Elytra, Tokyo, 28 (2): 437-442, November 15, 2000

Additional Records of Clytine Species (Coleoptera, Cerambycidae) from the Ogasawara Islands

Tatsuya NIISATO

Bioindicator Co., Ltd., Yarai-chô 126, Shinjuku-ku, Tokyo, 162-0805 Japan

and

Haruki KARUBE

Kanagawa Prefectural Museum of Natural History, 499, Iryuda, Odawara, Kanagawa Pref., 250–0031 Japan

Abstract Clytine cerambycid beetles are newly or additionally recorded from solitary islands off the main islands of the Ogasawaras. *Chlorophorus kusamai* is briefly described based on additional specimens including a female.

In his recent field surveys made in the Ogasawara Islands, the junior author, H. KARUBE, collected a short series of four clytine species from such solitary islands as Muko-jima, Otôto-jima, Ani-jima and Ane-jima. Although the cerambycid fauna of the Ogasawara Islands is well surveyed, very few records have been made from the above islands. In this short report we are going to newly or additionally record the clytine species from these islands.

Total nine species of three genera of the tribe Clytini have hitherto been recorded from the Ogasawara Islands. Most of them excluding *Chlorophorus muscosus* (BATES) are endemic to the islands and very important for analysing the species diversity in northern Micronesia. The clytine species are seldom found in the forest areas of the islands investigated after abrupt change of vegetation took place by human impact. On Muko-jima Island, most forests have been changed into grassland by feeding of introduced goats. All the clytines seem to be endangered now, even though *Chlorophorus kobayashii* KOMIYA was abundant at least 15 years ago.

The abbreviations used in the description were already explained in recent papers by the first author.

We wish to express our hearty thanks to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his constant guidance and reading through the original manuscript of this paper. Thanks are also due to Dr. Masatoshi TAKAKUWA of the Kanagawa Prefectural Museum of Natural History, Dr. Kouichi MATSUMOTO of Tokyo University of Agriculture, Atsugi, Messrs. Toshikazu SAKURAI, Mamoru KIKUCHI and Norikazu TANAKA of Ogasawara-mura for their kind help in the field works.

Xylotrechus ogasawarensis MATSUSHITA, 1933

[Japanese name: Ogasawara-ikarimon-tora-kamikiri]

(Fig. 1)

Xylotrechus ogasawarensis MATSUSHITA, 1933, Trans. Sapporo nat. Hist. Soc., **12**, p. 43; type locality: Bonins.

Xylotrechus (Xylotrechus) ogasawarensis: Keihin Konchû Dôkôkai (KUSAMA), 1959, New Insect Collect., p. 406.

Specimens examined. 13, 19, Otôto-jima Is., Chichi-jima group of Ogasawara Isls., Ogasawara-mura, Tokyo, Japan, 29–VI–1998, H. KARUBE leg.

Distribution. Ogasawara Islands: Otôto-jima Is. (new record), Ani-jima Is., Chichi-jima Is. and Haha-jima Is.

Chlorophorus kobayashii KOMIYA, 1976

[Japanese name: Ogasawara-kiiro-tora-kamikiri]

(Figs. 2–3, 9)

Chlorophorus kobayashii KOMIYA, 1976, Elytra, Tokyo, **4**, p. 31, figs 1–2, pl. 5, figs. 2, 2 a, b; type locality: Nagahama – Kitamura, Is. Haha-jima, Bonin Isls.

Chlorophorus boninensis: GRESSITT, 1956, Ins. Micronesia, 17(2), p. 106 (nec KANO, 1930).

Chlorophorus yayeyamensis: Колма *et al.*, 1965, Res. Rept. Kochi Univ., **14** (Nat. Sci.), **2**(9), p. 85 (nec Kano, 1933).

Chlorophorus boninensis f. yaeyamaformis KUSAMA, 1973, Rept. Fac. Sci. Shizuoka Univ., 8, p.125; type locality: Chichi-jima, Yoakeyama.

Specimens examined. 3 ざ ざ, 5 ♀ ♀, Otôto-jima Is., Chichi-jima group, 20-VI-2000, H. KARUBE leg.

Distribution. Ogasawara Islands: Otôto-jima Is. (new record), Chichi-jima Is., Higashi-jima Is. and Haha-jima Is.

Notes. The specimens from Otôto-jima Island are almost identical with the Chichi-jima ones. In eight specimens examined in total, the black maculation on the pronotum are clearly separated into a median spot and a pair of lateral ones (the median spot is divided again into two small spots in two specimens), and the elytral black bands are rather reduced and narrowed as in the Chichi-jima specimens.

438

Figs. 1–8. Four species of the tribe Clytini from solitary islands of the Ogasawara Islands. — 1, Xylotrechus ogasawarensis MATSUSHITA, male from Otôto-jima Is.; 2, Chlorophorus kobayashii KOMIYA, male from Otôto-jima Is.; 3, same species, female from Otôto-jima Is.; 4, C. kusamai M. SATô, male from Muko-jima Is.; 5, same species, female from Muko-jima Is.; 6, C. boninensis KANO, male from Ane-jima Is.; 7, same species, male from Ani-jima Is.; 8, same species, female from Muko-jima Is.



Tatsuya NIISATO and Haruki KARUBE

Chlorophorus kusamai M. SATÔ, 1999

[Japanese name: Mukojima-tora-kamikiri]

(Figs. 4–5, 10)

Chlorophorus kusamai M. Satô, 1999, Elytra, Tokyo, 27, p. 47, figs. 1–3; type locality: Muko-jima, Ogasawara Islands.

Additional description. Though this species was carefully described by the original author, only a single male specimen was available at that time. Some additional description including female characters is given below:

Pubescence light grayish green; pronotum povided with a pair of median small black spots just behind the middle and a pair of lateral ones at the middle; in a female speimen, the median spots are small and distinctly separated from each other; elytra with a small black spot at each humerus, which is isolated $(2 \delta \delta)$ or connected with the posterior black one at base $(1 \, \text{Q})$, an arcuate black maculation near basal third, and rather narrow incomplete transverse black bands at about middle and apical fourth, which form oblong spots according to individuals.

Male. Median lobe with apical lobe fairly short, moderately arcuate at sides near basal third, and arcuately narrowed to rather widely rounded apex. Paramere with each lobe spatulate, remarkably elongate and strongly broadened to apical 2/5, narrowly separated from each other though distinctly approximate at apical 2/5. Standard ratios of body parts as follows: HW/PA 1.08–1.14, HW/PW 0.77–0.85, PL/PA 1.48–1.62, PB/PA 1.12–1.23, PL/PW 1.06–1.14, PW/EW 0.81–0.82, EL/EW 2.35–2.40. Body length 10.1–10.8 mm.



Figs. 9–10. Male genital organ of *Chlorophorus kobayashii* KOMIYA (9) and *Chlorophorus kusamai* M. SATÔ (10); a, apical part of median lobe in dorsal view; b, paramere in dorsal view.

440

Female. Body broader than in male. Head a little smaller than in male, distinctly narrower than pronotum, with thinner antennae barely reaching the middle of elytra. Pronotum as long as wide, slightly narrower than elytra, widest at middle, strongly narrowed apicad. Elytra broad, well convex, rather weakly narrowed apicad. Last sternite trapeziform, arcuate at apical margin. Standard ratios of body parts as follows: HW/PA 1.13, HWPW 0.64, PL/PA 1.75, PB/PA 1.38, PL/PW 1.00, PW/EW 0.88, EL/EW 2.44. Body length 12.8 mm.

Specimens examined. 2 さ ざ, 1 ♀, Muko-jima Is., Muko-jima group, 28–VI–2000, H. KARUBE & K. MATSUMOTO leg.

Distribution. Ogasawara Islands: Muko-jima Is.

Notes. Chlorophorus kusamai is closest to *C. kobayashii* in the pattern of pubescent maculation on the dorsum and basic structure of the male genital organ. The two species are allopatric in the Ogasawara Islands, and form a small complex in the group of *C. yaeyamensis*.

Chlorophorus boninensis KANO, 1933

[Japanese name: Ogasawara-tora-kamikiri]

Chlorophorus boninensis KANO, 1933, Kontyû, Tokyo, 7, p. 135, fig.; type locality: Is. Chichi-jima, Bonin Isls.

Xylotrechus boninensis KANO, 1930, Bull. biogeogr. Soc. Japan, **1**, p. 242, pl. 15, fig. 3; type locality: Bonin Isls.

Chlorophorus quinquefasciatus (CASTELNAU et GORY) subsp. boninensis: MITONO, [1941], Cat. Coleopt. Japon., (8), p.120; type locality: Bonin Islands (Titisima).

Specimens examined. 299, Muko-jima Is., Muko-jima group, 28–VI–2000, H. KARUBE leg.; 1 &, Uguisu-hama Beach, Ani-jima Is., Chichi-jima group, 27–VI–1998, M. TAKAKUWA leg.; 1 &, Ane-jima Is., Haha-jima group, 19–VI–1999, H. KARUBE leg.

Distribution. Ogasawara Islands: Muko-jima Is. (new record), Ani-jima Is. (new record), Chichi-jima Is., Haha-jima Is. and Ane-jima Is. (new record).

Notes. Geographical variation in new localities, Ani-jima Is., Ane-jima Is. and Muko-jima Is., is not apparent, since we were able to examine only one or two specimens from respective islands. Externally, the specimens from new localities show the following characteristics.

Muko-jima Is. $(2 \Im \Im)$: The colour of dorsal pubescence is ochraceous yellow, almost as in *C. kobayashii*. The dorsal black maculation is fairly reduced as in sympatric *C. kusamai*. The black maculation on the pronotum forms three isolated spots (the median spot in one female is almost divided into two small ones). Of the black maculation of each elytron, the small humeral spot is narrowly connected with the J-shaped maculation near basal third, and the transverse bands at about middle and apical third are narrow, the median one not reaching the external margin in one female specimen.

Ani-jima Is. (13): The colour of dorsal pubescence is slightly reddish ochraceous

⁽Figs. 6-8)

yellow, fairly yellowish as compared with that of Chichi-jima specimens. The black maculation on the pronotum is narrowly separated into three spots, and the black one near basal third of the elytron forms a J-shape (widely open externally).

Ane-jima Is. (1δ) : The colour of dorsal pubescence is reddish ochraceous yellow, almost intermediate in coloration between Chichi-jima and Ani-jima specimens. The black maculation on the pronotum is rather widely separated into three spots, and the black one near basal third of the elytra forms semi-quadrate ring-shape as in Haha-jima and Chchi-jima specimens.

要 約

新里達也・苅部治紀: 小笠原諸島の小島嶼におけるトラカミキリの記録. — 小笠原諸島 のカミキリムシ科甲虫類の記録は, 父島および母島に集中し, そのほかの小島嶼の分布記録が ほとんど知られていない. 今回, これら小島嶼のうち弟島, 兄島, 姉島および聟島において, 昆虫類調査を行った際に得られた4種のトラカミキリ類を記録した. 各島嶼における新記録お よび追加知見は以下のとおりである.

1) オガサワライカリモントラカミキリ:弟島新記録.

2) オガサワラキイロトラカミキリ:弟島新記録.前胸背板の中央黒紋は2つに分離する個体 があるが,基本的には父島の個体群と変わらない.

3) ムコジマトラカミキリ:原記載以来の追加記録.雌は初記録となる.

4) オガサワラトラカミキリ:兄島,姉島および聟島新記録.検した個体数は1~2個体に過ぎないが,既産地の父島および母島の個体群に比べると,背面被毛の色彩や黒紋の形状に島嶼ごとの地理的変異が認められる.とくに聟島の個体は,同所的にいるムコジマトラカミキリに似て,黒紋が縮小傾向にある.

なお,今回の調査において採集されたトラカミキリの個体数は,一部の例外を除けばきわめ てわずかであった.これは,人為的遷移による森林植生の変化や,野生化したヤギの食害によ る森林の草原化が主要な原因だと考えられ,食材性カミキリムシの多くの種が絶滅の危機に瀕 していることを推測させる.

References

KANO, T., 1933. New and unrecorded longicorn-beetles from Japan and its adjacent territories, II. Kontyû, Tokyo, 7: 130-140.

KUSAMA, K., *et al.*, 1984. The Longicorn-Beetles of Japan in Color. Jpn. Soc. Coleopterol. (ed.). 565 pp., 96 pls. Kodansha, Tokyo. (In Japanese with English descriptions of new taxa.)

, H. NARA & Y. KUSUI, 1973. Notes on longicorn-beetles in the Bonin Islands (Coleoptera, Cerambycidae). *Rept. Fac. Sci. Shizuoka Univ.*, 8: 117–135.

- KOMIYA, J., 1976. Description of a new species allied to *Chlorophorus boninensis* KANO from the Bonin Islands (Cerambycidae). *Elytra*, *Tokyo*, **4**: 31–34.
- NIISATO, T., 1992. Subfamily Cerambycinae. In OHBAYASHI, N., M. SATÓ & K. KOJIMA (eds.), Illustr. Guide Identific. Longic. Beetles Japan, pp. 117–146, 467–534. (In Japanese.)
- SATÔ, M., 1999. A new Chlorophorus (Coleoptera, Cerambycidae) from the Ogasawara Islands, with notes on its derivation. Elytra, Tokyo, 27: 47-50.

442