

Epuraea (Epuraea) dolosa sp. n. and notes on taxonomy of some Palaearctic species of the genus *Epuraea* (Coleoptera: Nitidulidae)

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Epuraea (E.) dolosa sp. n. from Northern Europe (Perm' Province of Russia and Norway) is described with comments on the systematic position and taxonomy of some European species of the subgenus *Epuraea* similar to the new one. The new species is compared with *E. (E.) angustula* Sturm, 1844; *E. (E.) boreella* (Zetterstedt, 1828); *E. (E.) drapeta* Reitter, 1909; *E. (E.) excisicollis* Reitter, 1872; *E. (E.) fussi* Reitter, 1885; *E. (E.) longula* Erichson, 1845; *E. (E.) marseuli* Reitter, 1872; *E. (E.) oblonga* (Herbst, 1793); *E. (E.) opallzans* J. Sahlberg, 1889; *E. (E.) rubronotata* Reitter, 1873 and others.

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Introduction

Publications on Palaearctic Nitidulidae during recent decades, in particular reviews by Kirejtshuk (1992) and Audisio (1993), allow identification of the vast majority of species of the genus *Epuraea* Erichson, 1843, except some forms endemic for Middle and Central Asia and Palaearctic Far East. This paper deals with the description of a new species from Northern Europe confused with other species in the publications mentioned above and some others.

The examined material is kept in the following institutions: Zoological Institute, Russian Academy of Sciences, St.Petersburg (ZIN); Hungarian Natural History Museum, Budapest (TMB); Zoological Museum, Bergen University (ZMB); Finnish Museum of Natural History, University of Helsinki (NCH).

Epuraea (Epuraea) dolosa sp. n. (Figs 1-8)

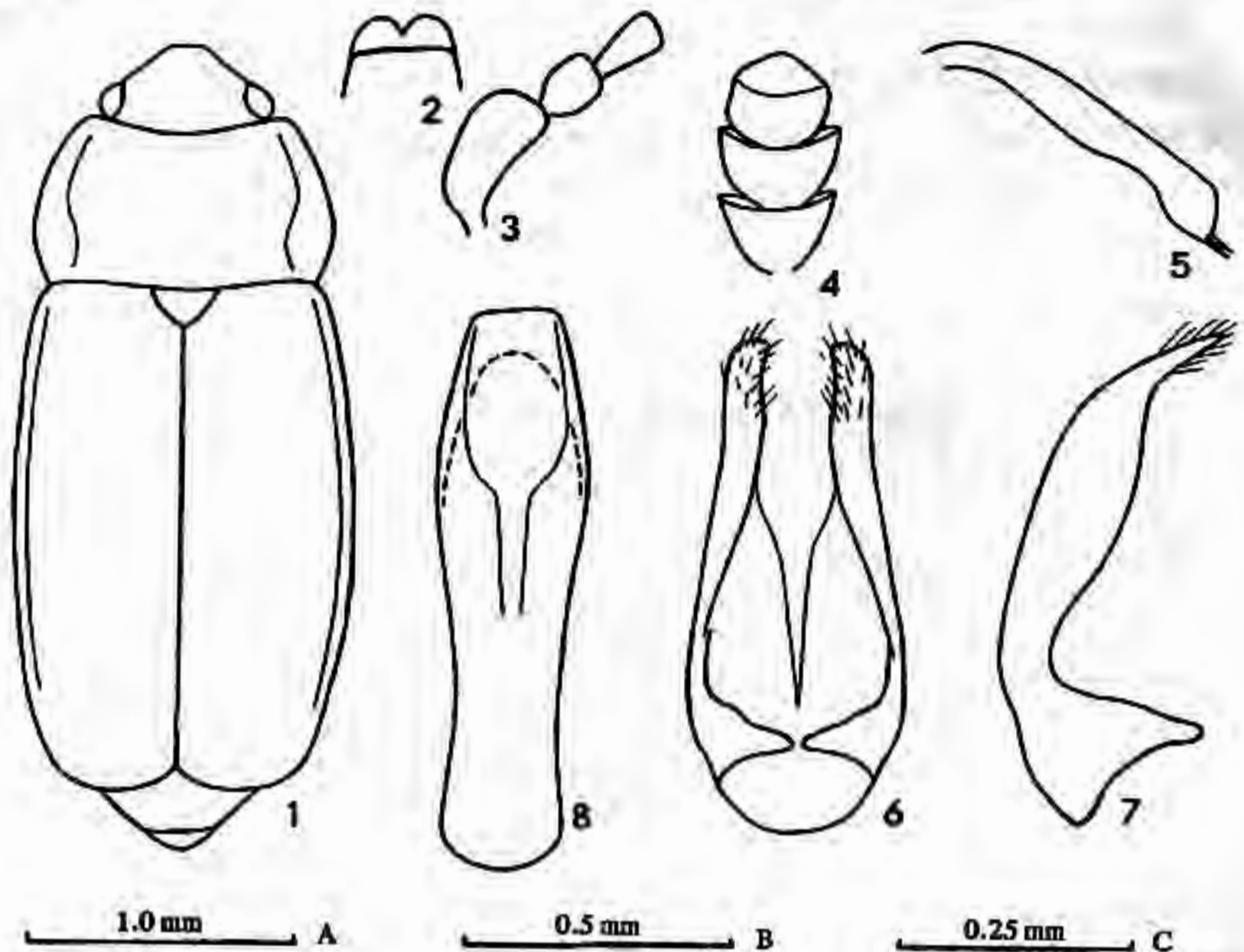
Holotype. ♂, Russia, Perm' Prov., nr. Kungur, 21.IV. 1955 (G. Zinoviev), ZIN.

Paratypes. Russia: 2 ♀, Perm' Prov., nr. Dobryanka, 2.V.1955, stump of cut spruce dried a year before (G. Zinoviev), ZIN; Norway: 3 specimens, "Røa V. Aker, Andr. Strand", ZMB, ZIN; 1 specimen, "Märud, Bakke", ZMB; 1 specimen, "Røa, Oslo, 16.5.51, A.

Strand", ZMB (the specimens from Norway were identified by O. Sjöberg as *Epuraea longipennis*).

Description. *Holotype, male*. Length 3.0, breadth 1.3, height 0.7 mm. Elongate, moderately convex dorsally and ventrally; straw-coloured with slightly lighter pronotal and elytral sides, and appendages, though terminal tarsomeres somewhat darkened; dorsum with greasy lustre and ventral surface with moderate shine; dorsum with moderately conspicuous yellowish hairs somewhat longer than the distance between their roots; ventral surface with shorter and less conspicuous hairs.

Head surface with shallow but distinct punctures nearly as large as eye facets, interspaces between them about half a puncture diameter, finely and somewhat smoothly microreticulated. Pronotal and elytral surface with slightly larger punctures than those on head, and with interspaces almost as broad as a puncture diameter. Surface of pygidium nearly as that on head, but punctures somewhat deeper and microreticulation more distinct. Ventral sclerites with punctures about as large as those on head and pygidium, but much sparser (though punctation on prosternum substantially obsolete), finely and more or less smoothly microreticulated, interspaces between them more than a puncture diameter.



Figs 1-8. *Epuraea (Epuraea) dolosa* sp. n. (5-8 – after Kirejtshuk, 1992; *E. (E.) longipennis*): 1, body shape with outline of explanate pronotal and elytral sides, dorsal view; 2, fore margin of head and exposed labral lobes, dorsal view; 3, scapus and 2nd-3rd antennal segments; 4, antennal club; 5, male middle tibia, dorsal view; 6, tegmen, ventral view; 7, tegmen, lateral view; 8, penis trunk, dorsal view. Scales: A – to Fig. 1; B – to Fig. 5; C – to Figs 2-4, 6-8.

Head a little shorter than the distance between eyes, weakly depressed between antennal insertions. Antennae about as long as head width, their club about 2/7 of total antennal length. Labral lobes separately and regularly rounded. Terminal segment of labial palpi wider than long, with truncate apex. Mentum of usual configuration, almost 4 times as wide as long. Pronotum with sides rather steeply sloping, distinctly explanate along lateral edges (maximal width of explanate part at pronotal base somewhat greater than width of scapus). Scutellum subtriangular, with gently rounded apex. Elytra 1.1 times as long as combined width (2.6 times as long as pronotum), with steeply sloping sides, which are extremely narrowly explanate along lateral edges; elytral apices gradually rounded. Pygidium with a truncate apex from under which a widely rounded apex of anal sclerite is exposed. Antennal grooves

indistinctly outlined along both inner and outer edges, steeply convergent behind mentum. Postocular fossae indistinct. Prosternal process strongly curved medially along fore coxae and sharply widened before its transversely abrupt apex. Distance between fore coxae about two-thirds, and that between hind coxae subequal to distance between middle coxae. Metasternum medially flattened and with a medial suture clearly traced at distal 3/4; hind edge of metasternum angularly excised between coxae. Hypopygidium a little shorter than 1st ventrite and with very widely rounded, almost truncate apex. Epipleura somewhat wider than antennal club.

Legs narrow. Tibiae 2/3 as wide as antennal club, middle ones with a subapical dilatation on outer edge. Femora approximately 1.7 times as wide as tibiae, with fore and hind edges gently curved. Fore tarsus a little narrower than tibia;

middle and hind tarsi much narrower; last tarsomere not shorter than 1st-4th ones combined, with simple and narrow claws.

Penis trunk moderately and tegmen weakly sclerotized.

Female. Pygidium with slightly projected and widely rounded apex. Fore tarsi about twice narrower than tibiae. Ovipositor weakly sclerotized and with usual configuration of sclerites.

Variations. Length 2.7-3.1 mm. Antennal club of some paratypes is somewhat darker than general body coloration, while terminal tarsal segments sometimes are not so dark as those in the holotype. Body coloration varies from straw-coloured reddish to light brownish. Some variability is manifested in pronotal outline, punctation and microreticulation.

Notes. This species has been misidentified as *E. (E.) rugulosa* by Kirejtshuk (1992) and Audisio (1993) and as *E. longipennis* by Silfverberg (1979, 1992) and Lundberg (1986). It was partly defined in the keys and remarks in the mentioned publications by Kirejtshuk and Audisio, though the outline of the body in the work by the first author is given from the drawing of the holotype of *E. (E.) longipennis* Sjöberg, 1939 (female, TMB, with labels "Transbaikalien, Leder-Reitter", "excisicollis Rtt.", "Ep. longipennis m. sp. n. O. Sjöberg det."), which should actually be regarded as a provisional synonym of *E. (E.) placida* Mäklin, 1853. The type specimens of *E. (E.) rugulosa* J. Sahlberg, 1889 deposited in NCH appear to belong to other species, namely: the lectotype, here designated (female, "Koresu-ando, Mäklin", "Spec. typ. N 412", "Eपुरaea rugulosa J. Sahlberg") and one paralectotype look like *E. (E.) opalizans* J. Sahlberg, 1889, but another paralectotype belongs apparently to *E. (E.) fussi* Reitter, 1875 in the traditional sense (Spornraft, 1967; Kirejtshuk, 1992; Audisio, 1993; etc.).

Having a comparatively convex and rather long body this new species partly resembles the group of species similar to *E. (E.) oblonga* (Herbst, 1793) with more or less moderately to widely explanate pronotal sides and widely rounded elytral apices; this group includes also *E. (E.) angustula* Sturm, 1844; *E. (E.) boreella* (Zetterstedt, 1828); *E. (E.) drapeta* Reitter, 1909; *E. (E.) excisicollis* Reitter, 1872; *E. (E.) fussi* Reitter, 1885; *E. (E.) longula* Erichson, 1845; *E. (E.) opalizans* J. Sahlberg, 1889; *E. (E.) rubronotata* Reitter, 1873.

E. (E.) interjecta Sjöberg, 1939 described from a single female (holotype: TMB, "Fennia, E. fussi m. vera", "coll. Reitter", "E. interjecta m. inedit. O. Sjöberg det.") appears to be an immature specimen of *E. (E.) fussi*, or less probably *E. (E.) danica*, *E. (E.) drapeta* or *E. (E.) excisicollis* (two last species have more developed and sharply bordered antennal grooves). Therefore I cannot be completely sure in the present interpretation of this specimen as well.

E. (E.) marseuli Reitter, 1872 (= *pusilla* Illiger, 1792, non Thunberg, 1794; *bickhardti* Deville, 1906) is characterized by the rather strongly projecting and acute elytral apices, but some representatives, particularly those from the south of the Russian Far East, have more or less shortened and widely rounded elytral apices. Besides, this species is easily distinguished from *E. (E.) dolosa* sp. n. by its usually lighter coloration and coarser punctation of body, widely explanate elytral sides, marked large postocular fossae, weakly emarginate hind edge of metasternum between coxae, the distance between hind coxae about twice that between middle ones.

The species mentioned above as "*oblonga* group" can be scarcely united as a group of relatives because their resemblance could be convergent. However, in spite of a greater convexity of dorsum in the studied specimens of the new species, this character shows a certain variability among representatives of each of the mentioned species and, therefore, cannot be regarded as a reliable diagnostic feature. At the same time, in contrast to all species mentioned above, the new species is characterized by a markedly narrow scapus, darkened terminal tarsomeres and elytra distinctly more than 2.5 times as long as pronotum. Only these external attributes allow separation of some specimens of *E. (E.) dolosa* sp. n. and those of, for instance, *E. (E.) rubronotata* without dissection of males. In particular, the new species has more resemblance in its appearance to *E. (E.) angustula*, *E. (E.) boreella*, *E. (E.) excisicollis*, *E. (E.) fussi*, *E. (E.) oblonga*, *E. (E.) rubronotata*, but, in addition to the shape of scapus, tarsal coloration and elytral length, these species are distinct from *E. (E.) dolosa* sp. n. in the following characters:

— *E. (E.) angustula* — in darker and almost unicoloured body, more or less regularly arched and less explanate pronotal sides, denser and less distinct punctation, visible

postocular fossae, absence of sexual dimorphism in structure of middle tibiae;

— *E. (E.) boreella* — in dark coloration of frequently more shiny body, less distinct and shallower punctation, subacute labral lobes;

— *E. (E.) excelsicollis* — in coarser and denser punctation on dorsum and more shiny interspaces between punctures, subacute labral lobes, less regularly arched and more widely explanate pronotal sides, sharply bordered inner and outer edges of deeper antennal grooves;

— *E. (E.) fussi* — in usually much darker antennal club, less distinct punctation on dorsum, widely explanate sides and suboblique apices of elytra with their maximal length at suture, and in frequently more conspicuous pubescence;

— *E. (E.) oblonga* — in usually lighter body coloration and much darker antennal club, less distinct punctation on dorsum, subacute labral lobes, widely explanate elytral sides, visible weak postocular fossae;

— *E. (E.) rubronotata* — in usually darker general coloration with 2 light spots on each elytron, darkened antennal club, subacute labral lobes, flattened pronotum with more weakly rounded and gently sloping sides, sharply bordered inner edges of antennal grooves, the distance between hind coxae at least 1.5 times that between middle ones.

Other species under consideration differ from *E. (E.) dolosa* sp. n. in the following characters:

— *E. (E.) longula* — in more shiny surface, subquadrangular pronotum with much more weakly emarginate fore edge, less arcuate edges of labral lobes, almost sharply bordered inner edges of antennal grooves, the distance between hind coxae 1.5 times that between middle ones, usually much more projected subapical dilatation of inner side of middle tibia in males;

— *E. (E.) drapeta* and *E. (E.) opalizans* — in more robust and compact body with usually light straw coloration except the rather dark antennal club, very coarse and profound punctation and microreticulation of dorsum, dorsal surface of head with a marked concavity at each

eye, subacute labral lobes, more strongly and less regularly arched and widely explanate pronotal sides, widely explanate elytral sides, and in *E. (E.) opalizans* the distance between hind coxae at least 1.5 times that between middle ones.

On the other hand, *E. (E.) dolosa* sp. n. has some resemblance to the group of species with probably a close relation to *E. (E.) laeviuscula* (Gyllenhal, 1827). This group is represented in the Palaearctic fauna by *E. (E.) debreuli* Reitter, 1898; ? *E. (E.) linearis* Mäklin, 1853; *E. (E.) mestscheryakovi* Kirejtshuk, 1992; *E. (E.) rapax* Reitter, 1884; *E. (E.) rufobrunnea* Sjöberg, 1939. But the new species has the pronotum not so convex and elytra with steeply sloped and extremely narrowly explanate sides, and very feeble punctation on dorsum which are rather characteristic for members of the *laeviuscula* group.

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