6.5 – 8.6 mm.

Material examined: Pakistan: Kagan-Tal, Umg. Shogran, 2300-3000 m, 24.-25.vii.1982, Erber et Heinz, 4 ex.; Dir, Lawarai-Pass, 2700-3300 m, 17.-19.vii.1981, Heinz, 6 ex.; Prov. Swat, Umg. Shangla, 2400 m, 4.viii.1979, Heinz (all VS).

Distribution: Afghanistan (Hindukusch), Pakistan, N India, China (Thibet) (DELKESKAMP, 1939).



Figs 48-53: aedeagus, ventral and lateral view: 48-49: *Cantharis biocellata* (Frm.); 50-51: *C. emilieae* n. sp.; 52-53: *C. schoeni* n. sp. Scale a – Figs 48-51; b – Figs 52-53.

Cantharis emilieae n. sp. Figs 50-51.

Head brown, antennae brown, segments towards end darkening to dark brown, prothorax yellowish brown, coxae and femora blackish, terminal portion of femora and tibiae yellowish brown, tarsi darker. Scutellum dark brown, elytra yellowish brown. Meso and metasternum black, abdominal sternites dark brown to black, yellowish brown bordered, last segment completely yellowish brown. Pubescent of body yellow.

Male: Eyes relatively large, convex, head across eyes very slightly wider than pronotum, behind eyes narrowing posteriorly. Antennae reaching elytral midlength, antennal segments with small round impressions. Surface of head very finely punctate and pubescent, semilustrous. Pronotum slightly wider than long, anterior margin rounded, anterior angles moderately rounded, lateral margins almost straight, very slightly diverging posteriorly. Surface of pronotum very finely and sparsely punctate and pubescent, lustrous. Basal apodeme of outer claw well developed on all tarsi. Elytra parallel-sided, their surface corrugated and pubescent, semilustrous, some hairs semierect. Aedeagus (Figs 50-51).

Female unknown.

Length ♂: 6.5 mm.

Type material: holotype ♂ (NMP): Usbekistan: Zeravshan Mts. (nr. Agalik), 1700 m, 26.v.1990, E. Strejčková.

Distribution: USSR: E Uzbekistan.

Name derivation. Named after its collector Dr. Emilie Strejčková.

Closely related to preceding species, from which it differs by different colouration of legs and elytra and especially by different aedeagus.

Cantharis schoeni n. sp. Figs 52-53.

Head, prothorax and legs yellowish brown, tarsi brown, antennae yellowish brown, from the third segment towards end darkening to dark brown. Elytra yellowish brown, each elytron with wide, longitudinal dark brown to almost black stripe, starting on subbasal portion and not reaching apex of elytron. Mesosternum brown, metasternum dark brown to black, abdominal sternites dark brown, narrowly yellow bordered, last sternite completely yellowish brown. Pubescence of body light grey.

Male: Eyes relatively large and convex, head across eyes very slightly wider than pronotum, behind eyes narrowing posteriorly. Antennae slightly exceeding over elytral midlength, antennal segments

with small oval impressions. Surface of head very finely microshagreened, finely and sparsely punctate and pubescent, lustrous. Pronotum slightly wider than long, anterior margin very slightly rounded, anterior angles rounded, lateral margins almost straight, moderately diverging posteriorly, posterior angles obtusely tapered. Surface of pronotum very sparsely and finely punctate and pubescent, lustrous. Basal apodeme of outer claw small but well developed in anterior tarsus, very small, hardly visible in middle and posterior ones. Elytra parallel-sided, corrugated, finely pubescent, some hairs semierect, lustrous. Aedeagus Figs 52-53.

Female: Eyes less convex than in male, head across eyes slightly narrower than pronotum, antennae shorter, reaching 1/3 of elytral length, pronotum distinctly wider than long, lateral margins slightly rounded, basal apodeme of outer claw developed only on anterior tarsus, very small, hardly visible. Elytra slightly enlarging posteriorly.

Length ♂♀: 5.7 – 7.0 mm.

Type material: Holotype ♂; Usbekistan or.: Tian-Schan (Čatkalskij chrebet), Čimgan, 25.-27.vi.1980, Schön; paratypes: Uzbekistan: Tian Shan, 1200 m, Silvestral Reserve of Tschatkal stream valley, netted from plants, 4.vi.1981, Merkl, ♂♀ (TMB); Tadshikistan, Pamir-Alai, Siddi Umgeb., 2000-2500 m, 2.-4.vii.1979, Muche, ♂ (NHMB); Alexander Gebirg., Koltze, ♀(DEI). Holotype deposited in author's collection to be deposited in NMP, paratypes in the same collections.

Distribution: USSR: W Kirgizia, Tadzhikistan.

Somewhat similar to certain forms of *C. rufa tenuelimbata* (Ball.) but smaller, with head and especially elytra lustrous, aedeagus quite different.

Name derivation. Named after the collector of the holotype Mr Karel Schön, specialist of the family Curculionidae.

Metacantharis Bourgeois, 1886

Key to species

Males

1. Apexes of laterophysae exceeding over lateral margins of apex of dorsal part of aedeagus (Figs 57-58)

M. attalia (Pic)

– Apexes of laterophysae not exceeding over lateral margins of dorsal part of aedeagus 2
2. Laterophysae shorter, not reaching apex of dorsal part of aedeagus, aedeagus slender (Figs 54-56).

M. raptor (Ball.)

– Laterophysae longer, reaching almost to apex of dorsal part of aedeagus, aedeagus wider (Figs 59-60) 3
3. Elytra 2.55-2.80 times longer than wide on humeral part.

M. wittmeri wittmeri n. sp.

– Elytra 1.95 times longer than wide on humeral part

M. wittmeri brachyelytrata n. ssp.

Females (including **Absidiella**)

1. Horseshoe-shaped depression with elevated, lustrous border is at the apex of last abdominal sternite (Fig. 61) 2
– Last sternite without horseshoe-shaped depression 3
2. Elytra 2.25-2.45 times longer than wide at humeral part.

M. wittmeri wittmeri n. sp.

– Elytra 2.10 times longer than wide at humeral part.

M. wittmeri brachyelytrata n. ssp.

3. Elytra entirely dark, rarely with brown humera

M. attalia (Pic)

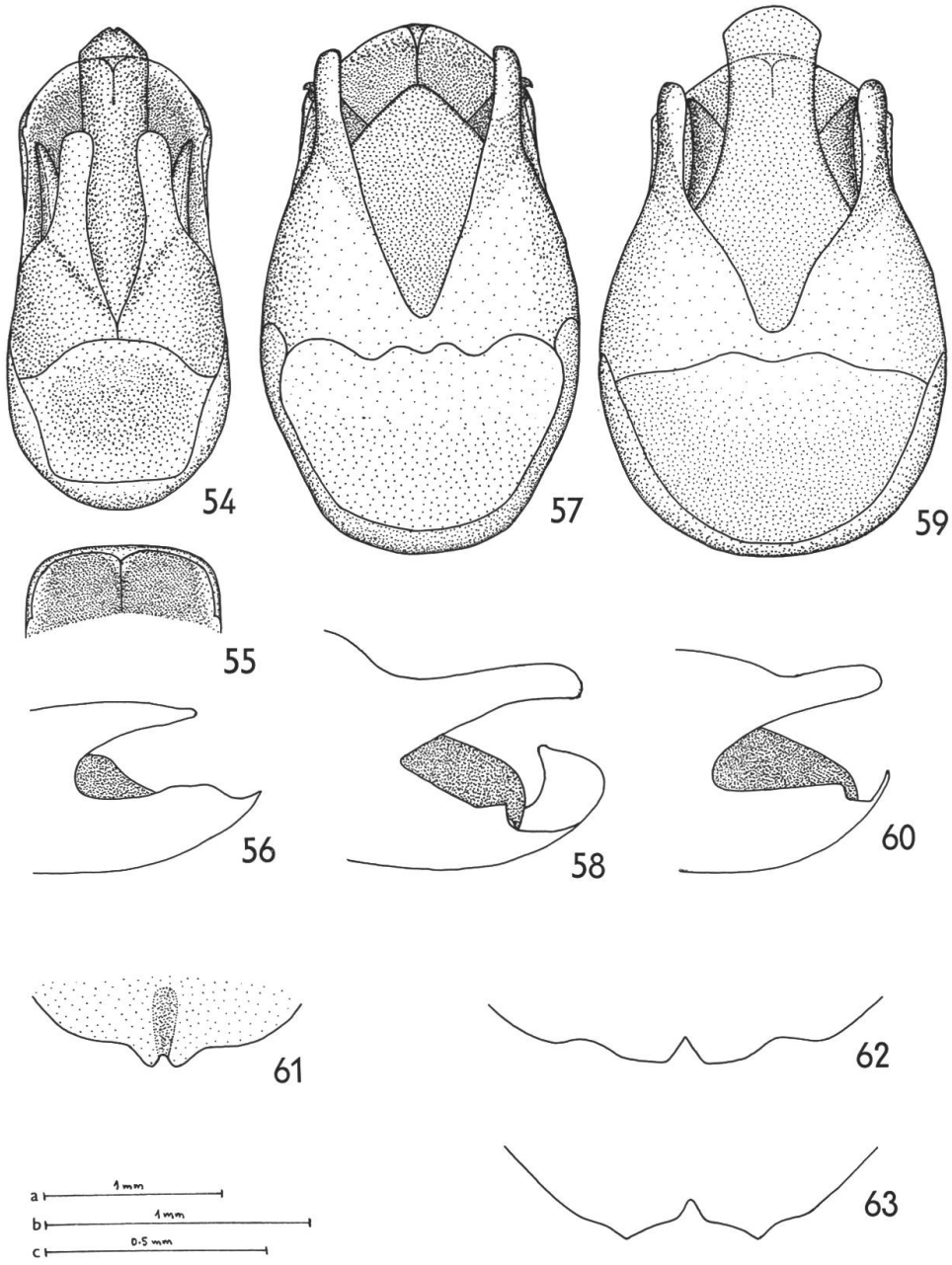
– At least narrow lateral margin of elytra brown 4
4. Posterior femora and tibiae yellow. **Absidiella kaszabi** (Wittm.)
– Posterior femora yellow, tibiae more or less darkened.

M. raptor (Ball.)

Metacantharis raptor (Ballion) Figs 54-56.

Telephorus raptor BALLION, 1870, Bull. Soc. Imp. Nat. Moscow 43: 351.
Cantharis raptor: PIC, 1914, l'Échange 30: 3.
Metacantharis raptor: WITTMER, 1969: Verhandl. Naturf. Ges. Basel 80: 77.
Teleborus (sic !) *submarginalis* BALLION, 1870, Bull. Soc. Imp. Nat. Moscow 43: 351, n. syn.
Cantharis raptrix (sic !) JACOBSON, 1911, Žuki Ross. Zapadnoj Evropy: 678.
Cantharis raptor var. *samarkandensis* PIC, 1913, l'Échange 29: 185, n. syn.

Head yellow to yellowish brown, first two antennal segments yellow, first segment darkened on its terminal half to completely dark, following segments dark with lighter base to completely dark. Pronotum and scutellum yellow to yellowish brown, anterior and lateral portions



Figs 54-63. 54-56: *Metacantharis raptor* (Ball.): 54 – aedeagus; 55 – variability of dorsoapical part of aedeagus; 56 – aedeagus, lateral view; 57-60; aedeagus, ventral and lateral view: 57-58: *M. attalia* (Pic); 59-60: *M. wittmeri wittmeri* n. sp.; 61-63: apex of female last sternite: 61 – *M. wittmeri wittmeri* n. sp.; 62 – *Bactrocantharis ciliatocollis* (Pic); 63 – *B. ruzickai* n. sp. Scale a – Figs 62-63; b – Fig. 61; c – Figs 54-60.

sometimes slightly darker. Elytra from completely yellow to yellow with sutural portion brown or blackish brown with narrow yellowish brown lateral margins and with or whithout narrow yellowish brown suture. Legs yellow, tibiae more or less darkened, tarsi dark. Prosternum yellow, meso and metasternum dark, abdomen from completely yellow to dark with yellow lateral margins. Pronotum semilustrous, head and elytra mat.

Male: Eyes small but convex, head across eyes slightly wider than pronotum. Antennae slightly exceeding over 3/4 of elytral length. Pronotum subquadrate, very slightly wider than long, anterior angles rounded, posterior one obtusely rectangular. Elytra slightly wider than pronotum, almost parallel-sided. Aedeagus (Figs 54-56).

Female: Eyes smaller, head across eyes slightly narrower than pronotum, antennae shorter, not reaching elytral midlength, pronotum distinctly wider than long, lateral margins more arcuate, elytra wider, slightly enlarging apically. Last abdominal sternite similar as in *M. wittmeri* n. sp. but without apical depression.

Length ♂♀: 5.1 – 7.8 mm.

Type material examined: *T. submarginalis* Ball., holotype, ♀, Chodshent (University of Odessa). *C. raptor* var. *samarkandensis* Pic: syntypes: Samarkand, Reitter, 3♂ (MHNP).

Other material examined: Transcaspien, Bodemeyer lgt., 25 ex. (NMP); Transcaspia, Karakum, 1 ex. (NHMB); Turkestan, 2 ex.; Turk., Sussamyr-Gb., Ketmen-Tjube, 2 ex.; Boukharie-Est, 1891, Barstchewski, 4 ex. (all NHMB); Aulie-Ata, 3 ex. (NHMB, TMB); Tachta-bazar, 8.iv.1887, 1 ex.; Samarkand, Reitter, 3 ex. (all TMB); Kazakhstan: Kara-Tau Mts., 8.v.1978, Víša, 3 ex.; v.1979, Boháč, 1 ex.; Uzbekistan: Šarat nr. Chiva, v.1979, Boháč, 1 ex.; Chiva, v.1979, Boháč, 3 ex.; iv.1980, Olexa, 1 ex.; Kara-kum nr. Chiva, 2.-4.v.1978, Strejček, 2 ex.; Urgenč, 4.v.1978, Strejček, 2 ex.; v.1979, Boháč, 3 ex.; Kyzyl-kum des., Šafrikan nr. Buchara, 28.iv.1980, Hladil et Olexa, 4 ex. (all VS); Afghanistan: Prov. Kataghan: 10 km S Ali-abad, 450 m, 1.iv.1966, Šimek, 1 ex.; 10-15 km O Kunduz, 14.iv.1966, Šimek, 2 ex. (all MMB). Tadzhikistan: Wachsch, Umgb. Kujbyshev, 22.iv.1990, Wittmer, 4 ex. (NMHB, VS).

Distribution: USSR: SE Turcmenia, S Kazakhstan, Uzbekistan; N Afghanistan, Tadzhikistan. Clinal variability can be observed within the area of distribution. Darker colouration increased in the East and North.

T. submarginalis Ball. and *T. raptor* Ball. were described from the same locality (Chodshent) and it seems each sexes separately. Although the type material of *T. raptor* Ball. was not examined, the synoymy can be established according to the description.

Metacantharis attalia (Pic) *n. comb.* Figs 57-58.

Cantharis dia ssp. *attalia* Pic, 1902, l'Échange 18: 55.
Cantharis athalia (sic !): Pic, 1914, l.c. 30: 5.
Cantharis senckenbergi Pic, 1913, l.c. 29: 187, n. syn.
Cantharis senckenbergi var. *diversenotata* Pic, 1913, l.c.: 187, n. syn.
Cantharis bucharica Pic, 1914: l.c. 30: 6, n. syn.
Metacantharis korzhinskii Barovskij, 1926, Rev. Russe Entomol. 20: 243, n. syn.

Head yellow to brown with lighter frons and mouthparts, first two antennal segments yellowish brown, following segments dark, sometimes with lighter basal portion. Pronotum and scutellum yellowish brown to dark brown, sometimes with somewhat lighter middle portion. Elytra greyish black, rarely with brown humera. Legs yellowish brown to dark brown with lighter bases of tibiae, tarsi dark. Prosternum yellowish brown to brown, meso and metasternum dark, abdomen yellowish brown, middle of sternites darkened. Pronotum semilustrous, head and elytra mat.

Male: Eyes small but convex, head across eyes as wide or very slightly wider than pronotum. Antennae slightly exceeding over 3/4 of elytral length. Pronotum subquadrate, slightly wider than long, anterior angles rounded, posterior ones obtusely rectangular. Elytra slightly wider than pronotum, almost parallel-sided. Aedeagus (Figs 57-58).

Female: Eyes smaller, head with eyes slightly narrower than pronotum, antennae shorter, not reaching elytral midlength, pronotum distinctly wider than long, lateral margins more arcuate, elytra wider, slightly enlarging apically. Last abdominal sternite similar to *M. wittmeri* n. sp. but without apical depression.

Length ♂♀: 6.5 – 9.7 mm.

Type material examined: *C. dia* ssp. *attalia* Pic: syntypes, Buchara, Karatagh, 3♂ 4♀, one male here designated as lectotype (TMB), other specimens as paralectotypes (TMB, DEI, MHNP); *C. senckenbergi* Pic: holotype, ♂, Süd-Turkestan, Safichadam, 7.vi.1913, Küchler (MHNP); *C. senckenbergi* var. *diversenotata* Pic: holotype, ♂, Buchara (MHNP); *C. bucharica* Pic: holotype, ♂, Buchara, Staudinger (MHNP); *M. korzhinskii* Bar.: holotype, ♂, Tabidara-Zagyrdešt (nr. Baldžuan), V. Buchara, 17.vi.1897, Kaznakov (ZIL).

Other material examined: Buchara, Karataek, 1 ex. (DEI); Issyk-kul, Ton-Fluss, 1 ex. (NHMB); Ost-Buchara, Karatag, 916 m, 1898, Hauser, 3 ex. (NHMB, TMB); Tadzhikistan: Hissar Mts.: Javroz, 2000 m, 24.iv.-3.v.1981, Olexa et Brodský, 2 ex.; Ziddi, 26.vi.1976, Bílý et Brodský, 6 ex.; 19.v.1982, Vilímová, 1 ex.; 31.v.1966, Král, 2 ex.; Takob, 2200-2400 m, 21.-2.v.1979, Pfeffer et

Olexa, 3 ex.; confl. Varzob et Sioma riv., 1800 m, ex larva 1982, Kubáň, 3 ex.; Varzob riv., Gushara, 1300-1600 m, 19.vi.1981, Majer, 1 ex.; Babatag Mts.: Kafirgan riv., 800 m, 25.iv.1983, Boháč, 1 ex.; Bulbulčašma, 18.iv.1980, Olexa et Kubáň, 4 ex.; Tachtaul (Dušanbe env.), 29.iv.1977, Bílý; 1 ex.; Semiganch, 22.iv.1981, Vilímová, 1 ex. (all VS); Hissar Mts.: Romit, 1600-1700 m, 5.v.1979, Muche, 2 ex.; Hanakaschlucht, 1700-1800 m, 8.vi.1976, Muche, 7 ex.; Alai Geb., 2200 m, 65 km N Duschanbe, 2.vi.1976, Muche, 8 ex.; Usbek SSR, Zimgan Umg., 80 km N Taschkent, 31.v.1976, Muche, 2 ex. (all NHMB); Turkestanskij chr., Džum-džum-sai, vi.1989, Růžička lgt., 15 ex.

Distribution: USSR: Uzbekistan, Tadzhikistan, ?? Kirgizia. Locality of Issyk-kul (Kirgizia) is almost surely caused by misslabelling.

Metacantharis wittmeri wittmeri n. sp. Figs 59-61.

Head yellow, posterior portion sometimes slightly darkened, first two antennal segments yellow, their terminal portion slightly darkened, following segments dark with lighter bases. Pronotum and scutellum yellow, elytra greyish black, sometimes with narrowly brown humera. Legs yellowish brown, terminal portions of femora and tibiae sometimes darkened. Prosternum yellow, meso and metasternum dark, abdomen yellowish brown. Pronotum semilustrous, head and elytra matt.

Male: Eyes small but convex, head across eyes as wide or very slightly narrower than pronotum. Antennae slightly exceeding over 3/4 of elytral length. Pronotum subquadrate, very slightly wider than long, anterior angles rounded, posterior ones obtusely rectangular. Elytra slightly wider than pronotum, almost parallel-sided, 2.55-2.80 times longer than wide on humeral part. Aedeagus (Figs 59-60).

Female: Eyes smaller than in male, head across eyes slightly narrower than pronotum, antennae reaching elytral midlength, pronotum distinctly wider than long, elytra distinctly wider than pronotum, very slightly enlarging towards apex, 2.25-2.45 times longer than wide on humeral part. Last abdominal sternite Fig. 61.

Length ♂♀: 7.1 – 8.6 mm.

Type material: Holotype ♂: Pakistan: Chitral, Garan Chashma, 1900-2800 m, 1.-2.vii., Erber et Heinz; paratypes: the same data, ♀; Afghanistan, Nuristan, Baschgaltal, 1100 m, 6.-24.iv.1953, J. Klapperich, 52 ♂♀ (NHMB); Umgebung Kabul, 22.v.1952, 20.iii.1953, J. Klapperich, 2♂; Kutiau, Nuristan, 5.-10.v.1953, J. Klapperich, 3♂ 1♀; Pagmangebirge, 2300 m, 30.v.1952, J. Klapperich, 4♂ 1♀; all paratypes. Holotype deposited in author's collection to be deposited in the NMP, paratypes deposited in author's collection, in NHMB and in TMB.

Distribution: NE Afghanistan, N Pakistan.

Name derivation. This species is named after Dr. Walter Wittmer, well-known specialist in families Cantharidae and Malachiidae, to whom I am very obliged for his help with obtaining material for this work.

Metacantharis wittmeri brachyelytrata n. ssp.

This subspecies differs from the nominotypical one by the following characters: elytra shorter, 1.95 times longer than wide at humeral part in male and 2.10 times longer in female. In female elytra slightly shortened, not covering last two abdominal segments. Elytra entirely greyish black, legs entirely yellowish brown.

Length ♂♀: 5.7 – 8.5 mm.

Type material: Holotype ♂: Afghanistan: villaje Kalarak, 13.vi.1975; paratype, the same data, ♀. Holotype and paratype deposited in NHMB.

Name derivation. Named after shortened elytra in female.

Silicantharis n. gen.

Type species: *Silicantharis walteri* n. sp.

Name derivation. *Silicantharis*, gender feminine, combined from *Silis* and *Cantharis*, refers to pronotum similar to some genera of the Subfam. Silinae.

Male: Mandibles simple, antennal segments with longitudinal to oval impressions, pronotum transversely oval, disc with shallow depressions and with a pair of small corners, on the tip of each one seems to be a glandular orifice (Fig. 72)[1]. Outer claw of all tarsi with distinct sharp apodeme, strongly reduced on posterior tarsus. Each elytron on anterior portion with two distinct nerves. Aedeagus quite of the *Cantharis*-type (Figs 71, 73).

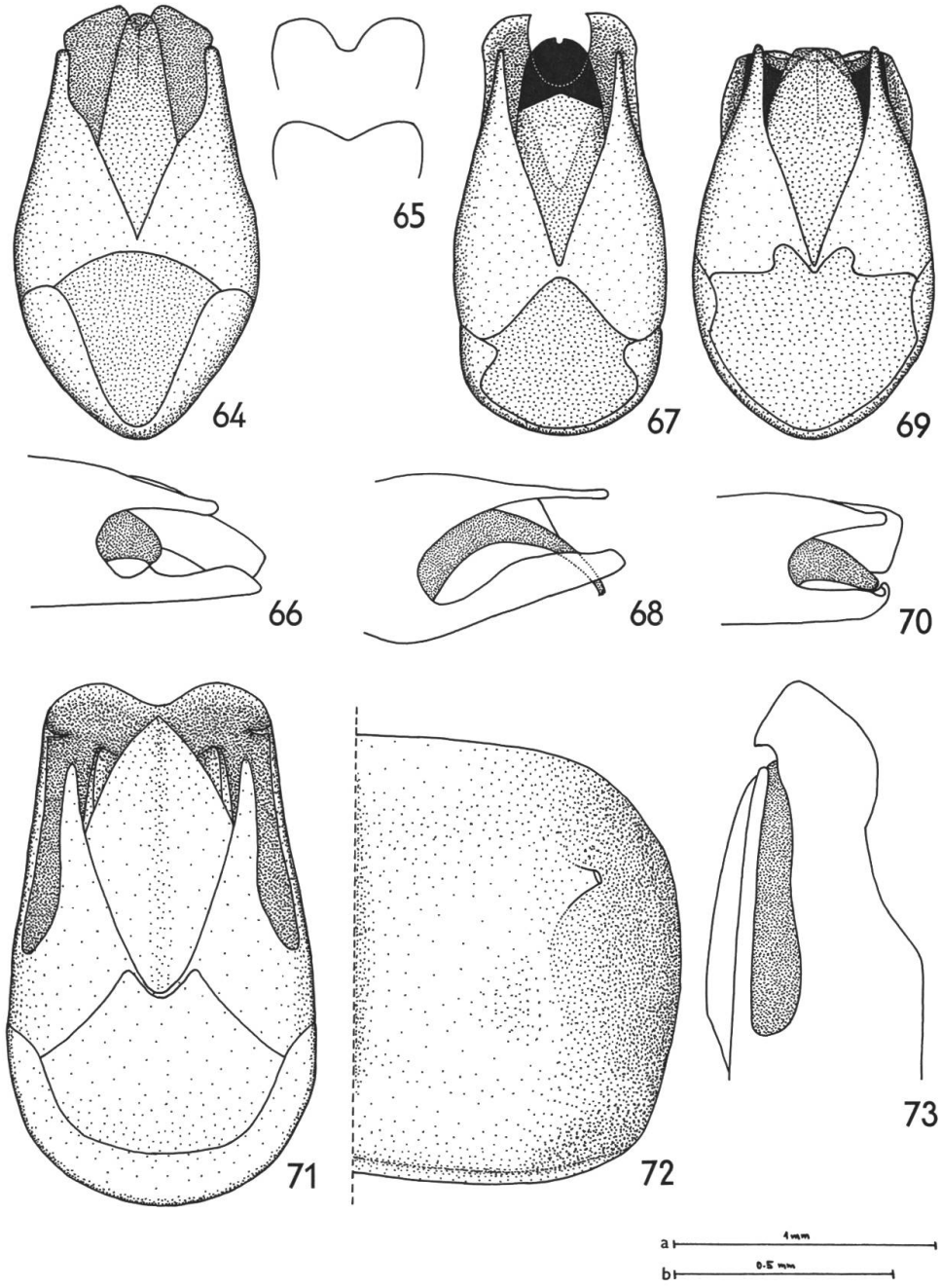
Female unknown.

It is closely related to *Cantharis* L., from which it differs by the pair of corners on pronotum and by developed nervation of elytra.

Silicantharis walteri n. sp. Figs 71-73.

Head black, mouthparts and antennae dark brown. Pronotum dark brown, yellow all around, margins narrower anteriorly and posteriorly,

1. Pronotum is slightly deformed, with not regularly developed left side, but its structure is quite regular.



Figs 64-73. 64-66: *Bactrocantharis ciliatocollis* (Pic): 64 – aedeagus; 65 – variability of dorsoapical part of aedeagus; 66 – aedeagus, lateral view; 67-70: aedeagus, ventral and lateral view: 67-68: *B. ruzickai* n. sp.; 69-70: *B. bogatchevi* Kazantsev; 71-73: *Silicantharis walteri* n. sp.: 71 – aedeagus; 72 – pronotum; 73 – aedeagus, lateral view. Scale a – Figs 64-70; b – Figs 71-73.

wider laterally. Elytra blackish brown, legs dark brown. Ventral surface of body blackish brown, lateral margins of abdominal sternites light brown bordered.

Male: Eyes relatively large, convex, head across eyes slightly narrower than pronotum, head behind eyes slightly narrowing posteriorly. Last two antennal segments missing, antennae presumably slightly exceeding over elytral midlength. Antennal segments with longitudinal impressions. Surface of head very sparsely punctate and brown pubescent, finely microshagreened, matt. Pronotum finely microshagreened, very sparsely brown pubescent, mat., with some depressions and with a pair of small corners (Fig. 72). Outer claw of anterior tarsus with distinct, sharp, basal apodeme, those on middle and posterior tarsus smaller but visible. Elytra parallel-sided, their surface roughly corrugated, sparsely, finely brown pubescent, two nerves are distinct on anterior portion of each elytron. Aedeagus (Figs 71, 73).

Female unknown.

Length ♂: 6.0 mm.

Type material: Holotype ♂: Thian-S., Tekesthal, deposited in NHMB.

Distribution: SE Kazakhstan.

Name derivation. Dedicated to well-known specialist in the family Cantharidae, Dr. Walter Wittmer.

Bactrocantharis Barovskij, 1926

Key to species

1. Elytra yellowish brown except of narrow, black, basal portion, aedeagus (Figs 69-70). **B. bogatchevi** Kazantsev
– Elytra black 2
2. Pronotum entirely yellowish brown, aedeagus Figs 64-66, last abdominal sternite of female (Fig. 62).
B. ciliatocollis (Pic)
– Pronotum yellowish brown with central, transverse, black spot, aedeagus Figs 67-68, last abdominal sternite of female (Fig. 63)
B. ruzickai n. sp.

Bactrocantharis ciliatocollis (Pic) Figs 62, 64-66.

Cantharis ciliatocollis Pic, 1906, l'Échange 22: 83.

Bactrocantharis ciliatocollis: BAROVSKIJ, 1926, Rev. Russe Entomol. 20: 236.
Cantharis kuchleri PIC, 1913, l'Échange 29: 187, n. syn.
Bactrocantharis kaznakovi BAROVSKIJ, 1926, Rev. Russe Entomol. 20: 236, n. syn.

Head black, mouthparts (clypeus sometimes black), first and basal half to whole second antennal segments yellowish brown, rest of antennal segments black with yellowish brown base. Pronotum yellowish brown, legs yellowish brown to black, tarsi always darkened. Scutellum and elytra black, ventral part of body black, lateral margins of abdominal segments and sometimes entire last one yellowish brown. Surface of body mat, pronotum laterally with long erect hairs.

Male: Eyes slightly convex, head across eyes distinctly narrower than pronotum, antennae reaching to elytral midlength. Pronotum transverse, anterior angles rounded, lateral margin before posterior angles sinuate, posterior angles almost rectangular, posterior margin rounded, very flattly emarginate in the middle. Elytra somewhat wider than pronotum, parallel-sided. Aedeagus (Figs 64-66).

Female: Generally wider than male, eyes smaller, very slightly convex, antennae reaching only 1/4 of elytral length. Apex of the last abdominal sternite (Fig. 62).

Length ♂♀: 8.2 – 13.2 mm.

Type material examined: *C. ciliatocollis* Pic: syntypes: Ost-Buchara, Karatag, 916 m, 1898, Hauser, ♂♀; lectotype, ♂ (TMB) and paralectotype, ♂ (NHMB) here designated; *C. kuchleri* Pic: syntypes: Süd-Turkestan: Muschabar, 13.v.1913, Küchler, ♂ (DEI), 2♀ (MHNP); Safichadam, 20.v.1913, Küchler, ♀ (DEI); *B. kaznakovi* Bar.: holotype, ♂, E Buchara, Salbar, Ak-su valley, 31.v.1897, Kaznakov; paratypes: the same data, 2♂ 2♀ (all ZIL).

Other material examined: USSR, Tadzhikistan: Hissar Mts.: 60 km N Dushanbe, confl. Varzob + Sioma riv., 1800 m, 17.vi.1981, Majer, 3 ex.; Varzob vall., 26.iv.1983, Boháč, 3 ex. (all VS); Warsovschlucht, 1300 m, 15.v.1985, Muche, 2 ex. (NHMB); Takob, 2300 m, 21.v.1974, Olexa, 9 ex.; Takob-Gušari, 24.iv.1980, Dvořák, 2 ex.; Semiganč, 27.iv.1981, Dvořák, 2 ex.; Romit, 2000 m, 25.iv.-3.v.1981, Brodský, 1 ex. (all VS); Romitschlucht, 5.-6.vi.1978, Muche, 1 ex. (NHMB); Javroz, 24.iv.1981, Olexa, 2 ex.; 1.-2.v.1981, Dvořák, 1 ex. (all VS); Kondara, 19.iv.1979, Danilevsky lgt., 1 ex. (NHMB).

Distribution: USSR: Tadzhikistan.

All distinguishing characters between *B. ciliatocollis* (Pic) and *B. kaznakovi* Bar. mentioned by BAROVSKIJ (1926) and by KAZANTSEV (1989) were found variable so that the synonymy of these species is established.

Bactrocantharis ruzickai n. sp. Figs 63, 67-68.

Head black, mouthparts yellowish brown, antennae black, first two antennal segments partly to entirely yellowish brown. Pronotum yellowish brown with central transverse black spot, scutellum black. Legs yellowish brown, femora and tibiae sometimes dorsally, tarsi always darkened. Elytra black, prosternum yellowish brown, meso, metasternum and abdomen black, abdominal segments with yellowish brown lateral margins, last abdominal segment entirely yellowish brown. Surface of body matt., pronotum laterally with long, erect hairs.

Male: Eyes slightly convex, head across eyes very slightly narrower than pronotum, antennae reaching elytral midlength. Pronotum transverse, anterior angles widely rounded, posterior ones rounded, anterior margin straight, posterior one very flattly emarginate in the middle, lateral sides of pronotum rounded. Elytra distinctly wider than pronotum, parallel-sided. Aedeagus (Figs 67-68).

Female: Generally wider than male, eyes slightly smaller than in male, head across eyes distinctly narrower than pronotum, antennae reaching only to 1/4 of elytral length. Apex of the last sternite (Fig. 63).

Length ♂♀: 8.8 – 11.3 mm.

Holotype ♂: Usbekistan; Turkestanskij chr., Džum-džum-sai, vi.1989, Růžička; paratypes: the same data, 6♂ 10♀. Holotype and paratypes deposited in author's collection, to be deposited in NMP.

Distribution: USSR: Uzbekistan.

Name derivation. Named after its collector Dr. J. Růžička, specialist in the family Silphidae.

This species is related to *B. ciliatocollis* (Pic), from which it differs by the narrower body, by the black spot on the pronotum, by the quite different aedeagus and by the somewhat different apex of the last abdominal sternite in female.

Bactrocantharis bogatchevi Kazantsev Figs 69-70.

Bactrocantharis bogatchevi KAZANTSEV, 1989, Entomol. Basiliensia 13: 240.

Head black, mouthparts brownish, antennae blackish, first two antennal segments brown to black. Pronotum yellowish brown with a pair of central, round, black spots. Femora always black, anterior and middle tibiae yellowish brown or more or less darkened, so that only base remains lighter, posterior tibiae always darkened with lighter base, tarsi dark. Elytra yellowish brown, scutellum and narrow basal portion of elytra black. Prosternum yellow, rest of the ventral part of body

black, lateral margins of abdominal segments and sometimes entire last one yellowish brown. Surface of body mat, spots on pronotum semilustrous. Pronotum laterally with long erect hairs.

Male: Eyes slightly convex, head across eyes very slightly narrower than pronotum, antennae moderately exceeding over midlength of elytra. Pronotum slightly wider than long, anterior angles rounded, lateral margins slightly rounded, posterior angles obtuse, moderately rounded, posterior margin like in the preceding species. Elytra somewhat wider than pronotum, parallel-sided. Aedeagus (Figs 69-70).

Female: Generally wider than male, eyes smaller, very slightly convex, antennae short, reaching 1/4 of elytral length. Apex of the last abdominal sternite like in the preceding species.

Length ♂♀: 8.6 – 10.5 mm.

Material examined: USSR, Uzbekistan, Zeravšanskij chr. Mts., 1000-1200 m, Aman-Kutan, 2.v.1977, Bílý et Strejček, 13 ex.; 23.iv.1978, Víša et Tesař, 5 ex. (VS, NHMB).

Discussion

The species of the Subfam. Cantharinae occuring in the studied region can be divided according to their distribution and relationship as follows:

1. Eurosiberian species, which usually form subspecies in Central Asia: *Cantharis lateralis lateralis* L., *C. lateralis afghana* n. ssp. and *C. rufa tenuelimbata* (Ball.).

2. Species characteristic for the steppe zone of Eurasia, areal of which reaches to southern Kazakhstan: *C. oculata* Gebl.

3. Euromediterranean species, reaching easternly to western part of Turcmenia: *Rhagonycha fulva* (Scop.)

4. Iranoturcmenian species, which can easternly reach up to Afghanistan: *Rhagonycha reflexa* Wittm. (closely related species occuring in Iran) and *Cantharis inforticornis* Pic.

5. Species occuring in Tian-shan mountains range, in Dsungarskij Ala-Tau Mts., in Chinese Turkestan and in Fergana basin, some of them easternly reach to western Mongolia: *Rhagonycha alpicola* Bar., *Absidiella kaszabi* (Wittm.), *Cantharis forticornis* Heyd., *C. fallaciosa* Bar., *C. oculimarginalis* Hick., *C. brancuccii* n. sp., *C. biplagiata* (Ball.), *C. jacobsoni* Bar., *C. voriseki* n. sp., *C. kugartensis* Bar., *C. pumilio* Heyd., *C. dobrzhanskii* Bar., *C. podistroides* n. sp., *C. schoeni* n. sp. and *Silicantharis walteri*.

6. Pamiroalaian species, occuring in Pamiroalain mountain range and in Afghanistan and Pakistan: *Prothemellus afghanus* (Witt.), all *Themus, Metacantharis* and *Bactrocantharis* species, *Pakabsidia afghana* Wittm., *Cantharis lucida* Pic and *C. emilieae* n. sp.

7. Himalayan species, occuring from Thibet to Hindukush, reaching Afghanistan: *Cantharis biocellata* (Frm.).

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