



Four curculionid-beetles (Coleoptera) new to the fauna of the Miyako Islands, the Ryukyus, Japan

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The weevil fauna of the Miyako Islands has not yet been fully elucidated, though Kojima & Fujisawa (2012) and Fujisawa & Kojima (2012) have added a number of weevils that are new for the islands. In our recent surveys conducted in the Miyako Islands, we found the following four weevil species which are new to the fauna of the islands.

Abbreviations. HK: Hiroaki Kojima; HY: Hiraku Yoshitake; NIAES: Institute for Agro-Environmental Sciences, NARO, Tsukuba, Japan; TUA: Tokyo University of Agriculture, Atsugi, Japan.

1. *Pempherulus megaten* Kojima & Morimoto, 2015 (Figs. 1-2)

Pempherulus megaten Kojima & Morimoto, 2015: 263 (type locality: "Nakano, Iriomote-jima Is."; Conoderinae, Mecopini; figured); Alonso-Zarazaga *et al.*, 2017: 167 (Baridinae, Conoderitae, Mecopini; cataloged).

Specimens examined. [Miyako-jima Is.] 7 exs., Aragusuku-kaigan, 27.XII.2017, HK (TUA); 1 ex., Shimajiri, 28.XII.2017, HK, on *Thespesia populnea* (TUA); 1 ex., Maehama Beach, 28.XII.2017, HK (TUA). [Ikema-jima Is.] 2 exs., Ikema-rope, 28.XII.2017, HK (TUA); 7 exs., same data but HY (NIAES); 5 exs., 17.III.2020, HK (TUA).

Distribution. Japan: Ryukyus (Miyako Isls.: Miyako-jima Is. and Ikema-jima Is.-new record; Yaeyama Isls.: Ishigaki-jima Is., Kuroshima Is., Iriomote-jima Is., Hateruma-jima Is. and Yonaguni-jima Is.).

Comments. This species has been recorded from the Yaeyama Islands, the Ryukyus, Japan and is known to associate with *Hibiscus tiliaceus* (Ôhamabô in Japanese; Malvaceae; Kojima & Morimoto, 2015). This is the northernmost record of this species. Adult weevils were also collected on *Thespesia populnea* (Sakishimahamabô in Japanese; Malvaceae) on Miyako-jima Island (putative host record).

2. *Edaphotrypetes parallelipennis* Morimoto, 1995 (Fig. 3)

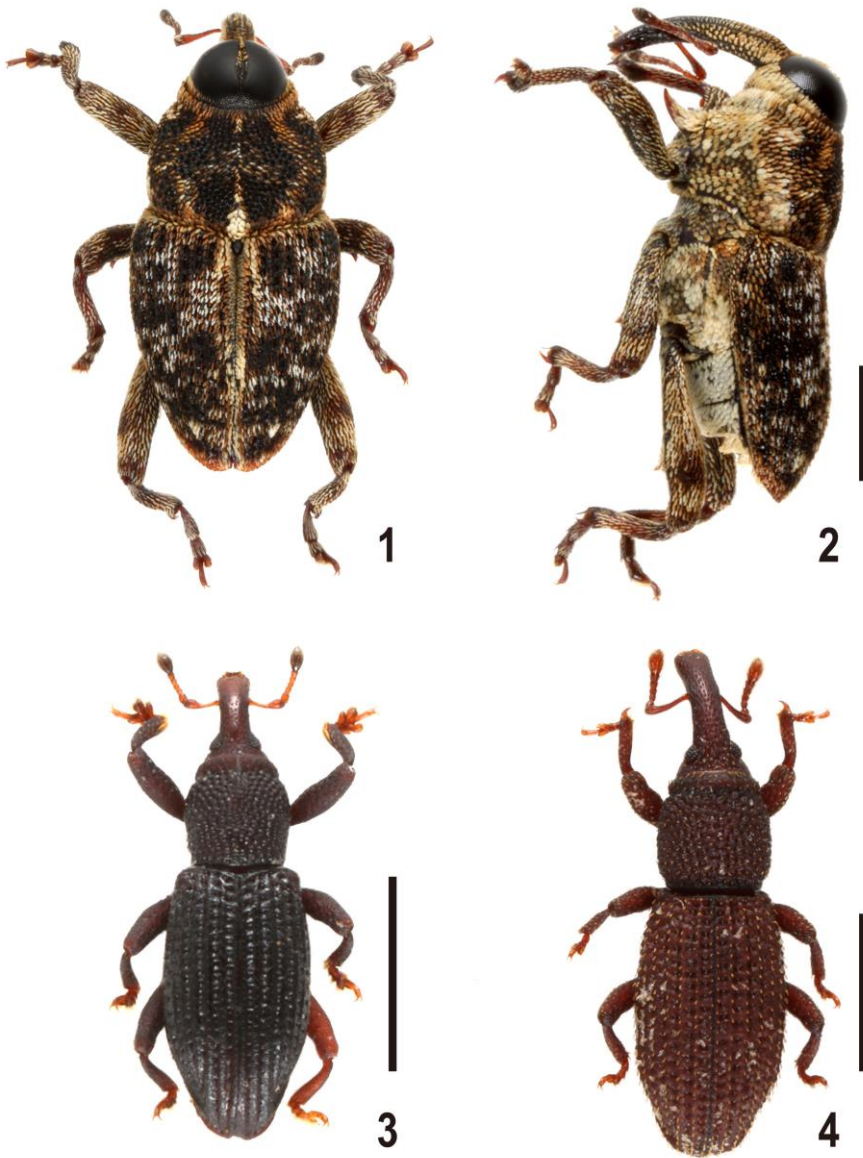
Edaphotrypetes parallelipennis Morimoto, 1995: 470 (type locality: "Mt. Inbidake, Yonaguni Is.", Phenocobatinae; figured); Alonso-Zarazaga, 2013: 493 (Molytinae, Phenicobatini; cataloged); Alonso-Zarazaga *et al.*, 2017: 176 (Cossoninae, Pentarthrini; cataloged).

Specimens examined. [Miyako-jima Is.] 7 exs., Ôno-sanrin, 29.XII.2017, HK (TUA); 5 exs., same data but HY (NIAES); 19 exs., 16.III.2020, HK (TUA).

Distribution. Japan: Kyushu (Cape Sata), Ryukyus (Tokara Isls.: Nakanoshima Is.; Amami-Isls.: Tokunoshima Is.; Miyako Isls.: Miyako-jima Is.-new record; Yaeyama Isls.: Yonaguni-jima Is.).

Comments. The occurrence of this species in the Miyako Islands fills the distributional gap of this species between Kyushu, including the Satsunan Islands (Cape Sata, Tokara-Nakanoshima Is. and Tokunoshima Is.) and the Ryukyus (Yonaguni-jima Is.).

Morimoto (1995: 472) described this species as having "Elytra with rounded humeri, then almost parallel-sided to the middle ..."; however, the elytra are weakly rounded laterally and widest at the middle.



Figs. 1-4. Habitus images of weevils from Miyako-jima Is., the Ryukyus, Japan. 1, *Pempherulus megaten*, male, dorsal; 2, ditto, lateral; 3, *Edaphotrypetes parallelipennis*, dorsal; 4, *Isodryotribus squamosus*, dorsal. Scale: 1.0 mm.

Weevils were collected by beating shrubs covered by the climbing plant, *Flagellaria indica* (Tōtsurumodoki in Japanese; Flagellariaceae). Although *Edaphotrypetes* was originally described as an edaphic weevil (Morimoto, 1995), it appears that this species inhabits leaf litter as well as low shrubs and decaying wood.

3. *Dryotribus mimeticus* Horn, 1873

Dryotribus mimeticus Horn, 1873: 433 (type locality: "Key West, Florida"; Cossoninae, Pentarthrides); Konishi, 1962: 4 (Cossoninae, Cotasterini; figured); Morimoto, 1984: 342, pl. 67, fig. 23; Morimoto, 1985: 19 (in key), 23 (figured); Hlaváč & Maughan, 2013: 222 (Cossoninae, Dryothribini; cataloged); Alonso-Zarazaga *et al.*, 2017: 173 (Cossoninae, Dryothribini; cataloged).

See Konishi (1962) and Hlaváč & Maughan (2013) for other synonymy.

Specimens examined. [Ikema-jima Is.] 2 exs., Ikema-rope, 28.XII.2017, HY, under driftwood washed ashore (NIAES).

Distribution. Japan (Hokkaido, Okushiri Is., Honshu, Tobishima Is., Izu Is., Ogasawara Is., Minamitorishima Is., Shikoku, Kyushu, Tokara Is., Amami Is., Daitô Is., Miyako Is.: Ikema-jima Is.-new record, Yaeyama Is.); Korea, China, Pantropic.

Comments. This species has a wide distribution in the Pacific, Atlantic and Indian oceans (Kamezawa, 2014; Kojima, 2014). Adult weevils were collected under driftwood washed ashore with the next species on Ikema-jima Island, the Miyako Islands.

4. *Isodryotribus squamosus* Konishi, 1962 (Fig. 4)

Isodryotribus squamosus Konishi, 1962: 5 (type locality: "Takara-jima, Tokara Islands"; Cossoninae, Cotasterini; figured); Morimoto, 1985: 19 (in key), 23; Hlaváč & Maughan, 2013: 222 (Cossoninae, Dryothribini; cataloged); Kojima & Fujisawa, 2015: 522 (Tokara Is.: Kodakara-jima Is. & Takara-jima Is.; biology); Kojima & Watanabe, 2015: 528 (Amami Is.: Yoro-jima Is.); Yoshitake *et al.*, 2016: 190 (Tokara Is.: Taira-jima Is.); Alonso-Zarazaga *et al.*, 2017: 173 (Cossoninae, Dryothribini; cataloged); Yoshitake & Tsuji, 2018: 28 (Amami Is.: Uke-jima Is.).

Specimens examined. [Miyako-jima Is.] 3 exs., Maja-kaigan, 29.XII.2017, HK (TUA). [Ikema-jima Is.] 8 exs., Ikema-rope, 28.XII.2017, HY, under driftwood washed ashore (NIAES).

Distribution. Japan: Ryukyus (Tokara Is.: Taira-jima Is., Kodakara-jima Is. and Takara-jima Is., Amami Is.: Uke-jima Is. and Yoro-jima Is.; Miyako Is.: Miyako-jima Is. and Ikema-jima Is.-new record)

Comments. Morimoto (1989) recorded this species on Nakanoshima Island in the Tokara Islands; however, it is considered that this was a misquotation of Takara-jima Island. This species is known from the Tokara Islands and the Amami Islands (Kojima & Fujisawa, 2015; Kojima & Watanabe, 2015; Yoshitake *et al.*, 2016; Yoshitake & Tsuji, 2018). The occurrence of this species on Miyako-jima Island represents the southernmost record. Adult weevils were collected under driftwood washed ashore.

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要 約

小島弘昭・吉武 啓：宮古諸島から初記録のゾウムシ科（甲虫目）4種。——— 著者らの最近の調査で、宮古諸島から初記録となるゾウムシ科甲虫4種を確認したので記録した。1) オキナワツノクモゾウムシ（和名新称）：これまで八重山諸島から知られていたが、宮古諸島からの発見は分布北限記録で、既知の寄主植物に加え、サキシマハマボウからも得られた；2) ナガヒサゴオチバゾウムシ：既知の分布空白地帯であった宮古諸島において、トウツルモドキの絡んだ灌木から得られた；3) ハマベキクイゾウムシ：広域分布する種で、国内では北海道から琉球列島まで、国外では汎熱帯に広く分布するが、宮古諸島から記録がなかった；4) ツヤケンマルバネキクイゾウムシ：トカラ列島と奄美群島から知られていたが、分布南限記録となる宮古諸島で海岸に打ち上げられた流木片から得られた。

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