# The Genus *Ischalia* (Coleoptera, Pyrochroidae) from Taiwan<sup>1)</sup>

### Masataka SATÔ

Biological Laboratory, Nagoya Women's University, Nagoya, 468 Japan

**Abstract** Two species of the genus *Ischalia* from Taiwan are dealt with. One of them is newly described under the name of *I. uenoi*. The other species, *I. arisana* Kôno, is recorded from Mt. Hsüeh Shan.

So far as I am aware, only one species of the genus *Ischalia* has hitherto been known from Taiwan. It was described from Mt. Arisan (=Ali-shan Mts.) by Kôno (1935) on the basis of a single specimen. Since then, no additional record of this group of beetles has been made for a long time. The main reason for this seems to be in the difficulty of finding *Ischalia* species. However, we were fortunate in collecting two species of the genus at high altitude of Mt. Ho-huan Shan and Mt. Hsüeh Shan, during the zoological researches in Taiwan 1989 made by the National Science Museum, Tokyo, under the leadership of Dr. S.-I. UÉNO. After a careful study, one of the two species proved to be new to science. It will be described in the following lines.

In the meantime, I had an opportunity to examine the type specimen of *Ischalia arisana* Kôno through the courtesy of Professor T. Kumata. Some additional data on this species will be briefly given on this occasion.

The abbreviations used in the present paper are as follows: TW – transverse diameter of each eye in dorsal aspect; W – greatest width of head including eyes; PW – greatest width of pronotum; PL – length of pronotum along median line; EW – greatest width of elytra; EL – greatest length of elytra.

I wish herewith to express my hearty thanks to Dr. Shun-Ichi Uéno and Dr. Mamoru Owada of the National Science Museum (Nat. Hist.), Tokyo, Professor Tosio Kumata of Hokkaido University, Professor Yau-I Chu and Mr. Chiun-chen Ker of National Taiwan University, and Dr. Shûhei Nomura of Kyushu University for their kindness in giving invaluable support to the present study.

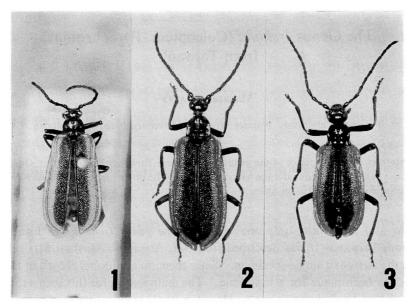
### Ischalia arisana Kôno, 1935

(Figs. 1-2, 4)

Ischalia arisana Kôno, 1935, Ins. matsum., 9: 158; 1936, Fauna Nipponica, 10 (8-2): 38.

The type specimen of this species is said to be a male in the original description,

<sup>1)</sup> This study is supported by the Grant-in-aid No. 01041099 for Field Research of the Monbusho International Scientific Research Program, Japan.



Figs. 1-3. Habitus. —— 1, *Ischalia arisana* Kôno (holotype); 2, same species (from Mt. Hsüeh Shan); 3, *I. uenoi* M. Satô, sp. nov. (Mt. Ho-huan Shan).

but in reality, it is a female. It has the following ratios of respective parts of body: HW/TW 4.00, PW/HW 1.21, PW/PL 1.21, EW/PW 2.24, EL/EW 1.95; length 6.40 mm, breadth 2.53 mm.

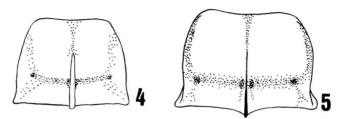
The specimens obtained on Mt. Hsüeh Shan are almost identical with the type. Ratios of respecitve parts of body are as follows: HW/TW 4.29, PH/HW 1.27–1.40, PW/PL 1.27–1.40, EW/PW 2.10–2.21, EL/EW 1.93–1.95; length 7.53–7.67 mm, breadth 2.80–2.93 mm.

# Ischalia uenoi M. SATÔ, sp. nov.

(Figs. 3, 5)

Female. Body elongate, flat, somewhat shining and closely covered with pubescence, which is more erect and sparser on elytra than on the other parts. Colour almost brownish black, with brownish tarsi and mandibles, but the lateral sides of elytra are broadly reddish orange which becomes wider towards the base.

Head suboval, transversely concave behind clypeus and rather longitudinally so between antennal sockets, convex between eyes, and finely punctate on the surface; clypeus distinct and finely punctate; eyes lateral; EW/HW 5.00; antennae thick, fili-



Figs. 4-5. Pronotum. — 4, Ischalia arisana Kôno (holotype); 5, I. uenoi M. Satô, sp. nov.

form, and attaining to the middle of elytra.

Pronotum subtrapezoidal, irregularly concave posteriad, gibbous anteriad; PW/HW 1.27–1.33, PW/PL 1.36–1.43; lateral margins ridged and evenly rounded, but distinctly sinuate at a prebasal portion; front angles more or less rounded, hind angles triangularly prominent; disc finely punctate, provided with a median carina on basal two-thirds, with a mediolongitudinal impression on apical third and a pair of ovate impressions on lateral sides of the carina and at postero-lateral margins.

Elytra elongate, flat; EW/PW 1.89–1.90, EL/EW 1.84–1.89; shoulders rounded; sides gently arcuate, with rounded apices; surface strongly and contiguously punctate; each elytron provided with a prominent costa which extends from humerus to near apex and is evenly curved, though sinuate at basal fourth, and with a short indistinct carina at humerus. Wings reduced.

Length: 6.47 mm; breadth: 2.40-2.53 mm.

Male. Unknown.

Holotype:  $1 \circlearrowleft$ , Ho-huan Shan, 3,100 m alt., Hua-lien Hsien, Taiwan, 25-VI-1989, S.-I. Uéno leg. Preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo. Paratype:  $1 \circlearrowleft$ , same data as for the holotype. Preserved in the collection of the Biological Laboratory, Nagoya Women's University.

The present new species can be easily distinguished from *I. arisana* Kôno by the following points: pronotum differently formed, long carina of elytron not reaching the apex, short humeral carina of elytron indistinct, and lateral areas of reddish orange on elytra broader at the base.

The collecting site of the present new species is a small gully without water near the top of the eastern peak of the mountain, which is sparsely covered with coniferous and broadleaved trees with thick undergrowth of subalpine bamboos. According to Dr. Uéno, the type specimens were obtained by sifting fallen leaves accumulated on the bottom of the gully.

The present species is dedicated to Dr. S.-I. UÉNO, who is the excellent leader of our researches on high mountains of Taiwan and collected the remarkable new species.

## 要 約

佐藤正孝: 台湾の高山性ヘリハネムシ. — 台湾からこれまでに記録されたヘリハネムシは、1935年に阿里山から記載されたアリサンヘリハネムシ Ischalia arisana Kôno のただ 1 種で、その後はまったく報告がなかった。1989年初夏に行われた高山帯の調査で、この属の甲虫が新たに合歡山と雪山から採集され、分布域がいちじるしくひろがった。これらの資料を詳しく検討した結果、雪山と阿里山のものは同種であろうと判定されたが、合歡山のものだけは、前胸背板の形状や上翅の隆条の様子が明らかに異なり、別の新種であることがわかったので、ウェノヘリハネムシ Ischalia uenoi M. SATÔ と命名して、この論文に記載した。基準標本の 2 個体はともに、亜高山性混合林の下草として密生する、ニイタカヤダケの落ち葉のなかからふるいだされたものである。なお、アリサンヘリハネムシには立派な後翅があるのに対して、ウェノヘリハネムシでは後翅が退化している。将来、高山帯のより綿密な調査が実施されれば、さらに異なった飛べない種が、ほかの高山からも発見されることと期待される。

## References

- BLAIR, K. G., 1912. Descriptions of new species of Pyrochroidae. Annls. Mag. nat. Hist., (8), 9: 527-533.
- Kôno, H., 1935. Drei neue Heteromeren aus Japan und Formosa, mit einer Liste der geographischen Verbreitung der japanischen Pyrochroiden und Pediliden. *Ins. matsum.*, **9**: 157–161.
- —— 1936. Family Pedilidae. *In Okada, Y., et al.* (eds.), *Fauna Nipponica*, **10** (8–2): 34–41, 52–53. Sansei-do, Tokyo. (In Japanese.)
- Lewis, G., 1879. On certain new species of Coleoptera from Japan. Annls. Mag. nat. Hist., (5), 4: 459-467.
- NAKANE, T., 1960. On the Pyrochroidae of Japan. Ent. Rev. Japan, 11: 59-66. (In Japanese.)
- Pascoe, F. P., 1860. Notice of new or little-known genera and species of Coleoptera, Part I. *J. Ent.*, 1: 36–64, pls. 2–3.
- Paulus, H. F., 1971. Neue Pyrochroidae aus Nepal (Coleoptera, Heteromera), mit einer Diskussion der verwandtschaftlichen Verhältnisse der Familie. Z. Arb. österr. Ent., 23: 75–85.
- Young, D. K., 1976. A new species of *Ischalia* from southeastern China (Coleoptera: Pyrochroidae). *Pan-Pacif. Ent.*, **52**: 213–215.