

New Cave-dwelling *Catops* (Coleoptera, Cholevidae) from the Abukuma Hills, Central Japan

Masaaki NISHIKAWA

27-1-115, Higashi-kashiwagaya 1, Ebina, 243-04 Japan

Abstract A new cave-dwelling species of the cholevid genus *Catops* is described from the Abukuma Hills of northeastern Honshu in Central Japan, under the name of *Catops sonei* sp. nov.

The cave-dwelling cholevid beetle, *Catops ohbayashii* JEANNEL (1954, p. 40; SZYMCZAKOWSKI, 1962, pp. 3–4, figs. 5–6), has been known to be limited in distribution to the western part of Honshu, especially around Lake Biwa-ko. In the eastern part of Honshu, however, no cave dweller belonging to the genus *Catops* has been known up to the present, with the exception of *C. sparcepunctatus* JEANNEL rather frequently found in caves lying in low mountain areas (e.g., YOSHIDA & NOMURA, 1952).

Recently, one specimen of a *Catops* was found by Mr. Shinzaburo SONE, one of the energetic biospeologists, from Kawauchi-dô Cave lying at the eastern foot of Mt. Otakine-yama in the central part of the Abukuma Hills, Fukushima Prefecture. It was submitted to me for identification together with several other cholevids from the same locality through the courtesy of Mr. Sumao KASAHARA. Additional specimens of the same species were obtained by the same biospeologist from two different caves in the southern part of the Abukuma Hills, Ibaraki Prefecture, and I was able to examine them through the courtesy of Dr. Shun-Ichi UENO. After a close examination, I have come to the conclusion that they apparently belong to a new species of the *longulus* group (*sensu* JEANNEL, 1936, pp. 346–349, and SZYMCZAKOWSKI, 1964, p. 154) in the genus *Catops*. In some respects, it is more closely similar to *C. angustipes apicalis* PORTEVIN (1914, pp. 216–217; JEANNEL, 1936, pp. 356, 381, fig. 850) than to *C. ohbayashii*. The new species will be described in the present paper. The abbreviations used herein are the same as those explained in my previous papers.

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UENO of the National Science Museum (Nat. Hist.), Tokyo, not only for his kindness in critically reading the original manuscript of this paper, but also for giving me the opportunity to examine the new species. Heartly thanks are also due to Messrs. Sumao KASAHARA, Shinzaburo SONE and Masao TÔYAMA for their kindness in supplying interesting materials or literature.

Catops sonei M. NISHIKAWA, sp. nov.

[Japanese name: Abukuma-chibishidemushi]

(Figs. 1-6)

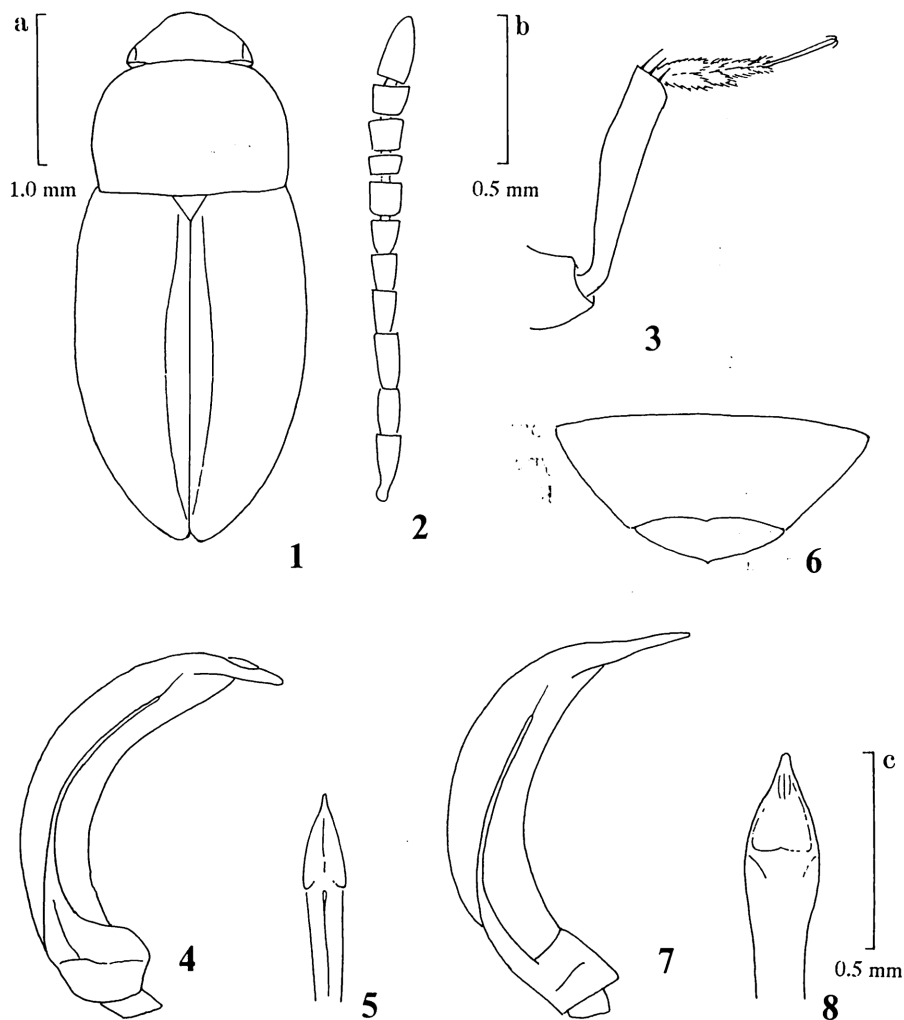
Male. Length 3.80–4.05 mm (in normal condition), width 1.65–1.73 mm. Body elongate, elliptical, with shiny, yellowish brown, relatively long, adpressed pubescence; labrum and maxillary palpi reddish brown; mouth-parts paler; head blackish brown, with front margin reddish; antennae clear reddish brown except for segments VII–X darker; pronotum and scutellum blackish brown; elytra blackish brown, though the basal portions are reddish, entirely bearing opalescent lustre; epipleura reddish brown; legs almost reddish brown; ventral surface dark reddish brown, though the apical half of each abdominal sternite is paler.

Head gently convex, subtrapezoidal, with front margin straight, wider than long, widest at the level of occipital carina (length:width = ca. 1:1.3); labrum transverse, subtrapezoidal, well emarginate at the front margin, with sparse punctuations; maxillary palpus with last segment conical, almost as long as the preceding one; frons clothed with punctures somewhat larger but denser than those on labrum; vertex punctate as on frons; eyes slightly reduced but completely faceted, moderately prominent; horizontal diameter of eye about 4/7 as long as the distance between antennal socket and occipital carina. Antennae long and slender, reaching about basal 1/7 of elytra; segments II–IV equal in length to one another, VI as long as wide, VII and IX equal in width to each other, VIII transverse, about 1.7 × as wide as long, XI elongate, pyriform. Segmental measurements (length followed by width) in the holotype as follows: I, 0.20, 0.10; II, 0.15, 0.09; III, 0.20, 0.09; IV, 0.15, 0.09; V, 0.13, 0.10; VI, 0.11, 0.11; VII, 0.13, 0.14; VIII, 0.08, 0.13; IX, 0.10, 0.14; X, 0.11, 0.13; XI, 0.23, 0.13.

Pronotum transverse, trapezoidal, gently convex, widest at the middle, with base narrower than elytral base, PW/HW 1.51–1.53 (M 1.52), PW/PL 1.40–1.53 (M 1.47); front and basal margins almost straight, strongly marginate in the former; front angles rounded; sides arcuate, gently marginate; hind angles obtuse; surface densely clothed with asperate punctuations. Scutellum triangular, punctate as on elytra. Hind wings full.

Elytra elongate-ovate, gently convex, widest at the middle, EW/PW 1.14–1.17 (M 1.16), EL/PL 2.62–2.89 (M 2.76), EL/EW 1.59–1.67 (M 1.63); sides arcuate, strongly converging towards apices in apical halves, the apices separately rounded; disc with suture complete, slightly angulate at the sutural end, with sutural stria and traces of four or five striae; surface granulate-punctate; microsculpture formed by short transverse wrinkles; epipleura ending at about apical 1/5, punctate as on elytra. Pygidium also punctate as on elytra. Ventral surface almost asperate-punctate, though the mesosternum is partially foveate, with microsculpture formed by oblique wrinkles.

Legs long and slender, with profemur smooth on under side; protibia gently expanded from basal 1/4 along inner margin; protarsus with basal three segments slightly dilated, the first one 2/3 as wide as the apex of protibia; mesotarsus with the



Figs. 1–8. *Catops* spp.; 1–6, *Catops sonei* M. NISHIKAWA, sp. nov., from Ohkaneda-dô Cave at the southern part of the Abukuma Hills, Ibaraki Pref., Central Japan; 7–8, *Catops angustipes apicalis* PORTEVIN, 1914, from Sakuragi-chô, Yokohama in Kanagawa Pref., Central Japan. — 1, Outline of body, ♂; 2, right antenna, ♂; 3, protibia, protarsus and apical part of profemur, ♂; 4, 7, male genitalia in lateral view; 5, 8, apical part of aedeagus in dorso-apical view; 6, abdominal sternites V and VI, ♀. (Scales: a for Fig. 1, b for Figs. 2–3 and c for the others.)

first segment the longest, distinctly thicker than the remainder; metafemur transversely depressed in middle.

Aedeagus symmetrical, slender, subparallel-sided except for acuminate apical portion, with apex distinctly projected in dorsal view; in lateral view, aedeagus arcuate, thick also in apical portion, with apical lobe short, strongly bent inwards. Parameres

slender, reaching about apical 1/4 of aedeagus. Basal piece ample.

Female. Length 3.90 mm (in normal condition), width 1.73 mm. Similar to male in general appearance. Measurements of body parts similar to those of the male, i.e., PW/HW 1.46, PW/PL 1.46, EW/PW 1.21, EL/PL 2.82, EL/EW 1.59. Segmental measurements of antenna (length followed by width) in the allotype as follows: I, 0.18, 0.08; II, 0.13, 0.08; III, 0.18, 0.08; IV, 0.14, 0.08; V, 0.10, 0.09; VI, 0.10, 0.10, VII, 0.13, 0.11; VIII, 0.06, 0.10; IX, 0.10, 0.13; X, 0.10, 0.11; XI, 0.23, 0.11. Mesosternum weakly elevated in medio-apical portion, partially foveate, with microsculpture intricate. Abdominal sternites normal, with sternite V somewhat depressed in middle, feebly bisinuate and minutely protuberant at the middle of apical margin, sternite VI also protuberant at the same portion as the preceding one. Pro- and mesotarsi normal.

Type series. Holotype: ♂, Ohkaneda-dô Cave at the southern part of the Abukuma Hills, Ohkaneda, Kitaibaraki-shi, Ibaraki Pref., E Honshu, Central Japan, 17-VII-1994, S. SONE leg. Allotype: ♀, Hanazono-dô Cave at the southern part of the Abukuma Hills, Hanazono, Kitaibaraki-shi, Ibaraki Pref., 17-VII-1994, S. SONE leg. Paratypes: 1 ♂, Kawauchi-dô Cave at the central part of the Abukuma Hills, Kawauchi-mura, Fukushima Pref., E Honshu, Central Japan, 4-V-1992, S. SONE leg.; 1 ♂, same data as for the holotype. All deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo, except for one paratype specimen from Kawauchi-dô Cave which is preserved in the collection of mine.

Notes. The paratype specimen from Kawauchi-dô Cave is slightly different from the specimens of the type population at the southern part of the Abukuma Hills in the ratio of body parts, i.e., PW/HW 1.42, PW/PL 1.34 and EW/PW 1.25. However, no specific difference is found in the aedeagal configuration between them.

As was pointed out in the introduction, the present new species is closely similar to *Catops angustipes apicalis* PORTEVIN, but is clearly different from the latter in the following points: eyes slightly reduced, inner margin of protarsi more expanded in male, and aedeagus slender in preapical portion with apex strongly projected, though the apical lobe is short in lateral view. The new species from Ohkaneda-dô and Hanazono-dô Caves was taken by baited traps together with *C. sparcepunctatus* JEANNEL. The cholevid collection from Kawauchi-dô Cave will be reported in a separate paper.

要 約

西川正明：阿武隈高地産チビシテムシ属の洞窟性の1新種。——本州の東北部の洞窟からは、じゅうらい、洞窟性のチビシテムシは知られていなかった。しかし、阿武隈高地の洞窟群のうち、数カ所の洞窟からもたらされたチビシテムシ属の種のひとつは、検討の結果、アカアシチビシテムシ *Catops angustipes apicalis* PORTEVIN に近縁の新種と認められた。そこで、これにアブクマチビシテムシ *Catops sonei* M. NISHIKAWA, sp. nov. と命名して記載した。

References

- JEANNEL, R., 1936. Monographie des Catopidae (Insectes Coléoptères). *Mém. Mus. Hist. nat., Paris*, (n.s.), **1**: 1–433.
- 1954. Un *Catops* nouveau du Japon. *Rev. fr. Ent.*, **21**: 40.
- PORTEVIN, G., 1914. Révision des silphides, liodides et clambides du Japon. *Annls. Soc. ent. Belg.*, **58**: 212–229.
- SZYMCZAKOWSKI, W., 1962. Remarques sur quelques Catopinae du Japon. *Niponius, Takamatsu*, **1**(17): 1–7.
- 1964. Analyse systématique et zoogéographique des Catopidae (Coleoptera) de la Région Orientale. *Acta zool. cracov.*, **9**: 55–289.
- YOSHIDA, A., & S. NOMURA, 1952. A list of the Arthropoda in the limestone caves in Kantô-Mountainland, with the descriptions of a new genus and three species. *Chûhō, Tokyo*, (6): 1–8, 1 fol., 1 pl.

Elytra, Tokyo, **23** (1): 75, May 15, 1995

Occurrence of *Ocypus* (*Xanthocypus*) *weisei* HAROLD (Coleoptera, Staphylinidae) in China

Yasuaki WATANABE

Laboratory of Entomology, Tokyo University of Agriculture,
Setagaya, Tokyo, 156 Japan

Examining the staphylinid collection at the National Science Museum (Nat. Hist.), Tokyo, I have found an unrecorded species from China. It agrees with *Ocypus* (*Xanthocypus*) *weisei* HAROLD widely distributed in Japan and Korea. Its collecting data are as follows:

2♂♂, 2♀♀, Xingshan, Beijing, China, 1–VII–1992, S. UÉNO leg.

I am deeply thankful to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his kindness in giving me the opportunity of studying the specimens.