

## Curculionid Weevils (Coleoptera) New to Gajajima Is., the Tokara Isls., North Ryukyus, Southwestern Japan

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**Abstract** Four species of the family Curculionidae (Coloeoptera) are recorded for the first time from Gajajima Is., the Tokara Isls., North Ryukyus, southwestern Japan: 1) *Macrorrhyncholus crassiusculus* WOLLASTON; 2) *Anthinobaris kiboshi kiboshi* (NAKANE); 3) *Oedophrys sakaguchii* (KÔNO); and 4) *Sympiezomias lewisi albidus* NAKAMURA et MORIMOTO.

Gajajima Is. is a small unpopulated island (area ca 4.1 km<sup>2</sup>, perimeter ca 9.0 km) located in the west-northwest 28 km of Nakanoshima Is. in the northern part of the Tokara Isls., North Ryukyus, southwestern Japan. There have been no residents since 1970 on the island (MATSUMURA, 1995). To date, nothing has been known about the weevil fauna of Gajajima Is., except that the sweet potato weevil, *Cylas formicarius* (FABRICIUS, 1798), has been recorded from the island (SAKAE, 1968).

In the summer of 2010 and 2011, T. HOSOYA (TH), W. TOKI (WT), and M. KATAYAMA (MK) conducted field surveys over twice for beetle fauna of Gajajima Is. (Figs. 1–3) and collected some curculionids, which were later identified into four species by H. YOSHITAKE (HY). In this paper, we record the four species for the first time from the island.

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## New Distribution Records

### Family Curculionidae

#### Subfamily Cossoninae

#### *Macrorhyncolus crassiusculus* WOLLASTON, 1873

(Fig. 4)

*Macrorhyncolus crassiusculus* WOLLASTON, 1873, 34 (type locality: “Hiogo”); MORIMOTO, 1973, pl. 14, fig. 64; 1984, 345, pl. 68, fig. 4 (diagnosis & ecology; distribution: Honshu, Niijima Is., Shikoku, Kyushu, Yakushima Is., Amami-Ôshima Is. & Okinawajima Is.); 1985, 26 (fig. 3E), 28 (distribution & ecology); MORIMOTO & MIYAKAWA, 1985, 30 (Niijima Is.); SASAKI *et al.*, 2002, 279 (cataloged); KOJIMA & FUJISAWA, 2016, 225 (Shikinejima Is.); OMAR *et al.*, 2017, 548 (in key); ALONSO-ZARAZAGA *et al.*, 2017, 178 (cataloged; “A: JA”).

*Specimen examined.* 1 ex., Kyû-shûraku, Gajajima Is., 13.VII.2011, MK.

*Distribution.* Japan: Honshu, the Izu Isls. (Niijima Is. and Shikinejima Is.), Shikoku, Kyushu, and the Ôsumi Isls. (Yakushima Is.), Tokara Isls. (Gajajima Is. – new record), Amami Isls. (Amami-Ôshima Is.) and Okinawa Isls. (Okinawajima Is.).

*Notes.* Adults of this species are commonly found under the bark of dead pine trees (Pinaceae).

#### Subfamily Baridinae

#### *Anthinobaris kiboshi kiboshi* (NAKANE, 1963)

(Fig. 5)

*Baris kiboshi* NAKANE, 1963, 40 (type locality: “Nakanoshima”).

*Anthinobaris kiboshi*: MORIMOTO & YOSHIHARA, 1996, 32 (new combination with the new genus *Anthinobaris*).

*Anthinobaris kiboshi kiboshi*: KOJIMA & FUJISAWA, 2015, 519 (on flowers of *Peucedanum japonicum*); ALONSO-ZARAZAGA *et al.*, 2017, 121 (cataloged; “A: JA (Ryûkyû)”).

See YOSHIHARA (2016: 45) for other synonymy.

*Specimens examined.* 4 exs., near Lighthouse, Gajajima Is., 13.VII.2011, TH & WT.

*Distribution.* Japan: the Tokara Isls. (Kuchinoshima Is. and Nakanoshima Is.; Gajajima Is. – new record) and Amami Isls. (Amami-Ôshima Is. and Okinoerabujima Is.).

*Notes.* Adults of this species were found on flowers of *Peucedanum japonicum* (Apiaceae) on Kuchinoshima Is., the Tokara Isls. (KOJIMA & FUJISAWA, 2015).

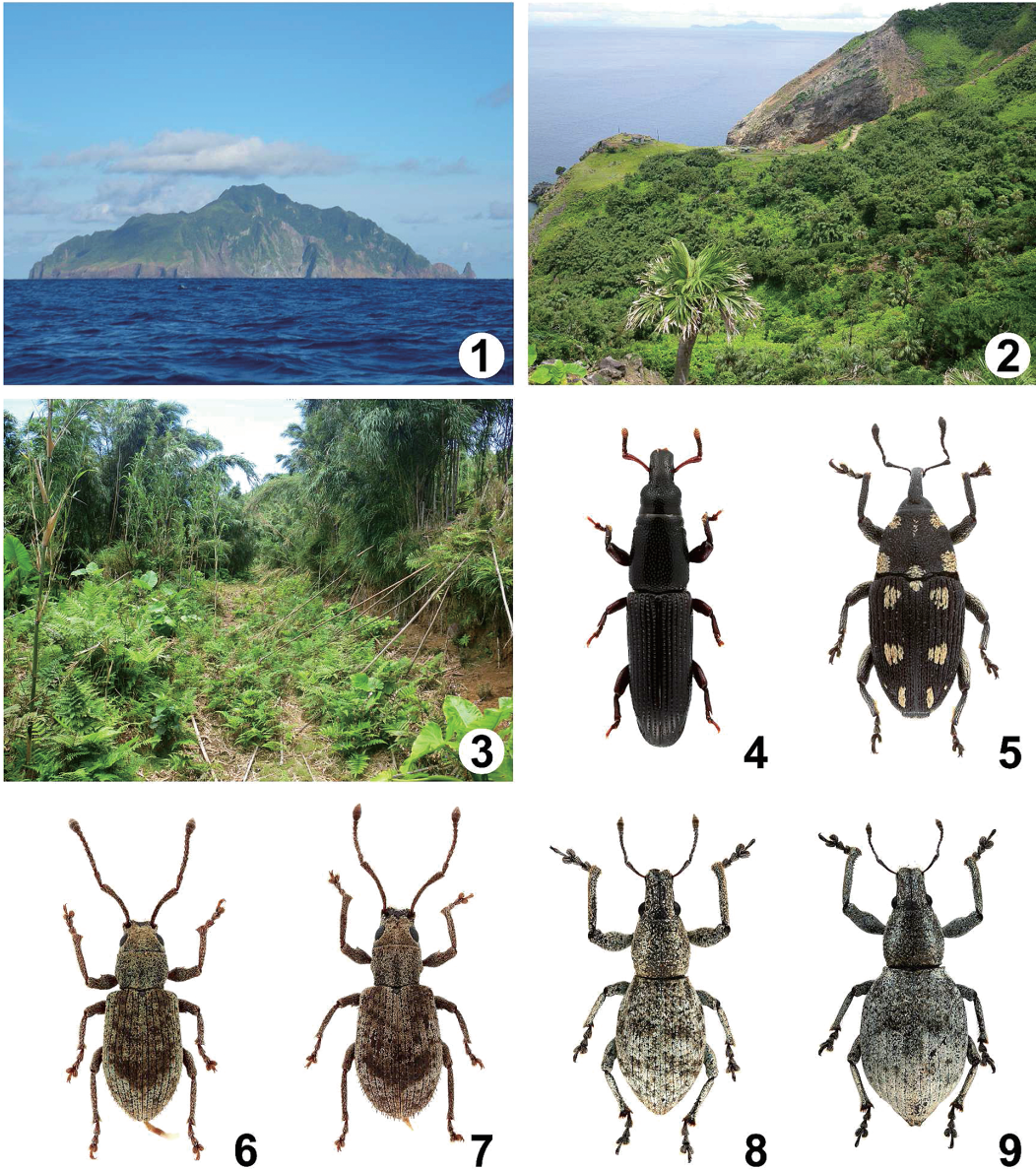
#### Subfamily Entiminae

#### *Oedophrys sakaguchii* (KÔNO, 1930)

(Figs. 6 & 7)

*Mylocerus sakaguchii* KÔNO, 1930, 210 (in key), 212, pl. 2, fig. 13 (type locality: “Okinawa”).

*Oedophrys sakaguchii*: KIM & KIM, 1974, 113 (Korea: “Naejangsan”); HONG *et al.*, 2000, 158 (“Korea (South)”); TAKEUCHI *et al.*, 2005, 150 (Setagaya, Tokyo); MORIMOTO *et al.*, 2006, 223 (redescription); KOJIMA, 2011, 342 (Aogashima Is.); KOJIMA & FUJISAWA, 2011, 10 (Izu-Ôshima Is.); KOJIMA, 2012, 4 (Kumejima Is.); KOJIMA & ZHANG, 2013, 179 (Mikurajima Is.); YUNAKOV, 2013, 273 (cataloged; “A: JA”); HAN *et al.*, 2014, 21 (“Korea (South?)”); YOSHITAKE *et al.*, 2016, 190 (Tairajima Is.); ALONSO-ZARAZAGA *et al.*, 2017, 267 (cataloged; “A: JA SC”).



Figs. 1–3. Gajajima Is. — 1, A view of the northeast side from the fishing boat “Kaito-maru II”; 2, Kyû-shûraku, an abandoned residential area where is covered with a secondary forest; 3, a habitat near Lighthouse.

Figs. 4–9. Dorsal habitus of Curculionidae spp. from Gajajima Is. — 4, *Macrorhyncholus crassiusculus*, male; 5, *Anthinobaris kiboshi kiboshi*, male; 6, *Oedophrys sakaguchii*, male; 7, ditto, female; 8, *Sympiezomias lewisi albidus*, male; 9, ditto, female.

See MORIMOTO *et al.* (2006) for other synonymy.

*Specimens examined.* Gajajima Is.: 2 exs., Kyû-shûraku, 26.VII.2010, TH; 23 exs., near Lighthouse, 13.VII.2011, TH & WT.

*Distribution.* Japan: Kyushu (Cape Sata-misaki), and the Ôsumi Isls. (Yakushima Is., Tanegashi-

ma Is., Kuroshima Is., and Iwôjima Is.), Tokara Isls. (Kuchinoshima Is., Nakanoshima Is., Tairajima Is., Akusekijima Is., and Takarajima Is.; Gajajima Is. – new record), Amami Isls. (Amami-Ôshima Is., Tokunoshima Is., Okinoerabujima Is., and Yorontô Is.) and Okinawa Isls. (Okinawajima Is. and Kumejima Is.); introduced to Honshu (Tokyo) and the Izu Isls. (Izu-Ôshima Is., Mikurajima Is., Hachijôjima Is., and Aogashima Is.); South Korea (?).

*Notes.* Adults of this species feed on *Eurya emarginata* (Ternstroemiaceae), *Morus* spp. (Moraceae), *Cerasus* spp. (Rosaceae), and *Boehmeria* spp. (Urticaceae) (MORIMOTO *et al.*, 2006).

### *Sympiezomias lewisi albidus* NAKAMURA et MORIMOTO, 2015

(Figs. 8 & 9)

*Sympiezomias lewisi albidus* NAKAMURA & MORIMOTO, 2015, 513 (in key), 517 (type locality: “Ambo, Yakushima I.”; “Yakushima I., Nakanoshima I., Kuchinoshima I., Kuroshima I.”), 702 (explanation in Japanese), pls. 75A–L, 78A–E, photo 296; ALONSO-ZARAZAGA *et al.*, 2017, 388 (cataloged; “A: JA”).

*Sympiezomias cribricollis* (nec KÔNO, 1930): YOSHITAKE *et al.*, 2016, 190 (Tairajima Is.).

*Specimens examined.* Gajajima Is.: 4 exs., near Lighthouse, 13.VII.2011, TH & WT.

*Distribution.* Japan: the Ôsumi Isls. (Kuroshima Is. and Yakushima Is.) and Tokara Isls. (Kuchinoshima Is., Nakanoshima Is., and Tairajima Is.; Gajajima Is. – new record).

*Notes.* This subspecies shows a superficial resemblance with *S. cribricollis*, but is readily distinguishable from the latter by the dorsally flat head from vertex to apical third of rostrum, as well as by the longer eyes.

## 要 約

吉武 啓・細谷忠嗣・土岐和多瑠・片山元気：トカラ列島臥蛇島新記録のゾウムシ科甲虫（鞘翅目）。———  
臥蛇島は中之島の28 km 西北西に位置する、面積約4 km<sup>2</sup>、周囲約9 kmの小島である。1970年に全島民が移住し、無人化したことなどから、同島の昆虫相はその大部分が未解明であり、ゾウムシ上科については、これまでアリモドキゾウムシ *Cylas formicarius* (FABRICIUS) (ミツギリゾウムシ科) が記録されているのみであった。本論文では、臥蛇島新記録となる以下のゾウムシ科甲虫4種の記録を報告した：マツオオキクイゾウムシ *Macrorhyncholus crassiusculus* WOLLASTON およびキボシヒメゾウムシ原名亜種 *Anthinobaris kiboshi kiboshi* (NAKANE), サカグチクチブトゾウムシ *Oedophrys sakaguchii* (KÔNO), ワモンヒョウタンゾウムシ屋久島亜種 *Sympiezomias lewisi albidus* NAKAMURA et MORIMOTO.

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