

A New Record of *Shirahoshizo juglandis* ZHERICHIN (Coleoptera, Curculionidae, Cryptorhynchinae) from Japan, with a Biological Note on Its Host Plant Association

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Shirahoshizo juglandis ZHERICHIN, 1991, which was originally described from Vladivostok, the Russian Far East, has hitherto been known only from the region (ALONSO-ZARAZAGA *et al.*, 2017). This species was collected from *Juglans mandshurica* (Juglandaceae; “Oni-gurumi” in Japanese) in the Russian Far East (ZHERICHIN, 1991, 1996), but no larval feeding plants has been reported for the species to date.

Recently, the first author examined many specimens of *S. juglandis* from various localities in Japan and observed emergence of *S. juglandis* adults from newly dead twigs of *J. mandshurica*. In this short report, we record this species from Japan for the first time, with new biological information on the species.

Specimens examined in this paper are preserved in the National Museum of Nature and Science, Tsukuba (NMNS), the Kyushu University Museum, Fukuoka (KUM), and the private collections of Mr. Yukihiko HIRANO, Odawara (YH) and Mr. Hideo KAWASE, Hakusan (HK). Before going further, we thank Dr. Shûhei NOMURA (NMNS), Dr. Munetoshi MARUYAMA (KUM), Mr. Yukihiko HIRANO (Odawara), and Mr. Hideo KAWASE (Hakusan) for their kind support in examining material and field survey. We also thank Dr. Hiraku YOSHITAKE (Kyushu Okinawa Agricultural Research Center, NARO, Itoman) for his critical reading of the draft.

Shirahoshizo juglandis ZHERICHIN, 1991

[Japanese name: Kurumi-kuchikakushi-zoumushi]

(Figs. 1–3)

Shirahoshizo juglandis ZHERICHIN, 1991: 106 (type locality: Sedanka, Vladivostok); ZHERICHIN, 1996: 294 (in key); STÜBEN & ALONSO-ZARAZAGA, 2013: 232 (in catalog; “A: FE”); ALONSO-ZARAZAGA *et al.*, 2017: 459 (in catalog; “A: FE”).
Shirahoshizo sp. 1: WATANABE *et al.*, 2017: 115 (in catalog).

Gen. et sp. (“an unidentified species whose generic placement is undetermined” in Japanese): MORIMOTO, 1994: 157 (in key).

Specimens examined. Japan. [Hokkaido] 1 ex., Garugawa, Teine-ku, Sapporo-shi, 14.V.1939, Y. NISHIJIMA (NMNS); 1 ex., Sapporo-shi, 14.VII.1940, Y. NISHIJIMA (NMNS); 1 ex., same locality, 7.VIII.1940, Y. NISHIJIMA (NMNS); 1 ex., same locality, 13.VIII.1940, Y. NISHIJIMA (NMNS). [Honshu] Aomori: 1 ex., Sukayu, Aomori-shi, 6.VII.1975, A. ABE (KUM); 1 ex., Yayoi, Hirosaki-shi, 23.V.1970, A. ABE (KUM); 1 ex., Akaishi-machi, Ajigasawa-machi, 13.VI.1971, A. ABE (KUM). Akita: 8 exs., Tamagawa, Tazawako, Senboku-shi, 10.VII.1976, S. MIYAKAWA (KUM); 2 exs., Kenmin-no-mori, Tazawako, Senboku-shi, 6.VII.1969, S. MIYAKAWA (KUM); 1 ex., Obonai, Tazawako, Senboku-shi, 9.VI.1983, S. MIYAKAWA (KUM). Iwate: 1 male and 1 female, Ôtsuki-tôge Pass, Kuji-shi, 10.VI.2007, H. YOSHITAKE, from dead twigs of walnut (KUM). Fukushima: 1 ex., Ohira, Tenei-mura, 24.V.2002, S. MIZUNOYA (KUM); 1 female, Yunokami-onsen Spa, Shimogou-machi, 20.V.1990, T. MIKAGE (KUM); 1 ex., Shindenhara, Minamiaizu-machi, 7.VI.1975, T. MIKAGE (KUM); 1 ex., Yunohana-onsen Spa, Minamiaizu-machi, 20.V.1990, T. MIKAGE (KUM); 1 male, same locality, 6.VI.1998, T. MIKAGE (KUM). Niigata: 1 male and 1 female, Murakami-shi, 23.IV.1962, K. BABA (KUM); 1 male, Kurokawa, Tainai-shi, 29.V.1955, K.



Figs. 1–3. *Shirahoshizo juglandis*, male. — 1, Dorsal habitus; 2, lateral habitus; 3, abdominal sternites.

BABA (KUM); 1 male, same locality, 29.V.1976, K. BABA (KUM); 1 male and 1 female, Okura, Sado-shi, 13.V.1962, TSURUMAKI (KUM); 1 female, same locality, 6.VI.1962, TSURUMAKI (KUM). Tochigi: 3 exs., Tokura, Nikkō-shi, 16.VII.1938, S. MIYAKAWA (KUM). Kanagawa: 2 exs., Shiozawa, Yamakita-machi, 3.V.1995, Y. HIRANO (YH); 1 ex., Takasugi, Yamakita-machi, 28.IV.1991, Y. HIRANO (YH). Nagano: 6 exs., Kurokawa, Iizuna-machi, 6.V.1997, Y. HIRANO (YH); 2 males and 1 female, Karuizawa-machi, 7–14.VII.1959. K. MORIMOTO (KUM); 1 female, Osawa, Chikuhoku-mura, 18.VI.1952, S. UENO (KUM); 1 ex., Tobira-onsen Spa. Matsumoto-shi, 28.VI.1974, H. HAYAKAWA (KUM); 1 female, Onazawa, Ina-shi, 16.VI.1962, K. OSHIMA (KUM); 1 ex., Kosedo, Ina-shi, 9.VI.1984, S. FURIHATA (KUM); 1 female, Kaida, Kiso-machi, 1974, H. HAYAKAWA (KUM); 1 ex., Ota-ki-mura, 31.V.2010, K. TAKAHASHI (KUM). Yamanashi: 1 ex., Daibosatsu, 1968, N. KINO (KUM); 1 ex., same locality, 31.V.1969, Y. HASEGAWA (KUM); 1 ex., Hinoharu, Nagasaka-chō, 28.V.1970, Y. Hasagawa (KUM). Ishikawa: 1 ex., Gongenmori, Uchinada-machi, 23.VI–15.VII.2018, N. TSUJI, emerged from a dead twig of *J. mandshurica* (KUM); 1 ex., same locality, 23.VI–26.VII.2018, N. TSUJI, emerged from a dead twig of *J. mandshurica* (KUM); 1 male, Mt. Iō-zen, Kanazawa-shi, 10.VII.1972, T. MIKAGE (KUM); 1 ex., Shaka-rindō, Hakusan-shi, 17.VI.2012, H. KAWASE (HK). Shizuoka: 1 ex., Keta, Tenryū-ku, Hamamatsu-shi, 8.VII.1951, K. KOJIMA (KUM). Gifu: 1 male, Akigami, Asahi-chō, Takayama-shi, 31.VII.1988, unknown collector (KUM). [Shikoku] Tokushima: 1 ex., Minaminoma, Kamiyama-chō, 20.VII.1952, HIURA (KUM); 1 ex., Mt. Tsurugi-san, 2.VI.1957, S. UENO (KUM). [Kyushu] Ōita: 1 male and 1 female, Mt. Kuro-dake, Kujū-machi, 8.VI.1985, S. URUSHIYAMA (KUM). [Nansei Islands] Yonaguni-jima Is.: 1 ex., Tabaru-gawa, 29.VII.1962, M. SATO and Y. ARITA (KUM).

Distribution. Japan (Hokkaido, Honshu, Shikoku, and Kyushu; Nansei Islands?) and the Russian Far East.

Host plants. This weevil is associated with *Juglans mandshurica*, since two adults were emerged from newly dead twigs of the plant taken in Ishikawa Prefecture, central Honshu, respectively.

Remarks. Previous studies pointed out that *Shirahoshizo juglandis* is quite different from other congeners in the body shape, dorsal markings, and less expanded femora (ZHERICHIN, 1991; MORIMOTO, 1994). Recently, the first author found that the male terminalia of the species are very different from any other Cryptorhynchina weevils known from East Asia (TSUJI, unpubl.). Therefore, the generic placement of *S. juglandis* warrants attention, but its current placement is here retained since the taxonomic position of this species should be revised in a comprehensive revision of the generic classification system of the subtribe Cryptorhynchina.

The specimen collected from Yonaguni-jima Is., southwestern part of the Nansei Islands, is probably mislabeled or artificially imported from the other region because the distribution of *J. mandshurica* in Japan extends to Hokkaido in the north and to Kyushu in the south, but not to the Nansei Islands (YAMAZAKI, 1989).

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