

A New Cantharid Beetle of the Genus *Themus*  
(Coleoptera, Cantharidae) from Ishigaki  
Island, Southwest Japan

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**Abstract** A new cantharid beetle belonging to the subgenus *Haplothemus* of the genus *Themus* is described and illustrated from Ishigaki Island of the Ryukyus, Southwest Japan. It is related to a Taiwanese species.

Up to this time, two species of the genus *Themus* MOTSCHULSKY, 1857, have been known from Okinawa Island of the Ryukyus, Japan (AKIYAMA, 1977; NAKANE, 1988; SATÔ & ISHIDA, 1982), and eleven species have been known from Taiwan (WITTMER, 1983). However, the genus has not been recorded from the Sakishima Group of the Ryukyu Islands, which lies between the two areas.

Recently, I had an opportunity to examine a series of specimens of a strange *Themus* species from Ishigaki Island of the Sakishima Group. It belongs to the subgenus *Haplothemus* WITTMER, 1973, hitherto unknown from the Ryukyus, because of the absence of longitudinal grooves on antennal segments. Its first specimen was collected in 1990 on the flower of *Castanopsis cuspidata* var. *sieboldii*. Then, I was able to obtain nine additional specimens in 1991, all of them having been caught at light in the central area of Ishigaki Island with primeval forest.

After a careful examination, it became clear that this species did not agree with any of the known members of the subgenus *Haplothemus*. It must be new to science, and will be described in this paper.

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*Themus (Haplothemus) ishigakiensis* OKUSHIMA, sp. nov.

[Japanese name: Ishigaki-ao-joukai]

(Figs. 1–5)

*Male.* Head, pronotal marking, scutellum, 1st and 2nd segments of antennae and legs black; 3rd to 11th segments of antennae, maxillary and labial palpi, eyes, and meso- and metasterna dark brown; prothorax yellow; elytra blue with dull metallic luster; abdominal sternites orange. Body rather closely covered with yellow pubescence; apical margin of clypeus fringed with brown bristles; 1st and 2nd segments of antennae and legs closely covered with dark brown pubescence; 3rd to 11th segments of antennae covered with appressed micro-pubescence sparsely intermingled with brown pubescence.

Head slightly shorter than width; disc almost flattened and weakly depressed in lateral areas before eyes; apical margin of clypeus arcuate with its center faintly indented; eyes globular and strongly projected; tips of maxillary palpi somewhat rounded; antennae attaining to apical third of elytra, 1st segment clavate, 2nd to 11th subcylindrical, relative lengths of antennal segments as follows: 19 : 15 : 10 : 19 : 19 : 20 : 19 : 19 : 16.5 : 15.5 : 17.

Pronotum subquadrate, 1.10 times (in the holotype; range 1.08–1.15) as wide as head, 0.78 (0.76–0.81) times as long as wide; anterior and posterior margins feebly sinuate; lateral margins weakly arcuate; anterior angles obtuse; posterior angles rounded; disc swollen, especially so in the posterior area; antero-lateral areas hollowed; medio-longitudinal furrow distinct in posterior half and indistinct in anterior half; a furrow along the posterior margin distinct; dorsal black marking extending from apex to base. Scutellum triangular with rounded apex, and closely punctate. Apex of prosternal process truncated. Mesosternum somewhat convex along the median line. Relative lengths of hind tarsal segments as follows: 70 : 47 : 36 : 30 : 35.

Elytra conjointly 1.22 (1.18–1.24) times as wide as pronotum, 3.21 (3.13–3.30) times as long as wide, the sides slightly convergent posteriad with dully pointed apices; suture and lateral sides well defined; disc distinctly, closely and rugosely punctate, provided with two vague costae on each elytron.

Male genitalia stout; ventral processes of lateral lobes very wide and sturdy; dorsal plate roundly projected on each side and deeply emarginate at the center (Figs. 2–4).

Length of body: 18.5 mm (in the holotype; range 18.2–18.7); length of right hind tibia: 6.15 (6.10–6.40) mm.

*Female.* Body somewhat longer and wider than in the male. Antennae a little shorter than in the male. Pronotum 1.14–1.25 times as wide as head, 0.71–0.77 times as long as wide. Elytra conjointly 1.19–1.26 times as wide as pronotum, 3.10–2.24 times as long as wide. Eighth abdominal sternite with a deep cleft at the center and a shallow notch on each side of terminal margin; disc somewhat swollen before the shallow notch on each side of terminal margin (Fig. 5).

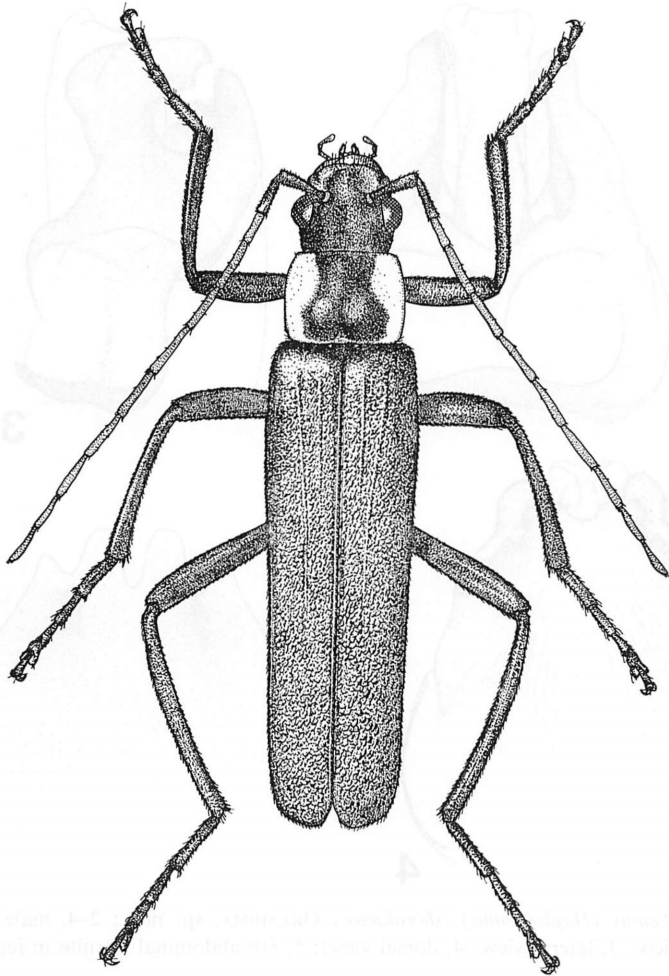
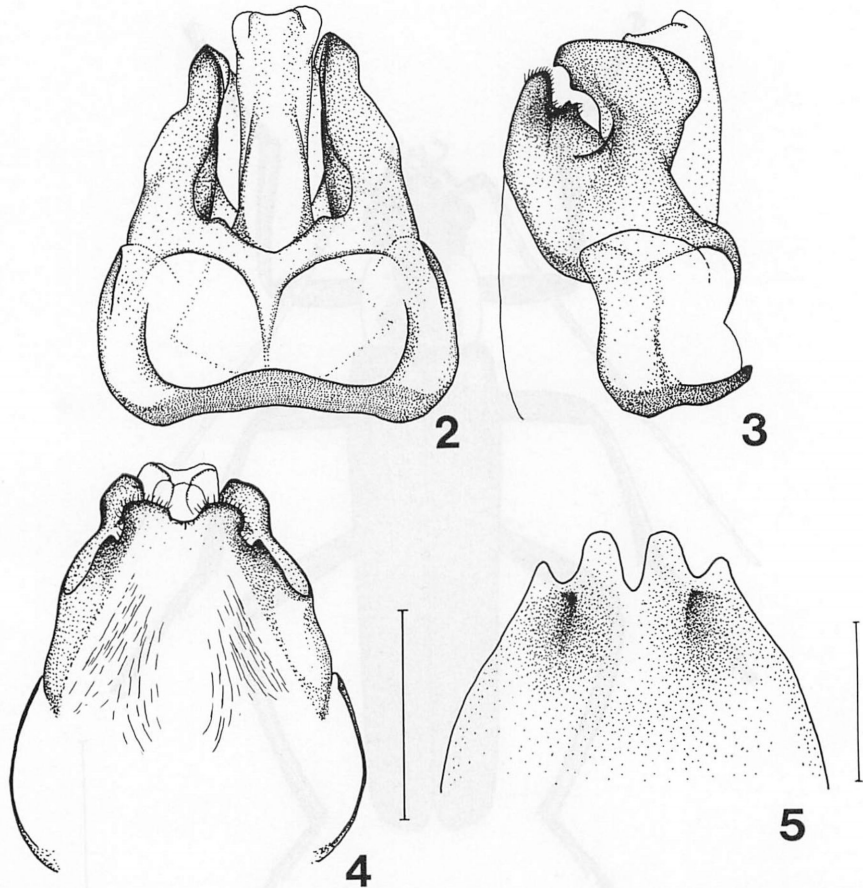


Fig. 1. *Themus (Haplothemus) ishigakiensis* OKUSHIMA, sp. nov., ♂, from Ishigaki Is. of the Ryukyus. (Scale: 5.0 mm.)

Length of body: 19.6–21.0 mm; length of right hind tibia: 5.70–6.20 mm.

*Type series.* Holotype: ♂, Mt. Omoto-dake, Ishigaki Is., Ryukyus, 20-III-1990, Y. OKUSHIMA leg. Allotype: ♀, Yoshihara, Ishigaki Is., Ryukyus, 5-III-1991, T. FUKAISHI leg. Paratypes: 1 ♂, Urasoko, Ishigaki Is., Ryukyus, 17-III-1991, M. OWADA leg.; 1 ♂, 1 ♀, same data as for the holotype, but 20-III-1991; 1 ♀, same locality as for the holotype, 21-III-1991, T. HANATANI leg.; 1 ♀, same data as for the allotype, but 24-III-1991; 2 ♂♂, same data as for the holotype, but 25-III-1991; 1 ♂, same locality as for the holotype, 25-III-1991, T. HANATANI leg.

The holotype and allotype will be preserved in the collection of the Laboratory of Entomology, Tokyo University of Agriculture. The paratypes are distributed to the



Figs. 2-5. *Themus (Haplothemus) ishigakiensis* OKUSHIMA, sp. nov.; 2-4, male genitalia (2, ventral view; 3, lateral view; 4, dorsal view); 5, 8th abdominal sternite in female. (Scale: 1.0 mm.)

collections of the National Science Museum (Nat. Hist.), Tokyo, Biological Laboratory, Nagoya Women's University, and mine.

*Distribution.* Ishigaki Is. (the Ryukyus, Southwest Japan).

*Remarks.* This new species is closely related to *Themus (Haplothemus) explanaticollis* (PIC, 1917) from Taiwan, but can easily be distinguished from the latter by somewhat smaller body, yellowish coloration of pronotum, complex dorsal plate of male genitalia, and the characteristic shape of terminal margin of the 8th abdominal sternite in the female.

## 要 約

奥島雄一：石垣島産キンイロジョウカイ属の 1 新種。——石垣島で採集されたジョウカイボン科の新種を，インガキアオジョウカイ *Themus (Haplothemus) ishigakiensis* と命名して記載した。本種は，台湾から記載された *T. (H.) explanaticollis* (PIC) に近縁であるが，いくぶん小型で，前胸背板の側縁が黄色く，雄交尾器の背板は複雑な形態を示し，雌の第 8 腹板の形態が異なることによって区別できる。

## References

- AKIYAMA, H., 1977. A record of *Themus kazuoi* from Is. Okinawa-hontô. *Coleopt. News, Tokyo*, (39): 8. (In Japanese.)
- MOTSCHULSKY, V. DE, 1857. Insectes du Japon. *Étud. ent., Helsingfors*, 6: 25–41.
- NAKANE, T., 1988. Notes on some little-known beetles (Coleoptera) in Japan, 3. *Kita-Kyûshû no Konchû, Kokura*, 35: 77–82, pl. 9.
- PIC, M., 1917. Descriptions abrégées diverses. *Mél. exot.-ent., Moulins*, (26): 2–24.
- SATÔ, M., & K. ISHIDA, 1982. The genus *Themus* of Japan (Coleoptera, Cantharidae). *Spec. Iss. Mem. Retir. Emer. Prof. M. Chûjô, Nagoya*, pp. 31–39.
- WITTMER, W., 1973. Zur Kenntnis der Gattung *Themus* MOTSCH. (Col. Cantharidae). *Ent. Arb. Mus. Frey, Tutzing*, 24: 186–227.
- 1983. Die Familie Cantharidae (Col.) auf Taiwan (2. Teil). *Ent. Rev. Japan*, 38: 147–172, pls. 10–14.