

Two new species of the genus *Donus* JEKEL (Coleoptera, Curculionidae, Hyperinae) from the mountains of S-Siberia

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Abstract

Two new species of the genus *Donus* are described. *D. dudkoi* sp. n. (Kuznetskii Alatau) is similar to *D. cupreus* and *D. janae* sp. n. (West Altai) is similar to *D. lepidus*. A key is provided. Distribution maps for the species related to *D. cupreus* and a list of Siberian species of *Donus* is provided as well.

Key Words: Taxonomy, Coleoptera, Curculionidae, Hyperinae, *Donus*, Siberia, Kuznetskii Alatau, West Altai, new species, key.

Introduction, material and methods

Two new species of the genus *Donus* JEKEL related to *D. cupreus* (LEGALOV, 1997). They were found during a survey of weevils material collected by R. Yu. Dudko in Southern Siberia: the central part of Kuznetskii Alatau (environment of the Bolshoi Zub (Big tooth) mountain, Tigirtish mountain range) and West Altai (Listvjaga mountain range) in 1997. The two new species, *D. cupreus* and *D. lepidus* (CAPIOMONT, 1868) seems to form a compact group the genus *Donus*. The species of this group are morphological quite similar and differ in having the undivided surface scales. A list of the Siberian species of the genus *Donus* is also provided in this paper.

All specimens are kept in the following museums: ISNB - Royal Belgian Institute for Natural Science, Brussel; SZMN - Siberian Zoological Museum (Novosibirsk).

Donus janae sp. n. (Fig. 1)

Description. Male. Length: 5.9 mm. Body dark; tibiae, tarsi, funicles and scapes brown. Body densely covered with scales. Pronotum and elytra covered with solid vestiture of dark and brownish-copper scales. Pronotum with two faint longitudinal dark stripes. Elytra with faint dark spots on each interval behind the middle, first interval near suture light brown, with dark apical spot, 4th-6th intervals with oblique light spots on basal half, each interval with a row of short setae. Rostrum thick and short, weakly curved, roughly punctate, with median carina; bare apical part small, weakly shining, with 5 long setae on sides. Mandibles bidentate. Antennae scrobes deep. Antennae inserted in the apical third of rostrum, scape dilated apically, 1st and 2nd joints of funicle long, 3rd and 4th conical, 5th, 6th and 7th globular, club narrow, with 3 joints. Head globular, fore-

head weakly depressed, about 1.22 times as narrow as the base of rostrum between eyes. Pronotum trapezoidal, about 1.22 times as wide as long, strongly widened from the base to apical one-fifth, then sharply narrowed to subapical constriction. Scutellum small, sunken. Elytra oblong-oval, about 1.37 times as long as wide, very weakly concave at base, almost parallel-sided, with smooth humeri, intervals wide, punctured striae weak, subapical swellings absent. Hind wings reduced. Abdomen concave. Pygidium covered with elytra. Legs long. Fore femora thicker than the posteriors, clavate, without tooth. Tibiae curved inwards in apical third, widened to apex on middle and hind tibiae, with small mucro at apex. Tarsi pubescent, 3rd joint bilobed; claws simple, connate at the base. Penis wide, symmetric, weakly narrowed from the base to the level of ostium, then strongly narrowed apically and bluntly pointed at apex, sclerotized rim in dorsal aspect nearly of the same width throughout even at the apex (Fig. 1D).

Female. Unknown.

Etymology. This new species is gladly named in honour of Yana L. Lozinskaya.

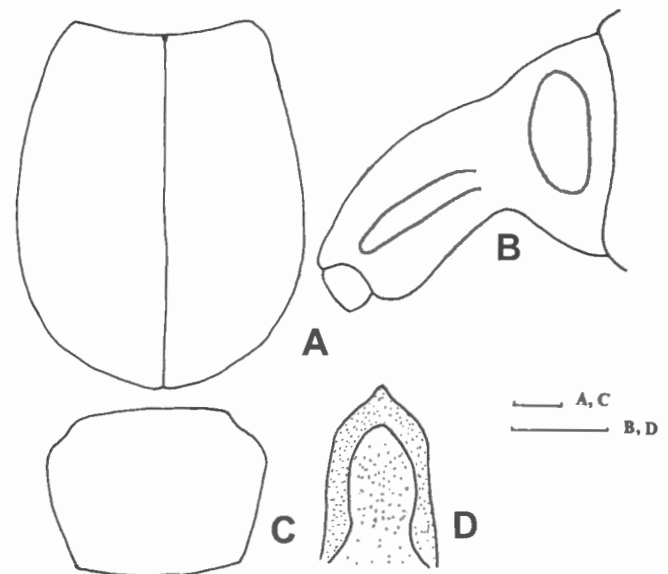


Fig. 1 — *Donus janae* sp. n. A, elytra, dorsal view; B, head and rostrum, lateral view; C, pronotum, dorsal view; D, penis apex, dorsal view. Scales = 0.5 mm.

Diagnosis. The species is very similar to the congeners (*D. lepidus*, *D. cupreus*, *D. dudkoi*), but differs in the body shape and the sclerotized rim of penis being nearly of the same width even at the apex (in dorsal view) (Figs 1-4). See also a key to species.

Holotype, male (SZMN), West Altai, Listvjaga mountain range, environment of Tesninskii Belok mountain, H~2000-2300 m, alpine zone, 28.vii.1997, (R.Yu. Dudko & V.K. Zinchenko).

***Donus dudkoi* sp. n.**
(Fig. 2)

Description. Body dark, tarsi, tibiae apici, scapes and funicles of antennae brown. Body densely covered with undivided copper scales. Pronotum with 3 stripes of lighter scales. In the hind half of elytra even intervals with patches of merged dark spots.

Male. Length: 5.1-5.6 mm. Rostrum short, feebly curved and widened from eyes to apex. Mandibles bidentate. A third apex of rostrum smooth with rare deep points, shining. The antennae furrowed deep, directed to lower corners of the eyes. Rostrum sides with rough points, shining. Frons wide, plane, with points. Frons covered with dense narrow scales, directed to pronotum. Frons about 1.20 - 1.31 times as narrow as the base of rostrum. Eyes not protruded from head contour. Head round. Antennae long. Scape clavate to apex, reaching the eyes, 1st and 2nd joints of funicle lengthened, 3rd and 4th conical, 5th and 6th globular, 7th wide-conical. Clava narrow, with 3 joints. Pronotum approximately as long as wide or weakly transverse, length/width - 1.11/1.22, narrowest at base, then straightly widened to the middle and again narrowed. Disk weakly convex, shining, small and densely punctate. Scutellum small, triangular, sunken. Elytra oblong-oval, about 1.41-1.49 times as long as wide, widest in the middle. Shoulders smoothed, fore apices tubercles absent. Intervals wide, 3rd interval of elytra somewhat raised above the others. Striae deep from non-merged points. Wings reduced. Abdomen weakly concave. 1st and 2nd ventrites lengthened, 5th ventrite wide, emarginate at apex. Pygidium hidden by elytra, made by the 8th tergite. Legs lengthened. Anterior coxae large, conic, continuous. Femora weakly thickened, without tooth. Anterior tibiae curved, mucronate on inner apex. Tarsi long, 3rd joint with two lobes. Pads with pubescence. Claws free, without tooth. Penis: Fig. 2G.

Female. Length: 5.6-6.1 mm. Larger. Elytra wider (length/width - 1.3/1.5). Abdomen convex. 5th ventrite not emarginate at apex. Sclerites of 8th ventrite separated. Spermatheca as Fig. 2F.

Etymology. This new species is named in honour of Dr. Roman Yu. Dudko who collected this species for the first time.

Diagnosis. The species is very similar to *D. cupreus*, but the male differs from it in the following characters: smaller dimensions; the pronotum widened at about the middle; the base of elytra weakly concave; penis symmetric and less sharpened. Females differ in the following characters: the wider elytra, the less smoothed shoulders and the more slender spermatheca (Figs. 2, 4). The new species is differed from *D. lepidus* by the dark legs yellow-brown in *D. lepidus*, the narrower pronotum and the narrower penis (Figs. 2, 3).

Holotype, male (SZMN), West Siberia, Kuznetskii Alatau, Tigirtish mountain range, 6 km SSW of Bolshoi Zub,

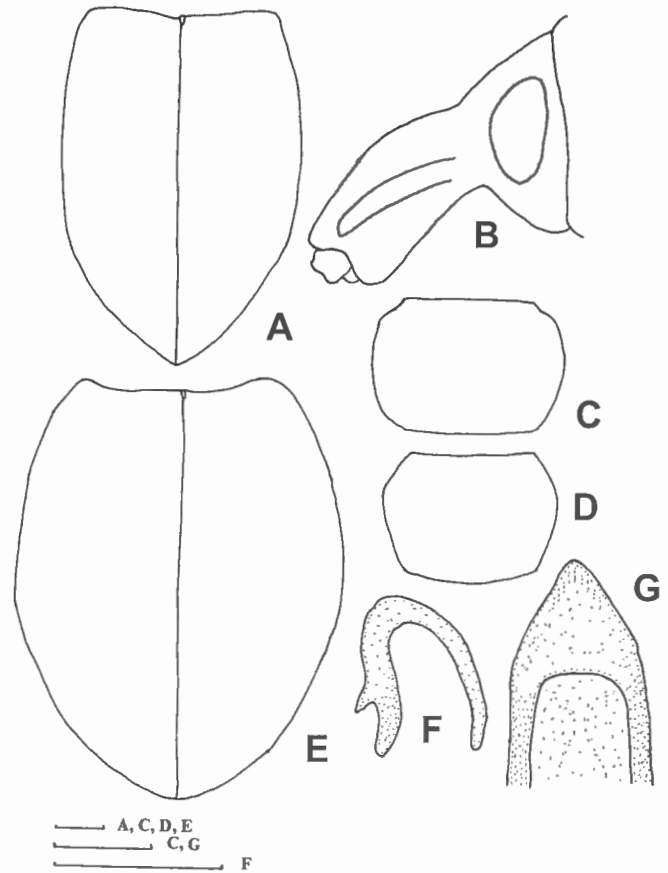


Fig. 2 — *Donus dudkoi* sp. n. A, elytra, male, dorsal view; B, head and rostrum, male, lateral view; C, pronotum, female, dorsal view; D, pronotum, male, dorsal view; E, elytra, female, dorsal view; F, spermatheca, dorsal view; G, penis apex, dorsal view. Scales = 0.5 mm.

H~1500 m, 25.ix.1997, (R.Yu. Dudko). Paratypes 5 male (SZMN), 1 male (ISNB), 5 female (SZMN), 1 female (ISNB), idem.

**A key to Siberian species
of the *Donus cupreus* group**

- 1a) Legs reddish-brown. Males narrower than females. Penis wide and stretched at about the apical third (Fig. 3D). Spermatheca strongly curved, with the apex not reaching the base (Fig. 3C). Length: 5.4-6.6 mm *lepidus*
- 1b) Legs black 2
- 2a) Elytra narrowed just behind the middle and bluntly acuminate at conjoint apex with smoother shoulders . . . 3
- 2b) Elytra almost parallel and rounded at about the apical third (Fig. 1A). Body more stretched. Shoulders smooth. Pronotum and elytra covered with solid shroud, consisting of wide unsplit scales. Sculpture of pronotum rougher. Rostrum with in the carina middle. Apex of rostrum shining, roughly pointed. Penis wide, sharply curved and narrowed in apical third (Fig. 1D). Length: 5.9 mm *janae* sp. nov.
- 3a) Bases of elytra strongly concave (Figs 4A, 4B). Shoulders smooth. Penis wider, stretched in the apical

- third (Fig. 4C), apex curved to the left. Spermatheca smaller, its apex weakly stretched (Fig. 4E). Rostrum longer (Fig. 4D). Length: 5.2-7.2 mm *cupreus*
- 3b) Bases of elytra very weakly concave (Figs 2A, 2E). Shoulders distinct. Penis narrower, symmetric to base (Fig. 2G). Rostrum shorter (Fig. 2B). Length: 5.1-6.1 mm *dudkoi* sp. nov.

The study of the weevils fauna of Siberia yielded 9 species of the genus *Donus*. A list of these species is provided below.

A list of the Siberian species of the genus *Donus*

- D. lepidus* (CAPIOMONT, 1868), **comb. nov.**
Phytonomus lepidus CAPIOMONT, 1868: 198-199.
Phytonomus lepidus: PETRI, 1901: 118, 191
Phytonomus lepidus: CSIKI, 1934: 43
 Distribution. Cheljabinsk Area: Malyi Iremen, Katav-Ivanovsk; Tomsk Area: Semiluzhki; Kuznetskii Alatau; Gornaya Shoria; W Sajan; S, SW, NE Altai; Irkutsk Area: Padun; Dauria (Fig. 5B).
D. cupreus (LEGALOV, 1997), **comb. nov.**
Glanis cupreus LEGALOV, 1997b: 474-475
 Distribution. W Altai (Fig. 5A).
D. dudkoi sp. nov.
 Distribution. Kuznetskii Alatau (Fig. 5C).
D. janae LEGALOV, sp. nov.
 Distribution. W Altai (Fig. 5D).
D. deportatus (BOHEMAN, 1840), **comb. nov.**
Hypera deportatus BOHEMAN, 1840: 354

- Hypera deportatus*: CAPIOMONT, 1867: 493, 497
Hypera deportatus: PETRI, 1901: 28, 37
Hypera deportatus: CSIKI, 1934: 14
Hypera deportatus: ZASLAVSKIJ, 1979: 90
Hypera punctella BOHEMAN, 1840: 357
Hypera punctella: CAPIOMONT, 1867: 493, 498
Hypera punctella: PETRI, 1901: 28, 36
Hypera punctella: CSIKI, 1934: 20
Hypera sushkini ZASLAVSKIJ, 1979: 89-90, **syn. nov.** (type seen)
 Distribution. Salair; Kuznetskii Alatau; Gornaya Shoria; W Sajan; NE Altai.
D. sajanicus KOROTYAEV, 1998
Donus sajanicus KOROTYAEV in KRIVETS, KOROTYAEV, 1998: 846-847
 Distribution. W Sajan; W, NE Altai.
D. burjaticus KOROTYAEV, 1998
Donus burjaticus KOROTYAEV in KRIVETS, KOROTYAEV, 1998: 848-849
 Distribution. Burjaria
D. opanassenkoi (LEGALOV, 1997)
Glanis opanassenkoi LEGALOV, 1997a: 119
 Distribution. N Krasnojarsk terr.; W Altai; Novosibirsk Area: Ubinskii Distr.
D. mniszzechi (CAPIOMONT, 1867), **comb. nov.**
Hypera mniszzechi CAPIOMONT, 1867: 516-518
Hypera mniszzechi: PETRI, 1901: 50
Hypera mniszzechi: CSIKI, 1934: 17
 Distribution. Altai.

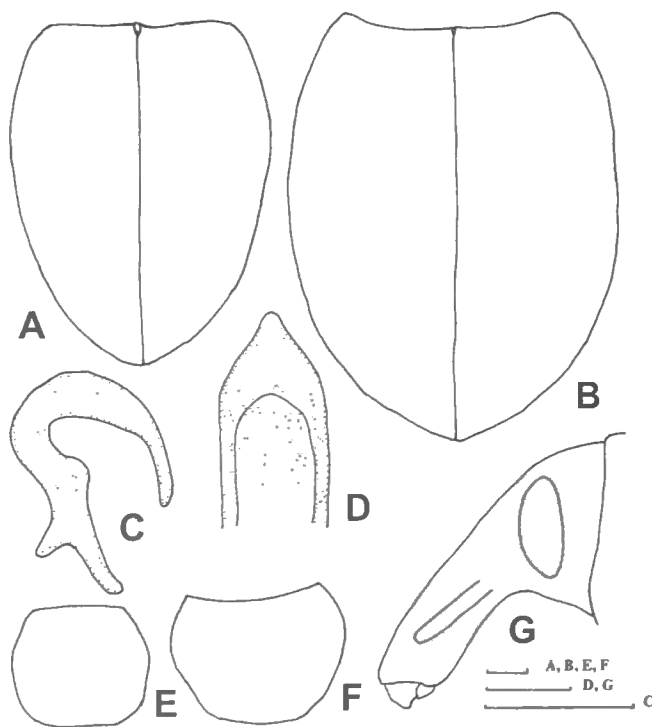


Fig. 3 — *Donus lepidus*. A, elytra, male, dorsal view; B, elytra, female, dorsal view; C, spermatheca, dorsal view; D, penis apex, dorsal view; E, pronotum, female, dorsal view; F, pronotum, male, dorsal view; G, head and rostrum, male, lateral view. Scales — 0.5 mm.

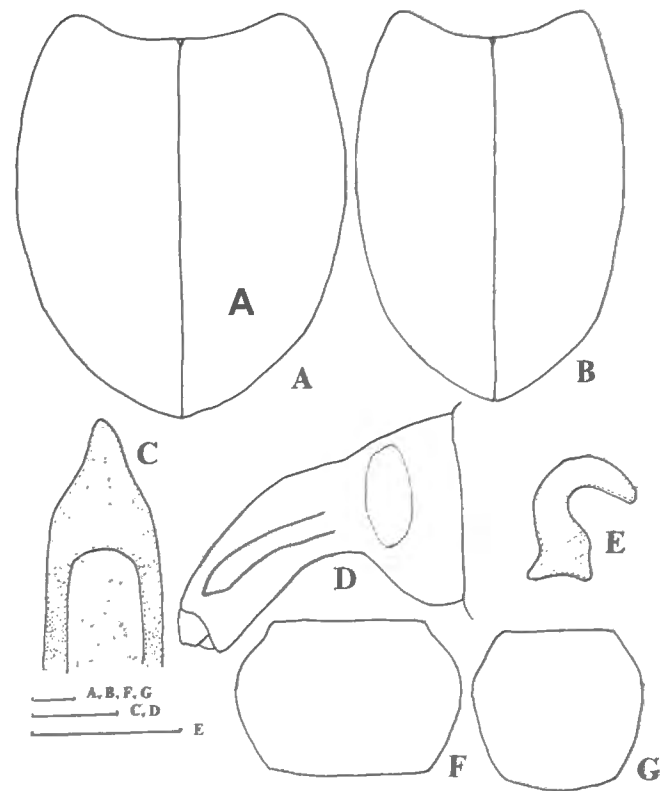


Fig. 4 — *Donus cupreus*. A, elytra, female, dorsal view; B, elytra, male, dorsal view; C, penis apex, dorsal view; D, head and rostrum, male, lateral view; E, spermatheca, dorsal view; F, pronotum, female, dorsal view; G, pronotum, male, dorsal view. Scales = 0.5 mm.

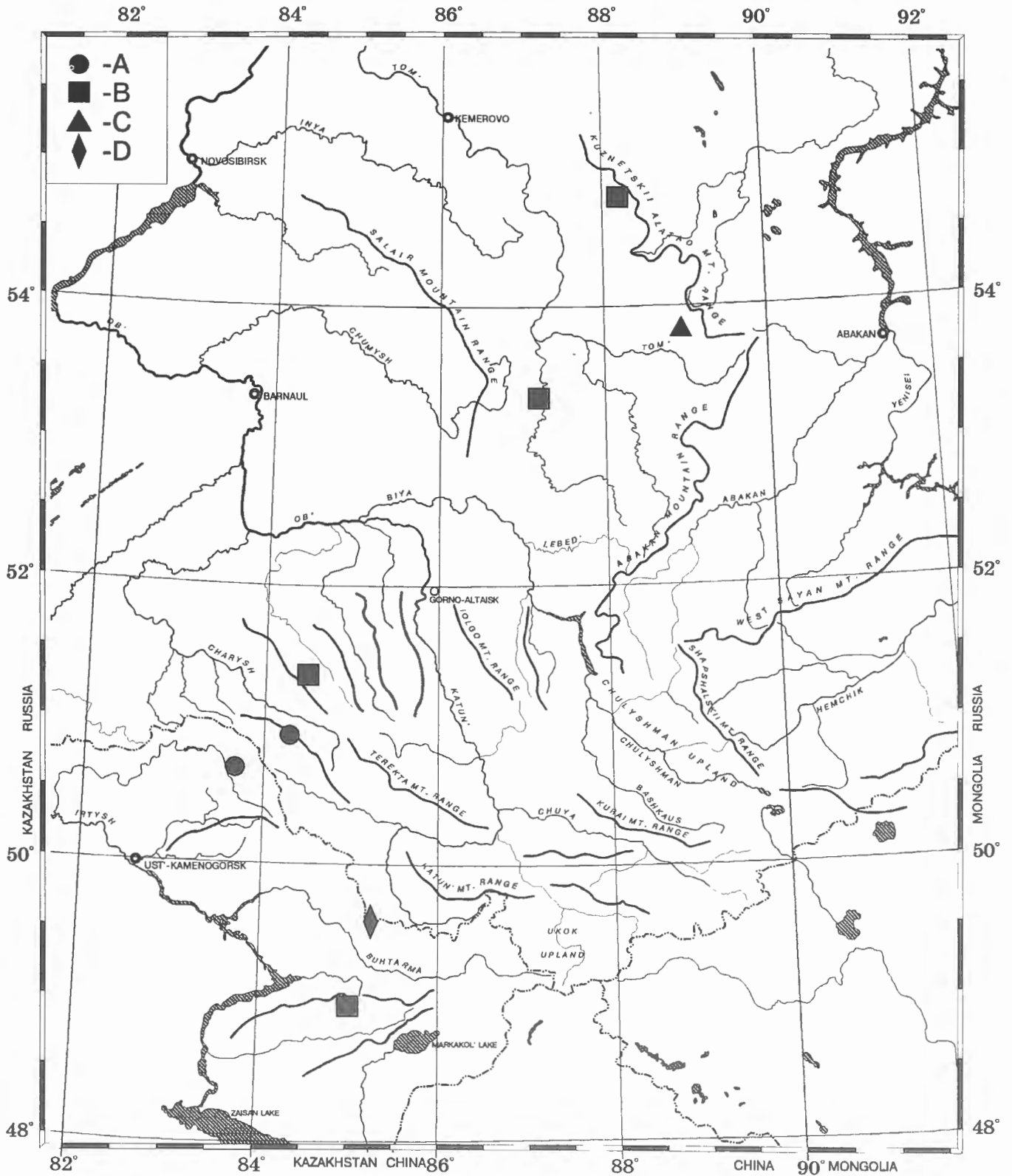


Fig. 5 — Distribution of species similar to *Donus cupreus* in S-Siberia. A, circle, *Donus cupreus*; B, quadrate, *Donus lepidus*; C, triangle, *Donus dudkoi*; D, rhombus, *Donus janae*.

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