

## Additional Records and Preliminary Data on the Biology of *Callipareius (Callipareius) japonicus* (NAKANE, 1963) (Coleoptera, Brentidae)

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*Callipareius (Callipareius) japonicus* (NAKANE, 1963) in the tribe Cyphagogini, subfamily Brentinae is one of the rare brentiid beetles endemic to Japan and has been recorded from Saitama, Shizuoka, Mie, Fukuoka and Ōita Prefectures, and Yakushima, Amami-Ōshima and Tokunoshima Islands, Kagoshima Prefecture (NAKANE, 1963; MORIMOTO, 1976; YOSHITAKE, 2000; HANEDA, 2010; SHINDO, 2012). Thus far, the biology of *C. (C.) japonicus* has been poorly documented. The adult beetles were obtained from an old decayed wood and a newly logged broad-leaved tree attacked by bark beetles in Shizuoka (MORIMOTO, 2008). Haneda (2010) reported that an adult beetle was discovered in the cavity of an old tree of *Fagus crenata* (Fagaceae) in Ōita. An adult beetle was discovered at the external opening of a tunnel excavated into a tree *Stewartia pseudocamellia* (Theaceae) by an undetermined wood-borer in Saitama (SHINDO, 2012).

Here, we report the additional records of *C. (C.) japonicus* from Japan, its usage of various kinds of trees, and its putative association with a curculionid beetle. The adults of *C. (C.) japonicus* were discovered on the surface of a recently dead *Machilus thunbergii* tree (Lauraceae) nearby galleries of an undetermined wood-borer in Miyazaki Prefecture. The first author observed the adults on the three different conditions of *S. pseudocamellia* trees in Tokyo Metropolis. An adult was walking on the trunk of healthy tree on 16th August 2008. Some adults were walking on the trunk and inside cavity of the weakened tree on 9th and 16th August 2008. A number of adults were discovered around and inside tunnels of a wood-borer, *Rhyncolus* sp. (Curculionidae, Cossoninae, Cossonini; adult was collected at the end of the tunnel on 13th October 2008), on the recently fallen tree on 9th and 16th August 2008 (Fig. 1). Some of them were mating. In addition, *C. (C.) japonicus* adults emerged from *Ardisia sieboldii* (Myrsinaceae), *Mac. thunbergii* and *Mallotus japonicus* trees (Euphorbiaceae), and a dead *Morus australis* tree (Moraceae) on Amami-Ōshima Is., Kagoshima Prefecture.

Some members of the Cyphagogini have been known as wood-borers, predators and/or aggressors of platypodid and scolytid beetles (SFORZI & BARTOLOZZI, 2004), and users of previously-owned tunnels of other wood-borers (YOSHITAKE & TSUTSUMIUCHI, 2003). *Callipareius kojimai* MORIMOTO emerged from *Fraxinus longicuspis* (Oleaceae) (YOSHITAKE, 2012). Our findings suggest that *C. (C.) japonicus* uses various kinds of broad-leaved trees and may associate with a *Rhyncolus* species. Further study is required to clarify the life history of *C. (C.) japonicus* including the association with other wood-borers.

The collection data for specimens examined herein are as follows. All specimens of *C. (C.) japonicus* were identified by the authors and preserved in the private collection of W. TOKI (PCWT) and the National Institute for Agro-Environmental Sciences (NIAES).

HONSHU. 19 exs. (PCWT & Specimen Nos., 24-0475060, 24-0475061, NIAES), Mt. Ningyo, Okutama-chō, Tokyo, ca. 1,000 m alt., 9–VIII–2008, W. TOKI leg., on the trunk and inside cavity of



Fig. 1. *Callipareus (Callipareus) japonicus* adults on the trunk of a newly dead *Stewartia pseudocamellia* tree in Tokyo.

the weakened *S. pseudocamellia*, and around and inside tunnels of wood-boring insects (presumably a *Rhyncolus* species) on newly fallen *S. pseudocamellia*; 1 ex. (PCWT), same locality and collector, 16–VIII–2008, on the trunk of healthy *S. pseudocamellia*; 4 exs. (PCWT), same collecting data, on the trunk and inside cavity of the weakened *S. pseudocamellia*; 13 exs. (PCWT & Specimen Nos. 24-0475062, 24-0475063, NIAES), same collecting data, around and inside tunnels of wood-boring insects (presumably a *Rhyncolus* species) on newly fallen *S. pseudocamellia*. SHIKOKU. 1 ex. (Specimen No. 24-0475078, NIAES), Shingu-mura, Ehime, 4–VIII–2003, T. Kurihara leg. KYUSHU. 3 exs. (PCWT), Mt. Osuzu, Tsuno-chô, Miyazaki, 8–VII–2010, W. TOKI leg., on the recently dead *Mac. thunbergii*. RYUKYUS. 2 exs. (Specimen Nos. 24-0475076, 24-0475077, NIAES), Chuou-rindou, Naze-shi, Amami-Ôshima Is., Kagoshima, 26–VI–2003, T. Kurihara leg., emerged from *Mac. thunbergii* on 19–VII–2003. 7 exs. (Specimen Nos. 24-0475064~24-0475070, NIAES), Mt. Yui, Amami-Ôshima Is., Kagoshima, 24–VIII–2004, H. MAKIHARA leg., emerged from the dead *Mo. australis* on 6–VIII–2005; 1 ex. (Specimen No. 24-0475073, NIAES), same collecting data, emerged from *Mal. japonicus* on 28–VIII–2005; 2 exs. (Specimen Nos. 24-0475072, 24-0475074, NIAES), same collecting data, emerged from *A. sieboldii* on 28–VIII–2005; 1 ex. (Specimen No. 24-0475071, NIAES), same collecting data, except collected on 16–X–2004, emerged from *A. sieboldii* on 9–IX–2005.

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