Cholevid Beetles from the Daisetsu-zan Mountains in Central Hokkaido, Northeast Japan

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Abstract Six species of cholevid beetles are recorded from the Daisetsu-zan Mountains in central Hokkaido, Northeast Japan. One of them, *Catops lygaeus* IABLOKOFF-KHNZORIAN, is redescribed as being new to the fauna of Japan.

The Daisetsu-zan Mountains are one of the most interesting areas from the zoogeographical viewpoint of the Japanese insect fauna. Mr. Nobuki Yasuda of the Sôunkyô Museum of Natural History, Kamikawa, has eagerly made faunal investigations of coleopterous insects in this area since more than twenty years ago (cf. Yasuda, 1985). Recently, I had an opportunity to examine his collection of cholevid beetles from the mountains taken by baited traps during the investigation. The collection consists of six species including one newly recorded from Japan. In the present paper, I am going to record them, with a redescription of *Catops lygaeus* Iablokoff-Khnzorian. 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 Mr. Masatoshi Takakuwa of the Kanagawa Prefectural Museum of Natural History, Odawara, for his kindness in critically reading the original manuscript of this paper. Hearty thanks are also due to Dr. Takehiko Nakane of Chiba, and to Messrs. Nobuki Yasuda of the Sôunkyô Museum of Natural History, Kamikawa, Mitsurô Arai and Yasutoshi Shibata of Tokyo for their kindness in supplying with important materials or useful information.

Mesocatops japonicus (JEANNEL, 1936)

Sciodrepoides japonicus Jeannel, 1936, Mém. Mus. Hist. nat., Paris, (n. s.), 1, p. 335, figs. 741–742, 750–752; type locality: Tokio, Japon.

Other references are omitted.

Specimens examined. 13, 19, Mt. Daisetsu-zan, 850–1,050 m in alt., Kamikawa, central Hokkaido, Northeast Japan, 21–VIII–1982, N. Yasuda leg.

Catops lygaeus IABLOKOFF-KHNZORIAN, 1974

[Japanese name: Daisetsu-chibishidemushi] (Figs. 1-5)

Catops lygaeus IABLOKOFF-KHNZORIAN, 1974, Dokl. Akad. Nauk. Armyanskoi, SSR, 59, pp. 295–296, fig. 1; type locality: Mt. Chekhova near Yuzhno-Sakhalinsk, Sakhalin Is.

Male and female. Length 3.85–4.55 mm in male, 4.45–4.60 mm in female (from apical margin of clypeus to apices of elytra), width 1.90–1.93 mm in male, 1.75–1.85 mm in female. Body elongate-elliptical, gently convex, with golden yellow adpressed pubescence; labrum, maxillary palpi and mouth parts clear reddish brown; antennae blackish brown except for basal two segments paler; head, pronotum and scutellum blackish brown; elytra reddish brown, entirely bearing opalescent lustre; legs also reddish brown; ventral surface almost blackish brown.

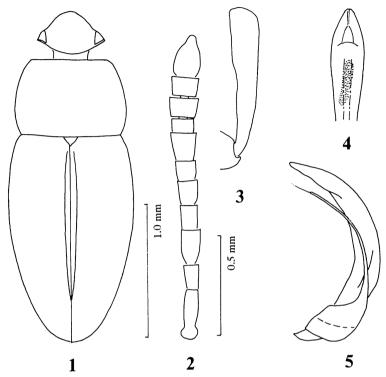
Head gently convex, subtrapezoidal, with front margin straight, wider than long, widest at the level of occipital carina (length: width = ca. 1:1.3); labrum transverse, subtrapezoidal, well emarginate at front margin, with punctures fine and sparse; maxillary palpi with last segment conical, slightly bent, 2/3 as wide as and extremely shorter than the preceding segment; frons with punctures larger and denser than those on labrum; vertex punctate as on frons: eyes normal, moderately prominent. Antennae rather long, hardly reaching pronotal base; segment II $2.3 \times 1.3 \times 1.3$

Pronotum transverse, trapezoidal, gently convex, widest before the middle, with base distinctly narrower than elytral base, PW/HW 1.66 in male, 1.63–1.64 in female, PW/PL 1.46–1.48 in male, 1.50–1.56 in female; front margin weakly emarginate and distinctly marginate; front angles rounded; sides arcuate, gently marginate; hind angles obtuse; basal margin almost straight; surface densely clothed with asperate punctuations. Scutellum triangular, punctulate. Hind wings full.

Elytra elongate, elliptical, slightly depressed, widest before the middle, EW/PW 1.17–1.22 in male, 1.18–1.19 in female, EL/PL 2.55–2.64 in male, 2.72–3.05 in female, EL/EW 1.42–1.53 in male, 1.51–1.66 in female; sides arcuate, gently converging apicad in apical halves; apices separately rounded; suture complete; disc with sutural and traces of four or five pairs of striae, the latter of which are rather distinct in apical portion; surface clothed with asperate punctuations and microsculpture formed by short transverse wrinkles; epipleura ending at about apical 1/6, punctate as on elytra. Pygidium closely and strongly punctate.

Mesosternum clothed with microscopic transverse wrinkles. Metasternum somewhat foveolate. Abdominal sternites clothed with transverse-rugose punctuations, with sternite V in female feebly bisinuate and protuberant at the middle of apical margin.

Legs with profemur smooth on underside; male protibia gently sinuate at middle of inner margin; male protarsus well dilated in basal three segments, with first one 5/6 as wide as apex of protibia; male mesotarsus with first segment the longest, distinctly



Figs. 1–5. Catops lygaeus IABLOKOFF-KHNZORIAN, 1974, from Mt. Daisetsu-zan in central Hokkaido, Northeast Japan. —— 1, Outline of body, 3; 2, antenna, same; 3, protibia and apical part of profemur in dorsal view, same; 4, apical part of aedeagus in dorso-apical view; 5, aedeagus in lateral view. (Scales: 1.0 mm for Fig. 1 and 0.5 mm for Figs. 2–5.)

thicker than the others.

Aedeagus symmetrical, subparallel-sided in basal 2/3, slightly dilated outwards and gradually narrowed towards apex in preapical portion, truncate at the apex, strongly arcuate in lateral view; surface weakly depressed longitudinally in middle portion, triangularly concave in apical portion, longitudinally grooved from the concavity to the apex; ligulae long, obliquely truncate outwards in apical portions, with apex acute. Parameres slender, elongate, reaching about apical 6/7 of aedeagus. Basal piece ample.

Specimens examined. 299, Mt. Daisetsu-zan, 850–1,050 m in alt., Kamikawa, central Hokkaido, Northeast Japan, 7–IX–1982, N. Yasuda leg.; 233, same locality and collector, 20–IX–1982.

Notes. The specimens from Daisetsu-zan are slightly different from the original description in the shape of antennal segments, i.e., segment III twice as long as wide, and VIII 1.8 times as wide as long, but the aedeagal configuration indicates that they can be included in the present species. This species is newly recorded from Japan. It was originally described from Mt. Chekhova near Yuzhno-Sakhalinsk in the southern part of the Island of Sakhalin, though it was left out from the cholevid fauna of the

Island in LAFER (1989).

The species is somewhat similar to the following species, but can be separated from the latter by the configuration of aedeagus and parameres of male genitalia, condition of punctuations on the upper surface, and the shape of protibiae in the male, respectively.

Catops angustitarsis lewisi JEANNEL, 1936

Catops angustitarsis lewisi Jeannel, 1936, Mém. Mus. Hist. nat., Paris, (n. s.), 1, p. 365, fig. 821; type area: Japon.

Other references are omitted.

Specimens examined. 13, 499, same locality and collector as the preceding species, 9-VIII-1982, 533, 21-VIII-1982.

Catops sachalinensis IABLOKOFF-KHNZORIAN, 1970

Catops sachalinensis IABLOKOFF-KHNZORIAN, 1970, Dokl. Akad. Nauk. Armyanskoi, SSR, **51**, pp. 304–305, fig. 1; type locality: Mt. Chekhova near Yuzhno-Sakhalinsk, Sakhalin Is. — LAFER, 1989, Opred. Nasek. Dal'nego Vostoka SSSR, **3**(1), pp. 316–317, figs. 198, *1–3*. — NAKANE, 1995, Kitakyûshû no Konchû, Kitakyushu, **42**, p. 43.

Catops yasudai Nakane, 1982, Rept. Fac. Sci. Kagoshima Univ., (Earth Sci. & Biol.), (15), pp. 104–105, fig. 3; type locality: Mt. Daisetsu, Hokkaido. — Nishikawa, 1983, Check-list Coleopt. Japan, (23), p. 6. — Hisamatsu, 1989, Check List Jpn. Ins., 1, p. 254.

Specimens examined. 233, 19, Mt. Niseikaushuppe of the Daisetsu-zan Mountains, 1,800 m in alt., Kamikawa, central Hokkaido, Northeast Japan, 16–VII–1984, N. YASUDA leg.

Notes. The present species was originally described from Sakhalin Island,* and has already been recorded from Hokkaido by LAFER (1989).

Catops sparcepunctatus Jeannel, 1936

Catops sparcepunctatus Jeannel, 1936, Mém. Mus. Hist. nat., Paris, (n. s.), 1, p. 349, fig. 772; type locality: Nikko, dans les montagnes, Japon.

Other references are omitted.

Specimens examined. 5♂♂, 5♀♀, Mt. Daisetsu-zan, 850–1,050 m in alt., Kamikawa, central Hokkaido, Northeast Japan, 2–VII–1982, N. Yasuda leg.

Catops sp.

Specimen examined. 1 \bigcirc , same locality and collector as in the preceding species, 8-VII-1982.

^{*} Sakhalin specimens examined. 333, 592, Gorniu Bozdukh, Sakhalin Gornu, Yuzhno-Sakhalinsk, southern Sakhalin, Russia, 8-VII-1992, Y. Kohara leg.

Notes. The specimen is comparatively elongate in profile, and has the following characters: abdominal sternites IV and V depressed in the middle, and notched at the middle of apical margin in the latter. Probably, it belongs to the hilleri group of the genus. I prefer to withhold its final determination until male specimens are available for further study.

要 約

西川正明:大雪山系で得られたチビシデムシ. — 北海道中央部の大雪山系で、保田信紀氏によって採集されたチビシデムシ科甲虫6種を報告した. それらのうちの、ダイセツチビシデムシ Catops lygaeus IABLOKOFF-KHNZORIAN は、日本から新たに記録されるものなので、得られた標本にもとづいた再記載をつけた.

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