New Host Plant and Southernmost Records of Asymmetric Lizard Beetle Doubledaya bucculenta Lewis (Coleoptera, Erotylidae, Languriinae)

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Doubledaya bucculenta Lewis, adult females have left-directionally asymmetric heads (Toki & Togashi, 2011). They excavate small holes in the internodes of recently dead bamboo (*Pleioblastus* sp., *P. simonii*, *P. chino*, and *Semiarundinaria* sp.) culms (Hayashi, 1974; Toki, 2009) and deposit an egg in the cavities of internodes. The hatched larvae complete their development within the cavity (Hayashi, 1974). Doubledaya bucculenta is endemic to Japan and is distributed in Iwate Prefecture and to the south of Honshu, Shikoku, Kyushu, Kuchinoerabu Island and Tokara-Nakanoshima Island (Toki, 2009). However, the known host plants are not distributed in the distributional southern region of *D. bucculenta* (i.e. Kuchinoerabu and Tokara-Nakanoshima Islands) (Suzuki, 1996; Terada, 1997). Here, we report the new and additional records in the Tokara Islands (Nakanoshima, Gaja, Akuseki, and Takara Islands), Toshimamura, Kagoshima Prefecture, Japan. The larvae, pupae and adults of *D. bucculenta* were discovered in the internodes of recently dead *P. linearis* (Hack.) Nakai in Nakanoshima, Gaja and Takara Islands (Fig. 1).

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Specimens examined. [Nakanoshima Island] $1 \, \mathcal{I}, 30$ –V-1962, M. SATô leg.; $1 \, \mathcal{I}, Mt$. Ontake, 14–VI-1993, collector unknown; $10 \, \text{exs.} (1 \, \mathcal{I}, 1 \, \mathcal{I}, 1 \, \mathcal{I})$ pupa and $1 \, \text{larvae}$, Mt. Kin, $230 \, \text{m}$ alt., $29^{\circ} \, 49' \, 32'' \, \text{N}/129^{\circ} \, 51' \, 54'' \, \text{E}, 12$ –VII–2011, W. Toki leg., in the internode of P. linearis; $9 \, \text{exs.} (1 \, \mathcal{I}, 1 \, \mathcal{I}, 1 \, \mathcal{I})$ pupa, $2 \, \mathcal{I}, 1 \, \mathcal{I}$ pupa and $4 \, \text{larvae}$), same locality, collector and host plant, 14–VII–2011; $18 \, \text{exs.} (1 \, \mathcal{I}, 2 \, \mathcal{I}, 1 \, \mathcal{I})$ pupa, $1 \, \mathcal{I}, 1 \, \mathcal{I}$ pupae and $13 \, \text{larvae}$), same locality, collector and host plant, 17–VII–2011. [Gaja Island] $11 \, \text{exs.} (1 \, \mathcal{I}, 3 \, \mathcal{I}, 3 \, \mathcal{I})$ pupae, $2 \, \mathcal{I}, 3 \, \mathcal{I}$ pupae and $12 \, \text{larvae}$, $12 \, \text{larvae}$,



Fig. 1. Habitat and adult of *Doubledaya bucculenta*. —— A, *Pleioblastus linearis* clump in Gaja Island; B, female adult in the internode of *P. linearis* in Takara Island. Scale: 5 mm.

References

Hayashi, N., 1974. Biology of *Doubledaya bucculenta*. *Nature and Insects*, *Tokyo*, **9**(7): 17. (In Japanese.)

Suzuki, S., 1996. *Illustrations of Japanese Bambusaceae*. Shukai-shorin, Funabashi. 271 pp. (In Japanese.)

Terada, J., 1997. Vegetation of Nakanoshima, Tokara Islands. *Bull. Kagoshima Pref. Mus.*, **16**: 1–48.

Toki, W., 2009. New host plants and additional records of asymmetric lizard beetle *Doubledaya bucculenta* Lewis, 1884 (Coleoptera: Erotylidae: Languriinae) in distributional northernmost region. *Biogeography*, **11**: 109–111.

& K. Togashi, 2011. Exaggerated asymmetric head morphology of female *Doubledaya bucculenta* (Coleoptera: Erotylidae: Languriinae) and ovipositional preference for bamboo internodes. *Zool. Sci.*, **28**: 348–354.

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