

On new or poorly known Cryptophagidae and Languriidae from Middle Asia (Insecta: Coleoptera)

With 4 Figures

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Abstract. Two new Cryptophagidae are described from Middle Asia: *Cryptophagus involatilis* spec. nov. and *Cryptophagus minor* spec. nov. New Middle Asian records of some further *Cryptophagus* as well as *Atomaria*, *Curelius* (Cryptophagidae), and *Cryptophilus* species (Languriidae) are given.

1. Introduction

This work is based on material collected in Middle Asia (Kazakhstan, Kirghizia, Tadjikistan) and lent to me by Dr. W. SCHAWALLER, Staatliches Museum für Naturkunde in Stuttgart (SMNS), Germany. Besides, a few other Middle Asian samples belonging to the Zoological Museum of Moscow State University (ZMUM), Russia, have been incorporated into the study as well. Material has been shared between both museums and the Staatliches Museum für Tierkunde in Dresden (SMTD) as indicated hereinafter.

2. Taxonomy

CRYPTOPHAGIDAE

Telmatophilus HEER, 1841

The Middle Asian fauna contains three species of that genus: *T. typhae* (FALLÉN, 1802), *T. brevicollis* AUBÉ, 1862, and *T. sparganii* (AHRENS, 1812). Of these, only one has been represented in the material under study.

2.1. *Telmatophilus typhae* (FALLÉN, 1802)

Material: Kirghizia: bank of Lake Issyk-Kul, S of Chon-Uryukty, 1600 m, 19–23. VI. 1993, leg. W. SCHAWALLER, 2 ex. SMNS, 2 ex. SMTD, 2 ex. ZMUM.

Distribution: Europe, Caucasus (Russian part, Georgia), Siberia, Russian Far East, N-Korea, Japan.

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Cryptophagus HERBST, 1792

Several widely distributed species of that genus frequently occur in Middle Asia and Kazakhstan, e.g. *C. acutangulus* GYLLENHAL, 1827, *C. aellaris* (SCOPOLI, 1763), *C. laticollis* LUCAS, 1846, *C. pilosus* GYLLENHAL, 1828, *C. quadrimaculatus* REITTER, 1877, *C. setulosus* STURM, 1845, *C. skalitzkyi* REITTER, 1875, and *C. subfumatus* KRAATZ, 1853. These are joined by some other, no less widespread but more rare species: *C. confertus* CASEY, 1900 (Turkestan, Schach-Sara; Kazakhstan, Kustanai Distr., Naurzum), *C. deniatus* (HERBST, 1793) (Uzbekistan, Tashkent; Turkmenistan, Canyon Keikodona), *C. distinguendus* STURM, 1845 (Kazakhstan, Dzhambeity Distr.; Balkhash Distr., Taspik), *C. fallax* BALFOUR-BROWNE, 1953 (Kazakhstan, Aksu-Dzhabagly State Reserve; Uzbekistan, Samarkand), *C. fasciatus* KRAATZ, 1852 (Turkmenistan, Merv), *C. hexagonalis* TOURNIER, 1872 (this species is widely distributed in Iran, Iraq, China), *C. postpositus* J. SAHLBERG, 1903 (Uzbekistan, Tashkent), *C. subvittatus* REITTER, 1887 (Turkmenistan, Dushak). Almost exceptionally Middle Asian are the following species: *C. bactrianus* SOLSKY, 1876 (Kazakhstan: Guriev Area; Zeravshan; Amu-Darya River, Nargys, 100 km from Chardzhou; Turkmenistan: Bahardon; Tedzhen), *C. hauseri* REITTER, 1890 (Syr-Darya, Aulie Ata; Uzbekistan: Samarkand; near Tashkent, Gulbachelor; Fergana; Hissar Mt. Ridge: canyon Dzhurvos; Ramat; Tajikistan: Dushanbe; Badkhyz; Turkmenia: Karabekaul Distr., Lambe; Chardzhou; Chimkent; Zeravshan, Serbent; Afghanistan: Kabul; Sanakat), *C. vagus* BRUCE, 1938 (Turkmenistan: Karakala, Aidere; Chimkent; Ashkhabad; Canyon Keykodona; Thalass-Thal; Canyon Kuhitang, Chodzha-Pil-Ata; Tadjikistan: near Dushanbe, Kok-Tau; Uzbekistan: Sizhak; Afghanistan: Kabul; Iran: Tehran), *C. laterangulus* REITTER, 1891 (Turkmenistan), *C. recticollis* SOLSKY, 1876 (Kazakhstan, South Balkhash, Taspik; Uzbekistan, Tashkent), *C. opacus* REITTER, 1898 (Kazakhstan), *C. ophthalmicus* BRUCE, 1938 (Kazakhstan: Bukantau Mt.; Guriev Area).

A few new species have been described recently from Middle Asia (LYUBARSKY, 1989, 1991): *C. desertus* LYUBARSKY, 1989, *C. kirgicus* LYUBARSKY, 1989, *C. longinitum* LYUBARSKY, 1989, *C. pseudopacus* LYUBARSKY, 1991. It seems opportune to put on record some additional localities for these species: *C. longinitum* (Kazakhstan, Guriev Area), *C. kirgicus* (Kazakhstan, Terskey Alatau Mt. Ridge, 10 km W of Baskartara; Dzhungarsky Alatau Mt. Ridge: Tastau River basin, Arkantirgen River; Mt. Zhumak, W spur of Tastau Mt. Ridge), *C. desertus* and *C. pseudopacus* (Kazakhstan, Guriev Area).

2.2. *Cryptophagus skalitzkyi* REITTER, 1875

Material: Kazakhstan: Charyn Valley, W of Chundza, 800 m, 10–13. VI. 1993, leg. W. Schawaller, 2 ex. SMNS. Kirghizia: Terskey Alatau Mt. Ridge, Ak-Su, 2100 m, 14–18. VI. 1993, leg. W. Schawaller, 2 ex. SMTD; Kichik Alai Mts, Kara-Goy, 2400 m, 21–22. V. 1993, leg. W. Schawaller, 4 ex. SMNS; same, above Kara-Goy, 3000–3200 m, 23. V. 1993, leg. W. Schawaller, 2 ex. SMNS; bank of Lake Issyk-Kul, S of Chon-Uryukty, 1600 m, 19–23. VI. 1993, leg. W. Schawaller, 1 ex. SMTD.

Distribution: M-, S-Europe, Caucasus (Russian part, Armenia, Azerbaidjan), Middle Asia (Uzbekistan, Turkmenistan, Kirghizia, Tadjikistan), Afghanistan.

2.3. *Cryptophagus subfumatus* KRAATZ, 1853

Material: Kirghizia: Fergansky Mt. Ridge, Yarodar, 1400–1500 m, 16–19. V. 1993, leg. Schawaller, 1 ex. SMNS; Chatkalsky Mt. Ridge, Sary-Chelek State Reserve, 1400–1600 m, 27–31. V. 1993, leg. Schawaller, 1 ex. SMNS.

Distribution: N-, M-, E-Europe, Caucasus, Middle Asia (Uzbekistan, Turkmenistan), Afghanistan, Siberia, Baikal region, Kamchatka, Russian Far East.

2.4. *Cryptophagus involatilis* spec. nov. (Figs 1, 3)

Material: Holotype (♂): East Kirghizia, W of Przhewalsk, Barskoon, 2300–2600 m, 2–7.VIII. 1980, leg. E.E. Perkovsky, ZMUM. Paratypes: East Kirghizia, S of Przhewalsk, Canyon Kashka-suu, 28.VIII.1987, leg. S.A. Kurbatov, 2 ♀♀ ZMUM; Kirghizia, Terskey Alatau, Ak-Su, 2600 m, 16.VI.1993, leg. W. Schawaller, 1 ♂ (SMNS); Kazakhstan, Zailiysky Alatau Mt. Ridge, environs of Almaty, upper reaches of Almatinka River, 2500 m, 6–9.VI.1993, leg. W. Schawaller, 1 ♂, 1 ♀ SMTD, 1 ♀ SMNS, 1 ♀ ZMUM; same locality, 3000 m, 9.VI.1993, leg. W. Schawaller, 1 ♀ SMNS, 1 ♂ ZMUM.

Description: Body broadly elongate (Fig. 1), slightly convex, uniform reddish-brown, clothed with dense, uniform, almost adpressed hairs.

Head of normal size with small, hemispherical, somewhat finely faceted eyes, strongly and closely punctured. Antennae long, slender, bearing a strongly delimited club, with half-club reaching beyond base of thorax, 3rd segment a little longer than 2nd, and 5th a little longer than 4th, while 6th, 7th, and 8th almost equal in length, 9th and 10th transverse, 10th broader than 9th, 11th obliquely oval, narrower than 10th.

Prothorax barely one-third broader than long, somewhat convex, moderately strongly and densely punctured, sides slightly flattened, straight and parallel, slightly tapering both basally and apically, forming no angle at lateral tooth, latter situated strongly behind middle. Sides finely margined, anterior margin straight, weakly sinuate, merging at an obtuse angle into callosity, latter occupying at most one-fifth of side margin, with a small, elongate-oval patch of bare surface invisible from above, at an obtuse angle posteriorly of lateral margin. Lateral tooth behind middle of lateral margin. Hind angles obtuse, base round, clearly sinuate, basal groove narrow. Legs of male 5–5–4, of female 5–5–5.

Elytra short, oval, over shoulders a little broader than thorax over lateral tooth, 1.4 times longer than combined breadth and 2.5 times longer than thorax, moderately convex, slightly flattened behind scutellum, with moderately strongly rounded sides and broadly rounded at apex, moderately strong and close punctures. Wings absent.

Length 2.2–2.8 mm.

Male genitalia: Aedeagus as in Fig. 3.

Distribution: Middle Asia: Kirghizia, Kazakhstan.

Remarks: Habitually, *C. involatilis* spec. nov. is similar to *C. kirgicus* LYUBARSKY, but more slender, its callosity is smaller, and its aedeagus is quite different from that of *C. kirgicus*.

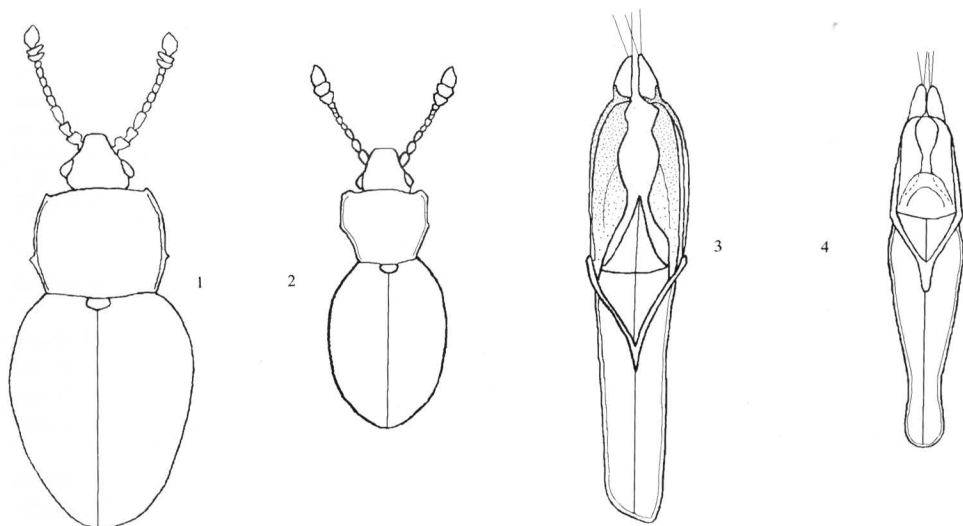
2.5. *Cryptophagus minor* spec. nov. (Figs 2, 4)

Material: Holotype (♂): Kazakhstan: Aksu-Dzhabagly State Reserve, Kshi-Kayandy, 1800 m, under stones, 17.V.1973, leg. V. Yanushev, ZMUM. Paratypes: Kirghizia: Kichik Alai, Kara-Goy, 2400 m, 21–22.V.1993, leg. W. Schawaller, 1 ♀ SMNS, 1 ♀ SMTD, 1 ♂ ZMUM.

Description: Body broadly elongate (Fig. 2), slightly convex, uniformly reddish-brown, clothed with dense, uniform, almost adpressed hairs.

Head of normal size, with small, hemispherical, somewhat finely faceted eyes, finely and densely punctured. Antennae long, slender, bearing a strongly delimited club, with half-club reaching beyond base of thorax, 3rd segment equal in length to 2nd, 5th 1.5 times longer than 4th; 6th and 7th almost equal in length; 8th subquadrate; 9th and 10th transverse; 10th broader than 9th; 11th obliquely oval, narrower than 10th.

Prothorax barely one-fifth broader than long, slightly convex, tapering both basally and apically, its sides slightly angular, forming an angle at midway, finely and sparsely punctured, 1–2 diameters apart from their neighbours on the average. Sides finely margined, anterior margin straight, weakly sinuate, merging at an obtuse angle into callosity which occupies at one-seventh of side margin, with a very small, elongate-oval patch of bare surface invisible from above, at an obtuse angle posteriorly of lateral



Figs 1–4: General view of *Cryptophagus involatilis* spec. nov. (1) and *C. minor* spec. nov. (2); aedeagus of *Cryptophagus involatilis* spec. nov. (3) and *C. minor* spec. nov. (4).

margin. Lateral tooth reduced. Hind angles obtuse, base round, slightly sinuate, basal groove narrow. Legs of male 5–5–4, of female 5–5–5.

Elytra short, oval, over shoulders a little broader than thorax over lateral angles, 1.5 times longer than combined breadth and 2.4 times longer than thorax, moderately convex, slightly flattened behind scutellum, with moderately strongly rounded sides and narrowly rounded apically, moderately strongly and densely punctured. Wings absent.

Length 2.0–2.3 mm.

Male genitalia: Aedeagus as in Fig. 4.

Remarks: *C. quadrimaculatus* differs from *C. minor* by the completely developed wings and structure of the aedeagus (short parameres), *C. simplex* differs from *C. minor* by the outstanding pubescence and structure of the aedeagus, while *C. araxicola*, *C. axillaris* and many other species of the *ellipticus*-group differ again by the structure of the aedeagus (tooth at its apex).

Atomaria STEPHENS, 1830

2.6. *Atomaria apicalis* ERICHSON, 1846

Material: Kirghizia: Fergansky Mt. Ridge, Yarodar, 1400–1500 m, 16–19. V. 1993, leg. W. Schawaller, 1 ex. SMNS.

Distribution: Europe, N-Africa, Canary Islands, Caucasus (Russian part, Georgia, Armenia), Kazakhstan, Siberia, Russian Far East, Mongolia, N-America.

2.7. *Atomaria fasciata* KOLENATI, 1846

Material: Kirghizia: Kichik Alai Mts, Kara-Goy, 2400 m, 21–22. V. 1993, leg. W. Schawaller, 1 ex. SMNS.

Distribution: W-, S-, E-Europe, Canary Islands, N-Africa, Caucasus (Russian part: N-Ossetia; Georgia, Armenia, Azerbaidjan), Middle Asia (Kazakhstan, Kirghizia, Tadjikistan), Afghanistan.

2.8. *Atomaria lewisi* REITTER, 1877

Material: Kazakhstan: Temurlik val., 1000 m, 24. VII. 1993, leg. W. Schawaller, 1 ex. SMNS. Kirghizia: Fergansky Mt. Ridge, Yarodar, 1400–1500 m, 16–19. V. 1993, leg. W. Schawaller, 2 ex. SMTD; Baubashata Mt. Ridge, S of Alash, 1500 m, 25–26. V. 1993, leg. W. Schawaller, 1 ex. SMNS. Tadjikistan: Zarafshan, Ura-Tyube, 20. VI–10. VII. 1987, leg. H. Muche, 1 ex. SMNS.

Distribution: Palaearctic (W-, N-, E-Europe, N-Africa, Caucasus, Middle Asia, Siberia, Tuva, Russian Far East [Sakhalin, Kurile Islands], Afghanistan, Mongolia, China, N- Korea, Japan); India, Nepal, Taiwan, Vietnam; S-Africa; N- America; Australia, New Zealand.

Curelius CASEY, 19002.9. *Curelius exiguus* (ERICHSON, 1846)

Material: Tadjikistan: Zarafshan, Ura-Tyube, 20. VI–10. VII. 1987, leg. H. Muche, 1 ex. SMNS, 1 ex. SMTD.

Distribution: W-, M-, S-, E-Europe, Caucasus (Russian part: N-Ossetia; Armenia, Azerbaidjan), Near East, Middle Asia (Uzbekistan, Tadjikhistan).

LANGURIIDAE

Cryptophilus REITTER, 18742.10. *Cryptophilus integer* HEER, 1841

Material: Kirghizia: Fergansky Mt. Ridge, Yarodar, 1400–1500 m, 16–19. V. 1993, leg. W. Schawaller, 2 ex. SMNS, 2 ex. SMTD.

Distribution: M-, S-, E-Europe, N-, S-Africa, Asia Minor, Caucasus (Georgia, Azerbaijan), Middle Asia (Turkmenistan, Tadjikistan), Afghanistan, Iran, N-Korea, Japan, S-America (Argentina).

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