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Thryogenes ussuriensis Egorov, 1979 (Coleoptera, Curculionidae) New for Japan

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Abstract A curculionid weevil, *Thryogenes ussuriensis* Egorov, 1979 (Brachycerinae, Erirhinini) was recorded from western Aomori Prefecture located in northern Honshu for the first time from Japan.

Presently, the curculionid genus *Thryogenes* Bedel, 1884 (Brachycerinae, Erirhinini, Erirhinina) comprises five Palaearctic species: 1) *T. festucae* (Herbst, 1795) from Europe, Siberia, Central Asia and Far Eastern Russia, 2) *T. fiorii* Zumpt, 1928 from Europe, 3) *T. nereis* (Paykull, 1800) from Europe, Siberia, Mongolia and Far Eastern Russia, 4) *T. scirrhosus* (Gyllenhal, 1835) from Europe, and 5) *T. ussuriensis* Egorov, 1979 from Far Eastern Russia, Mongolia, and northeastern China (Egorov *et al*., 1996; Alonso-Zarazaga *et al*., 2017).

Thryogenes weevils are hygrophilous and known to be associated particularly with Cyperaceae, such as *Scirpus lacustris*, *Carex*, *Eleocharis*, *Bolboschoenus* and *Schoenoplectus*, but also with *Sparganium* spp. (Caldara & O'Brien, 1995; Gosik, 2011; Stejskal & Trnka, 2017). Larval development and pupation take place in stems of their respective host plants, *Carex* (*C. riparia*, *C. papulosa*, and *C. vesicaria*), *Bolboschoenus koshevnikovii*, *Eleocharis palustris*, and *Schoenoplectus* (*S. tabernaemontani*, and *S. lacustris*) (Caldara & O'Brien, 1995; Gosik, 2011).

The known distribution range of this genus strongly suggests its occurrence in Japan, but no *Thryogenes* species have been known from the country to date. In this paper, I record *T. ussuriensis* from northern Honshu, as the first representative of the genus in Japan.

Thryogenes ussuriensis Egorov, 1979

[Japanese name: Kagiashi-ine-zômushi]

(Figs. 1–3)

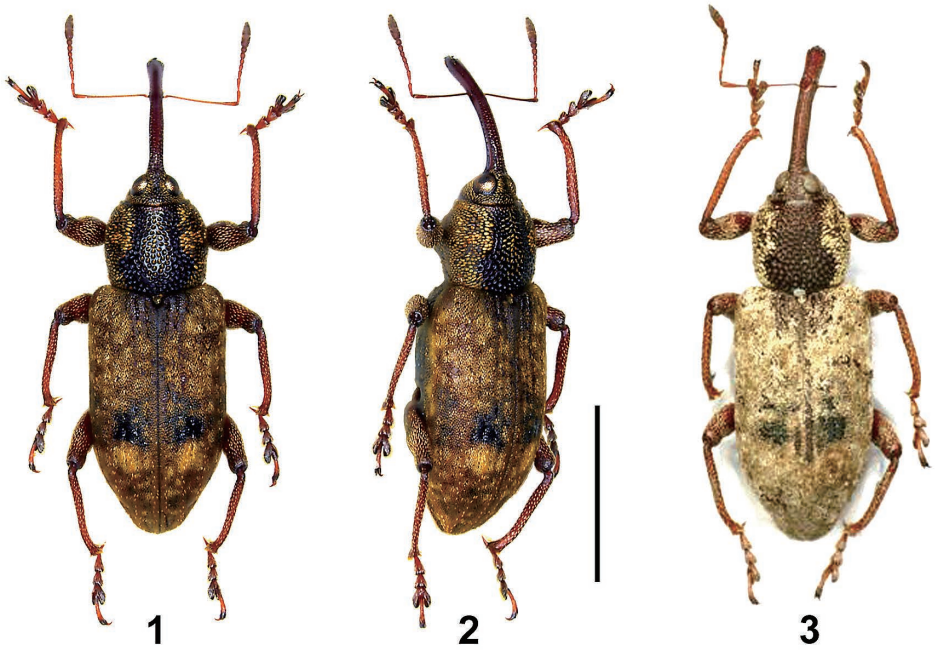
Thryogenes ussuriensis Egorov, 1979: 87. (type locality: "Примо́рский край"); Egorov *et al*., 1996: 435. (in key; Far Eastern Russia, Mongolia & northeastern China).

Thryogenes ussurensis [sic!]: Alonso-Zarazaga *et al*., 2017: 114. (cataloged; "**A**: FE MG SW").

Diagnosis. According to Egorov *et al*. (1996), *Thryogenes ussuriensis* is closely related to *T. festucae*, but differs from the latter by the following points: body slightly larger, 5.5–5.8 mm in length (4.5–4.7 mm in length for *T. festucae*); pronotal disc with a large exposed portion which is expanded laterally in basal part (with a rather narrow exposed portion of equal width in *T. festucae*); pronotum furnished with fine setae and slender scales on both sides (with slightly larger scales in *T. festucae*); each elytron with an exposed portion (entirely covered with scales in *T. festucae*).

Specimens examined. Japan: Honshu. [Aomori Pref.: Tsugaru City] 1 ♂, Kizukuri, Komotsuchi, Miyoshino-no-tameike Pond, 28.VI.1987, T. Satô leg., on a reed leaf (body length excl. rostrum 5.4 mm, width 2.0 mm); 1 ♂, Morita-chô, Ôdate, Ezogadate-tameike Pond, 29.VIII.2016, A. Abe leg. (6.2 mm, 2.3 mm).

Distribution. Japan: Honshu (Aomori Pref.) —— new record; northeastern China, Mongolia, and Far Eastern Russia.



Figs. 1–3. Habitus images of *Thryogenes ussuriensis* from Tsugaru City, Aomori Pref. —— 1 & 2, Male from Ezogadate-tameike, Morita-chô; 3, ditto from Miyoshino-no-tameike, Kizukuri (photo by K. MORIMOTO). —— 1 & 3, Dorsal habitus; 2, dorso-lateral habitus. Scale bar: 3.0 mm.

Fig. 4. Habitat of *Thryogenes ussuriensis* in Morita-chô, Tsugaru City, Aomori Pref. (Ezogadate-tameike).

Biology. In Aomori Prefecture, *Thryogenes ussuriensis* was collected from two adjacent agricultural ponds in the southwestern part of Tsugaru City. At one of the localities, Miyoshino-no-tameike, a male adult was found on a reed leaf growing on the shore of the pond. The other locality, Ezogadate-tameike, is known as a habitat of two rare subaquatic weevils, *Bagous lewisi* O'Brien et Morimoto, 1994 and *Pelenomus canaliculatus* (Fåhræus, 1843) (Ruisu-kagiashi-zômushi and Kurohoshi-kuchibuto-saru-zômushi in Japanese, respectively) (Satô, 2009). Although agricultural development is progressing, Cyperaceae, putative hosts of *T. ussuriensis*, still persist in and around lakes and marshes which are scattered in this area.

Remarks. The Tsugaru Plain including the two localities of *Thryogenes ussuriensis* was originally a vast wetland, but aridification and habitat fragmentation have progressed due to agricultural development for past decades. In order to evaluate the conservation value of this rare weevil, further survey is necessary to elucidate the current distribution of this species in the Tsugaru Plain as well as its adjacent areas.

One of the examined specimens was identified in 2007 by the late Dr. K. Morimoto.

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要　　約

佐藤隆志：日本初記録のカギアシイネゾウムシ（和名新称）（鞘翅目ゾウムシ科）．――― カギアシイネゾウムシ *Thryogenes ussuriensis* Egorov, 1979 はカギアシイネゾウムシ属（和名新称）*Thryogenes* を構成する 5 種の中では比較的大型で，これまで極東ロシアおよびモンゴル，中国北東部から知られていた．今回，青森県つがる市内で採集された標本に基づいて本種を日本初記録として報告した．採集地一帯には溜池や湿原が点在し，同属他種が寄主とするカヤツリグサ科植物が自生している．

References

Alonso-Zarazaga, M.A., H. Barrios, R. Borovec, P. Bouchard, R. Caldara, E. Colonnelli, L. Gültekin, P. Hlaváč, B. Korotyaev, C. H. C. Lyal, A. Machado, M. Meregalli, H. Pierotti, L. Ren, M. Sánchez-Ruiz, A. Sforzi, H. Silfverberg, J. Skuhrovec, M. Trýzna, A. J. Velázquez de Castro. & N. N. Yunakov, 2017. Cooperative Catalogue of Palaearctic Coleoptera Curculionoidea [online]. *Monografías Electrónicas* S. E. A., **8**. 729 pp. Sociedad Entomológica Aragonesa, Zaragoza. Available from: http://sea-entomologia.org/PDF/MeSEA_8_Catalogue_Palaeartic_Curculionoidea.pdf

Caldara, R., & C. W. O'Brien, 1995. Curculionidae: Aquatic weevils of China (Coleoptera). Pp. 389–408. *In* Jäch, M.A., & L. Ji (eds.), *Water Beetles of China*, **1**. 410 pp. Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein, Wien.

Egorov, A. B., 1979. Novyy vid zhuka-dolgonosika roda *Thryogenes* Bedel (Coleoptera, Curculionidae) s yuga Dal'nego Vostoka. *Trudy Russkogo Entomologicheskogo Obshchestva*, *St. Petersburg*, **61**: 87–89. (In Russian.)

Egorov A. B., V. V. Zherikhin & B. A. Korotyaev, 1996. Sem. Curculionidae - Dolgonosiki. Pp. 249–311 & 431–516. *In* Ler, P.A. (ed.), *Opredelitel' Nasekomykh Dal'nego Vostoka Rossii v Shesti Tomakh*. *Tom 3*. *Zhestkokrylye*, *Ili Zhuki*. *Chast' 3*. 555 pp. Dal'nauka, Vladivostok. (In Russian, with English book title: Key to the Insects of Russian Far East.)

GOSIK, R., 2011. Morphology of the immature stages of *Thryogenes festucae* (HERBST, 1795) (Coleoptera: Curculionidae). *Polish Journal of Entomology*, *Gdynia*, **80**: 475–484.

STEJSKAL, R., & F. TRNKA, 2017. Icones Insectorum Europae Centralis (Coleoptera: Brachyceridae, Dryophthoridae, Erirhinidae). *Folia Heyrovskyana*, *Zlín*, (ser. B), **30**. 21 pp. [incl. 10 pls.] (In Czech & English.)

SATÔ, T., 2009. [Contribution to the knowledge of weevils in Aomori Prefecture. 1. New distributional and ecological records, etc.] *Celastrina*, *Hirosaki*, (44): 63–68. (In Japanese.)

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