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Redescription of *Cyphon patiens* Klausnitzer based on the Japanese Specimens

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Abstract *Cyphon patiens* Klausnitzer is newly recorded from Japan, with redescription and figures.

Key words: Scirtidae, Coleoptera, *Cyphon patiens*, redescription, Hokkaido

Introduction

Recently the second author found out that two variations of the male genitalia in *Cyphon ainu* Nakane distributed in Hokkaido, Japan. After the careful examination of our collections and type specimens, it become clear that one of them is true *Cyphon ainu* Nakane and another is *Cyphon patiens* Klausnitzer known from Kunashir Islands.

In the present paper, we redescribe *Cyphon patiens* Klausnitzer based on the Japanese specimens.

Methodology and abbreviations were shown in the previous study (Yoshitomi, 2005).

Taxonomy

Cyphon patiens Klausnitzer, 1982

Cyphon patiens Klausnitzer, 1982, 280 [Type: in ZIL, examined].

Cyphon ainu: Yoshitomi, 2005, 103 [a part, misidentification].

[Japanese name: Nise-ainu-chibi-maruhananomi]

Materials examined. Type materials – Holotype, 1 male, Kunashir, Tretiakovo, 29–VI–1973, Kerzhner leg. (written by Russian characters). Misidentification to *Cyphon ainu* in Yoshitomi (2005) – 11 males & 2 females, Sarufutsu-gawa, Sarufutsu-mura, 1–VIII–1996, K. Mizota leg.; 1 male, Shiretoko-rindô, 24–VII–1986, K. Ishida leg.; 1 male, near Shiretoko-tôge, 500–750m alt., Rausu-chô, 26–VII–1994, K. Akita leg.; 1 male, Wakoto, Kucharo, 5–VII–1958, M. Miyatake leg.

Additional materials examined – 1 male & 1 female, Shiranuka, near Kushiro, 11–VII–1992, B. Kuznetsov leg.; 3 males & 1 female, Shiretoko-rindô, Utoro, Shari-chô, 8–VII–1992, B. Kuznetsov leg.; 1 male, Kitayama

camp station, Abashiri, 23–VI–1998, K. Ijima leg.; 1 male, Kabuto-numa, Toyotomi-chô, 28–VI–1999, M. Hayashi leg.; 1 male, Hyôtan-numa, Temninkyô, Higashikawa-chô, 22–VII–1993, M. Hayashi leg.; 2 males, Shitaosobetsu, Shibeche, 28–VI–1995, K. Ijima leg.

Redescription. Male. The external features fully described by Klausnitzer (1982); PW/PL 2.00–2.21 (2.11); EL/EW 1.53–1.85 (1.71); EL/PL 4.83–5.52 (5.17); EW/PW 1.33–1.58 (1.44); TL/EW 1.84–2.20 (2.05). Caudal margin of sternite VII lightly convex. Tergite VIII well sclerotized; median plate forming lobe-like projection, finely punctate; lateral projections short, curved interiorly, obtuse at apices, closely covered with large punctures in apical 1/3. Tergite IX well sclerotized, consisting of a pair of rod-like hemitergite, as long as tergite VIII; apices obtuse, bearing short setae. Tegmen short, well sclerotized; parameres short, curved dorsally, pointed at apices. Penis short, well sclerotized; parameroid forming lobe-like projection, lacking any projections in lateral margin, obtuse at apex.

Female. Sexual dimorphism indistinct. PW/PL 2.13–2.25 (2.19); EL/EW 1.69–1.80 (1.75); EL/PL 5.08–5.54 (5.32); EW/PW 1.32–1.50 (1.39); TL/EW 2.00–2.13 (2.08). Caudal margin of sternite VII arcuate. Tergite VIII moderately sclerotized, trapezoidal, shallowly concave in caudal margin, which bearing short spines, sparsely covered with minute setae in caudal part; apodemes long and slender. Sternite VIII moderately sclerotized, bearing short setae in apical part, rather straight in apical margin. Ovipositor long, two pairs of apical setae in stylus; relative length of stylus, coxite and baculus as (n = 1) 1.0 : 4.1 : 18.3. Prehensor weakly sclerotized, V-shaped.

Measurement. Male (n = 8): TL 3.39–4.08 (3.71)

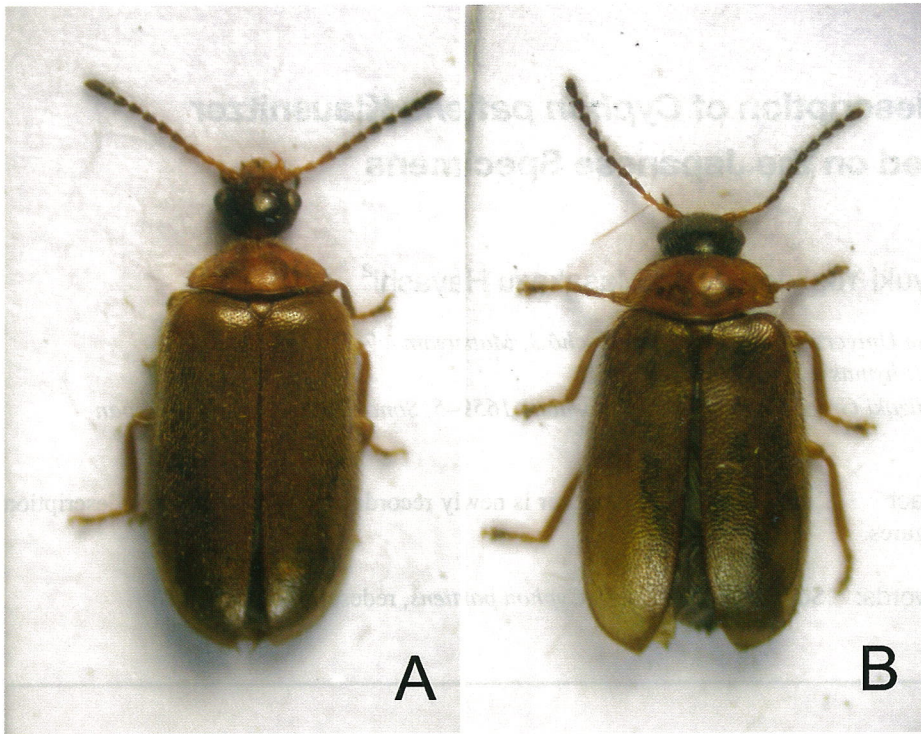


Figure 1.
Habitus of *Cyphon ainu*
Nakane (A) and *Cyphon*
patiens Klausnitzer (B).

mm; PW 1.15–1.40 (1.27) mm; PL 0.52–0.68 (0.60) mm; EL 2.87–3.40 (3.10) mm; EW 1.75–1.90 (1.81) mm. Female (n = 3): TL 3.60–3.80 (3.70) mm; PW 1.20–1.35 (1.28) mm; PL 0.55–0.61 (0.59) mm; EL 3.05–3.20 (3.12) mm; EW 1.75–1.80 (1.78) mm.

Distribution. Kunashir, Hokkaido (east and northern parts).

Remarks. This species belongs to subgroup A of *Cyphon collaris* species-group (sensu Yoshitomi, 2005). This is closely related to *Cyphon ainu* Nakane distributed sympatrically (see Figure 3), and differs from the latter by the following characteristics: 1) lateral projections of tergite VIII shorter than median plate, closely covered with large punctures in apical 1/3; 2) parameroid of penis forming lobe-like projection; 3) apical margin of sternite VIII of female rather straight; 4) tergite VIII of female shallowly concave in caudal margin.

In the original description of this species (p. 280–282 in Klausnitzer, 1982), the following mistakes were presented: sternite IX (also fig. 23) – lateral projections of tergite VIII; tegmen (also fig. 24) – penis and upside-down; penis (also fig. 25) – tegmen.

Cyphon ainu Nakane, 1963

Cyphon ainu Nakane, 1963, 31 [Type: in SEHU, examined]. Other synonyms see Yoshitomi (2005).

[Japanese name: Ainu-chibi-maruhananomi]

Additional materials examined. 1 male, Iwabokki, Kushiro, 6–VII–1992, B. Kuznetsov leg.; 1 male, Kottaro, Kushiro, 6–VII–1992, B. Kuznetsov leg.; 1 male, Shiraisawa-rindô, Otaru, 1–VII–1992, B. Kuznetsov leg.; 1 male, Kushiro-shitsugen, 4–VII–1992, B. Kuznetsov leg.; 3 males, Kabuto-numa, Toyotomi-chô, 28–VI–1999, M. Hayashi leg.; 33 exs.,

Shibetsu-chô, 26–VI–2001, H. Yoshitomi leg.; 4 males, Bushigawa, Okushiri Is., 6~9–VI–2003, S. Hori leg.

Other materials were recorded by Yoshitomi (2005) except for the specimens of misidentification to *Cyphon patiens* Klausnitzer, 1982 (see above).

Discussion

We can not find the differential characters between *C. ainu* and *C. patiens* in the external features, so we have to check the male and female genitalia.

The following keys are addition to “Key to species of *Cyphon collaris* species-group of Japan” (Yoshitomi, 2005, p. 100–103).

1. Coloration of body almost yellowish-orange throughout; distributed in Hokkaido. 1'
- . Coloration of body almost blackish-brown throughout, but some species have yellowish-orange in pronotum only; distributed in Honshu, Shikoku and Kyushu. 2
- 1'. Lateral projections of tergite VIII of male shorter than median plate, closely covered with large punctures in apical 1/3; parameroid of penis forming lobe-like projection; apical margin of sternite VIII of female rather straight; tergite VIII of female shallowly concave in caudal margin.
..... *C. patiens* Klausnitzer
- . Lateral projections of tergite VIII of male longer than median plate, closely covered with short setae; parameroid of penis expanded laterally in apical part; apical margin of sternite VIII of female arcuate; tergite VIII of female arcuate in caudal margin. *C. ainu* Nakane

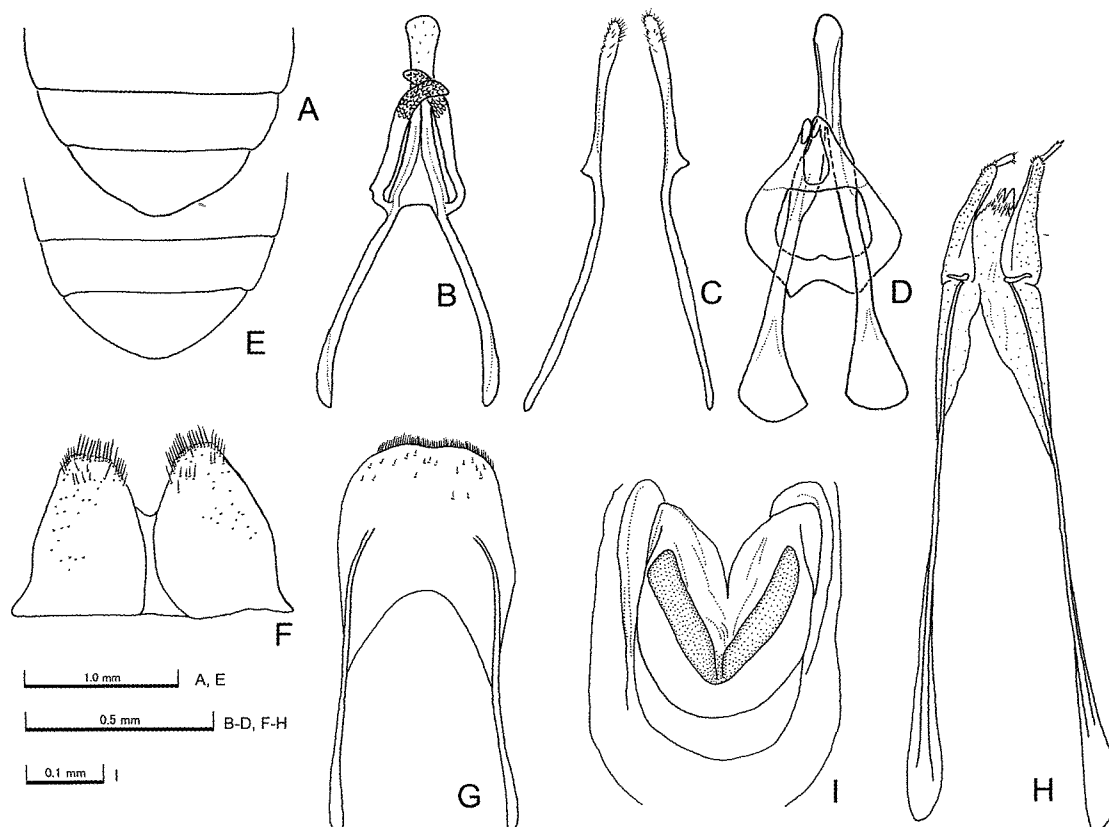


Figure 2.

Cyphon patiens Klausnitzer, male (A–D) and female (E–I). A and E: sternites V–VII. B: tergite VIII. C: tergite IX. D: tegmen and penis. F: sternite VIII. G: tergite VIII. H: ovipositor. I: prehensor.

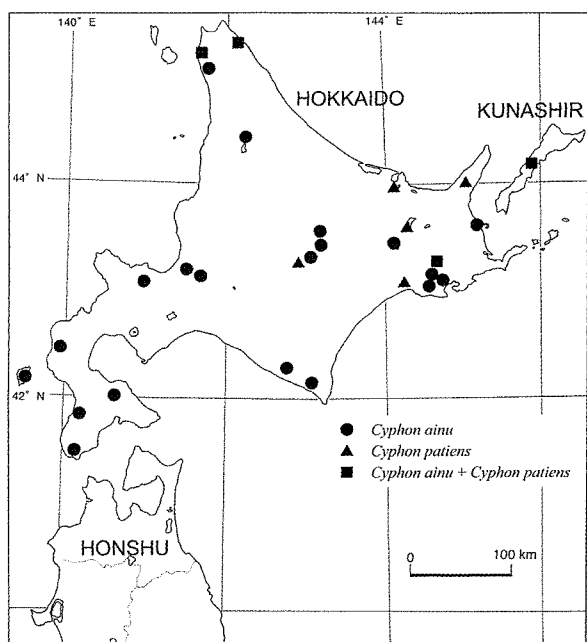


Figure 3.

Distribution map of *Cyphon patiens* Klausnitzer and *Cyphon ainu* Nakane.

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