# A Possible Hybrid Individual between *Pterolophia zonata* (BATES) and *P. caudata* (BATES) (Coleoptera, Cerambycidae) from Fujisawa, Kanagawa, Japan

# Ryûtarô IWATA

Department of Forest Science and Resources, College of Bioresource Sciences, Nihon University, Fujisawa, 252–8510 Japan

**Abstract** A possible hybrid individual between *Pterolophia zonata* (BATES) and *Pterolophia caudata* (BATES) (Coleoptera, Cerambycidae) was collected at Fujisawa, Kanagawa, Japan. Its morphological features are attributable to those of the two species, but the whole morphology is biased to the former, suggesting a possibility of successive fertility of the F, individual.

I had a chance to examine a puzzling specimen of *Pterolophia* (Cerambycidae, Lamiinae), which apparently resembles both *P. zonata* (BATES) and *P. caudata* (BATES):

1 9, Nihon University Shonan Campus, Fujisawa, Kanagawa, Japan, 17-V-1991,

a field-practicing student leg. (Fig. 1).

It was collected during students' practice of entomology at a secondary forest in the university campus, probably by beating dead branches of a deciduous broad-leaved tree. In addition, at the same locality, I myself captured a typical individual of *P. zonata* (same date as above) ( $\mathfrak{P}$ , Fig. 2), and a typical individual of *P. caudata* ( $\mathfrak{P}$ ), indicating both species' co-existence there.

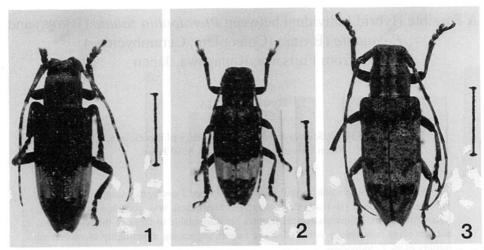
Since hybridization between these allied species seemed likely, the specimen was

thoroughly examined to show the following characters:

Antennae with segments 3 and 4 subequal in length, with distinct blotches or regions of white hairs on almost all segments; pronotum broadest at middle, with median part of posterior edge weakly protruded over scutellum; elytra deeply punctured, with pale band little furnished with punctures, with outermost (3rd) carina almost reduced, with apex not acute (characteristics of *P. zonata*); and, head with gena less than 1.5 times as long as inferior eye-lobe; pronotum broadest at middle, furnished only with golden hairs, with very obscure medio-lateral protuberances (characteristics of *P. caudata*).

Outline of the above-mentioned morphological features, as a whole, suggests that it is a hybrid individual between the two species, with the characteristics of the former somewhat dominant. This might further suggest that it is not a direct  $F_1$  of the two species, but an  $F_2$  or its descendant, which leads to suggest the  $F_1$  is still fertile to some degree.

Interspecific matings have been known among several coleopterous families, such



Figs. 1–3. *Pterolophia* spp. from Fujisawa, Kanagawa Pref. (scale: 5 mm); 1, possible hybrid,  $\mathfrak{P}$ ; 2, *P. zonata* (BATES),  $\mathfrak{P}$ , typical form; 3, *P. caudata* (BATES),  $\mathfrak{P}$ , typical form.

as Carabidae (Sota & Kubota, 1995; Kubota, 1996; etc.), and examples in the Cerambycidae have also been observed and reported several times (Gardiner, 1954; Makihara, 1987; etc.), among which are those of the tribe Phrissomini (comprising *Parechthistatus* and *Mesechthistatus* for the Japanese fauna). In this group, possible intergeneric (!) hybrids have been reported (Takakuwa, 1976; Hirai, 1987; Hirai & Kinoshita, 1992; etc.), and, furthermore, experimental hybridizations have been successfully carried out by Kawaji (1988). In the case of the genus *Ropica* from the Yaeyama Islands, Japan, Kusama and Takakuwa (1984) tried to cope with difficult classification of the species by introducing the idea of hybridization, although Makihara (1985) re-classified them not by using this idea.

The present example is a possible new case of hybridization in the family Cerambycidae. Such examples can be rarely, but not never, obtained, to which attention should be paid.

### 要 約

岩田隆太郎:神奈川県藤沢市にて得られたアトジロサビカミキリ・トガリシロオビサビカミキリの種間雑種と考えられる個体について。 — アトジロサビカミキリ・トガリシロオビサビカミキリの種間雑種と考えられる個体が、神奈川県藤沢市で得られた。その形態は両種の各形態の組合せであるが、全体としてアトジロサビカミキリの方に偏りを見せ、 $F_1$ 個体の稔性の可能性をも示唆している。

#### References

GARDINER, L. M., 1954. Differential growth as evidence of the relationship of Monochamus notatus

- (Drury) and M. scutellatus (SAY) (Coleoptera: Cerambycidae). Can. Entomol., 86: 465-470.
- HIRAI, I., 1987. A hybrid individual between *Parechthistatus gibber* and *Mesechthistatus taniguchii*. *Gekkann-Mushi, Tokyo*, (202): 33. (In Japanese.)
- & T. Kinoshita, 1992. Hybrid individuals between *Mesechthistatus fujisanus* and *Parechthistatus grossus*. *Gekkan-Mushi*, *Tokyo*, (260): 10–12. (In Japanese.)
- KAWAJI, K., 1988. Hybridization of Phrissomini species through rearing. *Gekkan-Mushi, Tokyo*, (203): 33–35. (In Japanese.)
- KUBOTA, K., 1996. Movements of three Carabus (Ohomopterus) species and a hybrid population (Coleoptera, Carabidae). Jpn. J. Ent., 64: 861–869.
- Kusama, K., & M. Takakuwa, 1984. Genus Ropica Pascoe. In Jpn. Soc. Coleopterol. (ed.), The Longicorn-Beetles of Japan in Color, 389–392, pl. 57. Kôdansha, Tokyo. (In Japanese with English title.)
- MAKIHARA, H., 1985. Genus *Ropica* from Japan. Studies on Cerambycidae (Coleoptera) of Japan (4). Coleopterists' News, Tokyo, (67/68): 1–6. (In Japanese with English title.)
- SOTA, T., & K. KUBOTA, 1995. Interspecific mating in carabid beetles. *Konchû to Shizen (Nature and Insects)*, *Tokyo*, **30** (2): 13–19. (In Japanese with English title.)
- TAKAKUWA, M., 1976. Issues on *Parechthistatus* and *Mesechthistatus* from Japan. (3). *Gekkan-Mushi, Tokyo*, (62): 17–22. (In Japanese.)

Elytra, Tokyo, 26 (1): 215-216, May 15, 1998

# Two New Records of Cerambycid Beetles (Coleopterta) from Yaku-shima Island, Southwest Japan

# Keiji OKADA

Bioindicator Co., Ltd., Takada 3-16-4, Toshima-ku, Tokyo, 171-0033 Japan

In my recent collecting trip to Yaku-shima Island, Southwest Japan, I was able to find two unrecorded cerambycid beetles, *Pseudiphra apicalis* and *Sciades* (*Miaenia*) *nakanei*. They were collected by beating at the blighted branches on Seibu-rindô of the island. In this short report, I would like to record them as the first records of the species from Yaku-shima Island.

I wish to express my sincere thanks to Mr. Tatsuya NIISATO for his help in preparing the manuscript, and also to Mr. Hiroyuki Yoshitomi for his help in field works.

#### 1. Pseudiphra apicalis (SCHWARZER)

Specimen examined. 1 ♀, Seibu-rindô, Yaku-shima Is., Kagoshima Pref., Japan, 18-VII-1997, K. OKADA leg.

Distribution. Japan: Izu Isls. (Miyake-jima Is., Mikura-jima Is.); Ôsumi Islands: Yaku-shima Is. (new record); Okinawa Isls.: Okinawa-hontô Is.; Taiwan; Philippines: Luson Is., Mindanao Is.