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TWO NEW SPECIES OF THE GENUS *DEPORAUS* SAM. (COLEOPTERA: RHYNCHITIDAE) FROM THE RUSSIAN FAR EAST AND CHINA

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Two new species of the genus *Deporaus* are described. *D. (Pseudapoderites) azarovae* sp. n. from Sakhalin Island is closely related to *D. (P.) pacatus* (Faust, 1882) and *D. (Paleodeporaus) ussuriensis* sp. n. from Russia (Primorskiy krai) and China is similar with *D. (P.) rhynchitoides* Sawada, 1993.

KEY WORDS: Coleoptera, Rhynchitidae, Isotheini, *Deporaus*, new species, Russian Far East, China.

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В роде *Deporaus* описаны два новых вида. *D. (Pseudapoderites) azarovae* Legalov, sp. n. с Сахалина близок к *D. (P.) pacatus* (Faust, 1882), а *D. (Paleodeporaus) ussuriensis* Legalov, sp. n. из России (Приморский край) и Китая – к *D. (P.) rhynchitoides* Sawada, 1993.

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INTRODUCTION

Two new species of the genus *Deporaus* Samouelle, 1819 have been found during study of the East Asian representatives of the tribe Isotheini Scudder, 1893. Both

species belong to the primitive subgenera *Pseudapoderites* Legalov, 2003 and *Paleodeporaus* Legalov, 2003, which are characterised by the tube not rolling and by gnawing of young sprouts. The description of new species are given below.

Materials (including holotypes) are deposited in the following institutes: ZISP – Institute of Zoology, Russian Academy of Sciences (St-Petersburg, Russia), ISEA – Institute of Systematic and Ecology of Animals, Siberian Branch of the Russian Academy of Sciences (Novosibirsk, Russia), IBSS – Institute of Biology and Soil Science, Far East Branch of the Russian Academy of Sciences (Vladivostok, Russia) and DEI = Deutsches Entomologisches Institut (Munchenberg, Germany).

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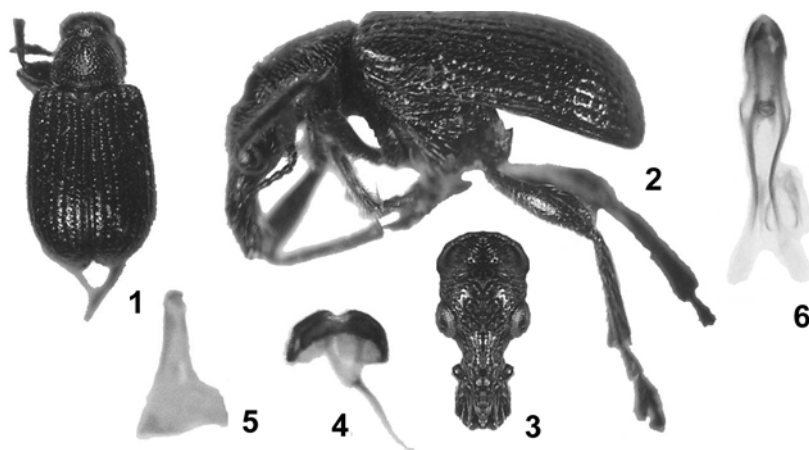
DESCRIPTION OF NEW SPECIES

Deporaus (Pseudapoderites) azarovae Legalov, sp. n.

Figs 1-6

MATERIAL. Holotype – ♂ (ZISP), RUSSIA: Sakhalin Is., Chekhova Mt., 29.VI 1973 (leg. Kasparyan).

DESCRIPTION. MALE: Body black, lacking lustre, without metal lustre, with appressed, short, light setae. Rostrum short and thick, 2.27 times longer than wide, curved, lacking lustre, toward apex, from place of attachment of the antennae up to the basis with smooth carina. Topmost third lacking lustre. Other part of the rostrum finely and densely punctate. Antennae located behind the middle of the rostrum. Eyes large, convex. Forehead wide, flat, sparsely and finely punctate. Temples longer than eyes, punctate. Vertex convex, finely and sparsely punctate. Neck expressed, wrinkled. Antennae average sizes, reaching the middle of the pronotum. Scapus and 1st segment of the funicle oval. 2nd and 3rd segments elongated. 2nd segment longer than 1st and 3rd segments. 4th segment oval, narrower than 1st segments. 5th and 6th segments long-trapezoid. 7th segment trapezoid, similar to segments of the clava. Clava wide, shorter than the funicle. 1st segment of the clava longer than 2nd segments. 2nd segment hardly shorter than 3rd segment. 3rd segment pointed. Pronotum weakly transversal, 1.07 times wider than length, narrowed to the basis and apex. Pronotal groove sharp. Sides rounded. Disk densely and finely punctate. Scutellum trapezoid, densely and finely punctate. Elytra almost rectangular, 1.3 times longer than wide. Greatest width on the middle. Humeri weakly smoothed. Intervals convex, punctate. Striae clear and wide. Penultimate stria merges with last stria in the apical part of the elytra. Prothorax rugosity-punctate. Mesothorax gently punctate. Mesepisternums smooth. Metepisternum narrow, finely punctate. Metathorax sparsely punctate. Abdomen convex, very much densely punctate. 1st and 2nd ventrites wide. 3rd and 4th ventrites narrower. 5th ventrite narrow. Pygidium and propygidium densely punctate. Legs average sizes. Femora widened. Tibiae long. Protibiae almost direct, narrower, with weak mucro. Meso- and metatibiae wider, flattened, widened to apex. Tarsi long, 1st segment elongated, 2nd segment triangular, 3rd segment bilobed, 5th segment elongated. Claws with teeth. Length of body: 2.8 mm.



Figs 1-6. *Deporaus azarovae* sp. n. 1) body dorsally; 2) body laterally; 3) rostrum and head dorsally; 4) 8th tergite of male dorsally; 5) apex of tegmen dorsally; 6) aedeagus dorsally.

DIAGNOSIS. New species is closely related to *Deporaus (Pseudapoderites) pacatus* (Faust, 1882) (from South of the Russian Far East, North-Eastern China, Japan and Korea) but can be distinguished by shorter and stronger curved rostrum, by weaker convex eyes, by sparsely punctate forehead, and by the armament of the endophallus (in *D. pacatus* rostrum longer and weaker curved, eyes stronger convex, forehead densely punctate, basal sclerite of the endophallus of other shape).

ETYMOLOGY. New species is named in honor of entomologist N.A. Azarova (IBSS, Vladivostok).

DISTRIBUTION. Russia: South Sakhalin.

NOTES. New species has been listed previously from Sakhalin Island as *Deporaus septentrionalis* Sawada, 1993 (Egorov, 1996: 212; Legalov, 2003: 174; 2006: 202) as a result of misidentification.

***Deporaus (Paleodeporaus) ussuriensis* Legalov, sp. n.**

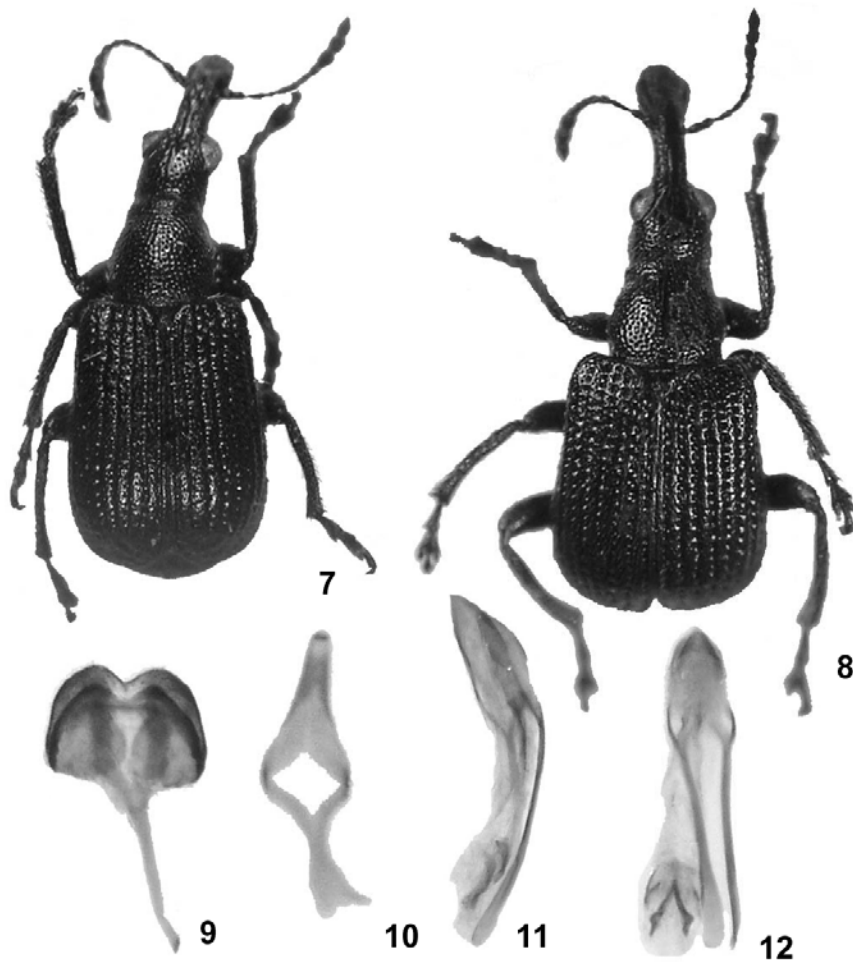
Figs 7-12

MATERIAL. Holotype – ♂ (ISEA), RUSSIA: Primorskii krai: Nadezhdinskii District, Peninsula De-Friz, *Pyrus*, 9.VI 2006 (leg. Legalov). Paratype – the same data as holotype, 7 ♂, 3 ♀, (leg. Legalov); Vladivostok, Akademicheskaja, *Crataegus*, 29.V-18.VI 1970, 2 ex. (IBSS) (leg. Azarova); the same locality, 7.VI 1972, 5 ex. (IBSS) (leg. Azarova); env. Vladivostok, *Crataegus*, 8.VI 2006, 1 ♀ (ISEA) (leg. Legalov); Vladivostok, Sedanka, *Padus*, 9.V 1973, 1 ex. (DEI) (leg. Kuznetsov); env. Vladivostok, 18.V 1972, 1 ♂ (ZISP), 1 ♀ (ZISP) (leg. Gur'eva); env. Vladivostok, Okeanskaja, 1.VI 1937, 1 ♀ (ZISP) (leg. Stepanov); the same locality, 5.VII 1986, 1 ♂ (ZISP) (leg. Zherikhin); env. Vladivostok, Maikhe riv. [=Artemovka riv.], 8.VI 1930,

1 ♂ (ISEA) (leg. Shabliovskii); 25 km of Vladivostok, Sakharnyi Kluch, 25.V 1963, 1 ♀ (ZISP) (leg. Falkovich); env. Ussuriisk, 14.V-1.VI 1982, 2 ♂ (ZISP), 3 ♀ (ZISP), 1 ♀ (ISEA) (leg. Kozlov); Nikolsk-Ussuriisk [=Ussuriisk], *Pyrus*, 9.VI 1932, 1 ♀ (ZISP); Ussuriiskii District, env. Gornotaezhnoe, 20-21.V 1989, 1 ♂ (ZISP) (leg. Belokobylsky); same district, Suputinka riv. [=Komarovka riv.], *Crataegus*, 8.VIII 1937, 1 ♀ (ZISP) (leg. Richter); Lazovskii District, env. Lazo, *Crataegus*, 10-13.VI 2006, 2 ♀ (ISEA) (leg. Legalov); Dal'negorskii District, 15 km of Cheremshany, Cheremukhovaja riv., Kamennyi Kluch, 26.VII 1986, 1 ♂ (ZISP) (leg. Zherikhin, Grachev). CHINA: Manchuria, Iman'po, 9.VI 1911, 1 ♂ (ZISP) (leg. Emel'janov).

DESCRIPTION. Body black, lacking lustre, with short, semierect, light setae. MALE: Rostrum short, longer than the head, 3.2-3.7 times longer than wide, toward to apex, curved, with carina from the place of attachment of antennae up to the basis. On each side from carina roughly punctate. Topmost third largely punctate. Place of attachment of antennae smooth, located behind the middle of the rostrum. Eyes large, weakly convex. Forehead wide, almost flat, densely punctate. Vertex convex, punctate. Temples elongated, longer than eyes. Neck weakly expressed, transversal-wrinkled. Antennae average sizes, reaching the middle of the pronotum. Scapus and 1st segment oval. 2nd segment elongated, much longer than 1st segments. 3-6th segments long-trapezoid. 7th segment trapezoid, similar to segments of the clava. Clava shorter than the funicle. 1st segment of clava elongated. 2nd segment shorter than 1st segments. 3rd segment equal to the 1st segment, pointed. Pronotum square, with the weakly pronotal groove. Sides weakly rounded. Disk weakly convex, roughly and rugosity punctate. Scutellum almost trapezoid, punctate. Elytra almost rectangular, 1.19-1.32 times longer than wide, with weakly smoothed shoulders and the greatest width behind the middle. Intervals convex, wide, punctate. Striae sharp, deep. Points in them large. 9th stria merges with the 10th stria in the apical part of the elytra. Prothorax weakly rugosity-punctate. Mesepisternums and mesothorax gently rugosity-punctate. Metathorax densely and largely rugosity-punctate. Metepisternum narrow, more sparsely punctate. Abdomen convex, largely and densely punctate. 1-3rd ventrites wide. 4th ventrite narrower. 5th ventrite narrow. Propygidium and pygidium convex and wide, densely punctate. Legs long. Femora widened. Tibiae long. Protibiae straight. Meso- and meta tibiae wider and curved. 1st segment of metatarsi longer than 2nd and 3rd segments together taken. Transfer apparatus of the endophallus consists of two sclerites. Length of body: 3.1-4.3 mm. FEMALE: Rostrum longer than the pronotum, 4.17-4.67 times longer than wide. Antennae located on the middle of the rostrum. Eyes more finely than at males. Pronotum weakly transversal, 1.04-1.2 times wider than length. Elytra 1.17-1.18 times longer than wide. Abdomen stronger convex. Length of body: 2.8-5.3 mm.

DIAGNOSIS. This new species is very similar to *Deporaus* (*Paleodeporaus*) *rhynchitoides* Sawada, 1993 from Japan, but differs by the densely punctate vertex, by narrower intervals of the elytra, by wider striae, by regular curved rostrum at females, and by the armament of the endophallus (in *D. rhynchitoides* vertex sparsely punctate, wider intervals of the elytra, narrower striae, rostrum weakly bent in place of the attachment of the antennae at females and basal sclerite of armament of the endophallus with tooth and lower sclerite strongly curved).



Figs 7-12. *Deporaus ussuriensis* sp. n. 7) body of male dorsally; 8) body of female dorsally; 9) 8th tergite of male dorsally; 10) tegmen dorsally; 11) aedeagus laterally; 12) aedeagus dorsally.

ETYMOLOGY. The name of species is derived from the historical name of Ussuri region.

DISTRIBUTION. Russia: Primorskii krai; North-East China.

NOTES. New species has been recorded previously from Primorskii krai as *Deporaus rhynchitoides* Sawada, 1993 (Legalov, 2002: 109; 2003: 174; 2006: 202).

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REFERENCES

Egorov, A.B. 1996. [Fam. Rhynchitidae – Rhynchitid-Beetles] – [Key of insects of the Far East of Russia] 3(3): 199-215. (In Russian).

Legalov, A.A. 2002. [Checklist of weevils of families Nemonychidae, Urodontidae, Rhynchitidae, Attelabidae and Brentidae (Coleoptera, Curculionoidea) from Asian part of Russia] – [Fauna of Russian Far East] 4. Blagoveshchensk: 105-116. (In Russian).

Legalov, A.A. 2003. [Taxonomy, classification and phylogeny of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna]. – Novosibirsk. CD-R. № 0320301200. 733+350 p. (641 Mb.) (In Russian).

Legalov, A.A. 2006. [Annotated list of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the Russian fauna] – [Proceedings of the Russian Entomological Society]. St-Petersburg 77: 200-210. (In Russian).

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