IDIONYX VICTOR SPEC. NOV. (ANISOPTERA: CORDULIIDAE) AND SOME OTHER ODONATA FROM HONGKONG

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14 spp. are recorded, of which Orthetrum t. triangulare (Sel.) is new for Hongkong. Idionyx victor sp. n. (holotype &: Hongkong, New Territories, Chuk Yueng, 24-VI-1988) is described and compared with I. yolanda Sel., I. thailandica Hämäläinen and I. philippa Ris.

INTRODUCTION

The dragonfly fauna of Hongkong is well documented by ASAHINA (1965, 1987b, 1988) and MATSUKI et al. (1990). Not considering LAI's (1971) somewhat confusing records, many of which are based on misidentifications, ca. 65 species are known from the Hongkong territories.

By courtesy of Mr Roland A. Müller I have been able to study a small, but interesting lot of Hongkong dragonflies collected by Dr Colin Treadaway. It contains 14 species, including one novelty to the fauna, *Orthetrum t. triangulare* (Selys). This material includes also one male specimen of an *Idionyx* species, which has been treated by ASAHINA (1965, 1988) as *Idionyx yolanda* Selys, 1871. Although this species resembles *yolanda* superficially, it seems to represent a distinct new species, which is described here.

The specimens were collected in the following localities: Loc. 1: New Territories, Kowloon, 22-VI-1988; — Loc. 2: New Territories, Kadoore Garden, 23-VI-1988; — Loc. 3: New Territories, Brides Pool, 23-VI-1988; — Loc. 4: New Territories, Chuk Yueng, 24-VI-1988.

LIST OF SPECIES

Prodasineura autumnalis (Fraser, 1922). — Loc. 3: 1 &; — Loc. 4: 1 \, \text{Q}.

Copera ciliata (Selys, 1863). — Loc. 4: 1 \, \text{d}.

Euphaea decorata Selys, 1853. — Loc. 1: 1 \, \text{d}; — Loc. 3: 3 \, \text{d}, 2 \, \text{Q}; — Loc. 4: 1 \, \text{d}.

Rhinocypha p. perforata (Percheron, 1835). — Loc. 3: 3 &, 2 Q.

Idionyx victor spec. nov. — Loc. 4: 1 &. See below.

Orthetrum chrysis (Selys, 1891). — Loc. 3: 1 &.

O. s. sabina (Drury, 1770). — Loc. 3: 1 3.

O. pruinosum neglectum (Rambur, 1842). — Loc. 3: 1 3. This sp. is missing in ASAHINA (1988), but it was listed by ASAHINA (1965).

- O. luzonicum (Brauer, 1868). Loc. 2: 1 &; Loc. 3: 2 &; Loc. 4: 1 &.
- O. glaucum (Brauer, 1865). Loc. 4: 2 &.
- O. t. triangulare (Selys, 1878). Loc. 4: 3 & ASAHINA (1965, 1988) and MATSUKI et al. (1990) have recorded O. triangulare melania (Selys, 1883) from Hongkong. The occurrence of both taxa in Hongkong gives further support to the present view that melania and triangulare are distinct good species.

Neurothemis fulvia (Drury, 1773). — Loc. 2: 1 &.

Trithemis aurora (Burmeister, 1839). — Loc. 2: 1 &; — Loc. 3: 2 &; — Loc. 4: 1 Q.

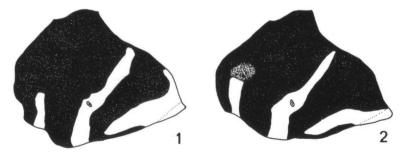
Zygonyx iris insignis (Kirby, 1900). — Loc. 3: 1 \(\trianglerapprox; — Loc. 4: 1 \(\frac{\pi}{\pi}\). The \(\trianglerapprox resembles the "untypical form" reported by ASAHINA (1988, Fig. 43). I presume that it is a question of colour variability only.

IDIONYX VICTOR SPEC. NOV. Figures 1, 3

Idionyx yolanda (nec. Selys, 1871): ASAHINA, 1965: 499, 501 (2 \eth , 1 \heartsuit from Hongkong; \eth appendages and accessory genitalia figured; figs 18-20); — ASAHINA, 1988: 697-698 (no new material; same figures of as above (figs 30-32), but also \heartsuit distal abd. segments figured (fig. 33).

Material. — Holotype: &, Hongkong, New Territories, Chuk Yueng, 24-VI-1988, C. Treadaway leg. Holotype at present in coll. R.A. Müller (St. Gallen, Switzerland), to be deposited at SMF (Frankfurt/Main).

MALE. — Head. — Labium pale brown. Labrum lemon-yellow, narrowly bordered by brown. Clypeus black, narrowly bordered by yellow below, the



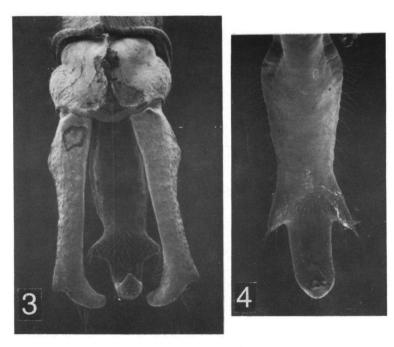
Figs 1-2. Colour pattern of pterothorax: (1) *Idionyx victor* sp. n., holotype &; — (2) *I. yolanda* Selys, & from central East Borneo, Kali-Bengin, 11-IX-1956 (RMNH).

yellow colour extending upwards in the middle, forming a triangle. Frons black, with metallic green lustre in the upper part. Vesicle of the same colour. Rear of head black.

Thorax. — Pterothorax metallic green with bright lemon-yellow bands as in Figure 1. Coxae and trochanters of the first two pairs pale yellowish, of the third pair dark brown. All femora dark brown. Tibiae of the first pair brown, the others pale yellowish.

Wings. — Hyaline, tinted with yellowish-brown, more markedly so at the base of wings along the costal/subcostal fields. Antenodals number 13-14 in fore wing and 8 in hind wing; postnodals correspondingly 6 and 9. Pterostigma black, short, covering about two underlying cells. One crossvein in hypertrigone in all wings. Two cubitoanal crossveins in hind wing. Anal loop made of 9 cells. Membranula greyish brown. Discoidal field with a row of 12-13 single cells in fore wing and 6 cells in hind wing followed by multiple cells.

Abdomen. — Black with reduced yellow marks in segments 1-3: segment 1 with a small spot in the posterolateral corner, continuing as a broad band bordering the tergal margin of segment 2 and as a narrower band along the tergal margin of segment 3. The basal 4 intersegmental rings yellow on dorsum, the ring



Figs 3-4. Dorsal view of: (3) anal appendages and abdominal segments 9-10 of the holotype δ of *Idionyx victor* sp. n.; — (4) inferior appendage of *I. yolanda* Selys (same δ as in Fig. 2).

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between segments 1-2 more broadly yellow. A distinct yellow middorsal stripe on segment 2.

Segments 2-3 a little expanded dorsally and segments 7-9 only slightly broadened laterad. Segment 10 without dorsal crest.

External genitalia (see ASAHINA, 1965, fig. 18; 1988, fig. 32) similar to those of *I. yolanda*. Anal appendages as in Figure 3 (and in ASAHINA, 1965, figs 19-20, and ASAHINA, 1988, figs 30-31). The lateral projections of the inferior appendage point straight laterad in dorsal view.

Measurements (in mm). — Hind wing 28; — abdomen (incl. appendages) 31.

DISCUSSION

The male anal appendages of *I. victor* sp. n. resemble those of *I. yolanda* Sel., *I. thailandica* Hämäläinen and *I. philippa* Ris. The distinction with *yolanda* is quite apparent; unlike in *victor*, the lateral projections of the inferior appendage are pointed distinctly downwards in *yolanda* (see Fig. 4, and LIEFTINCK, 1939, fig. 1). The shape of the abdomen is quite similar in these two species, but the colour pattern of the pterothorax (Figs 1-2) is different; in *victor* the yellow band on the metepimeron turns towards the metepisternum in the upper end.

The lateral projections of the inferior appendage of *thailandica* male (see HÄMÄLÄINEN, 1985; figs 3, 5 and ASAHINA 1987a, figs 53-54) resemble those of *victor*, but they point a trifle downwards. However, it is easiest to separate these species by the shape of the abdomen; in *thailandica* segments 7-9 are distinctly expanded laterally. In the holotype male of *thailandica* the apex of segment 8 is nearly twice as broad as the apex of segment 6, but in the holotype male of *victor* it is less than 1.5 x as broad.

In *philippa* the lateral projections of the inferior appendage point also a trifle downwards, and segment 10 is furnished with a distinct dorsal crest (see LIEF-TINCK, 1971, fig 2). The lateral bands on the pterothorax are also differently shaped.

I. yolanda has a wide distribution: Malaya peninsula, Sumatra, Billiton, Borneo and Basilan. I. thailandica has been found in different parts of Thailand, and I. philippa is widely distributed in the Philippine islands.

REFERENCES

ASAHINA, S., 1965. The Odonata of Hongkong. Kontyû 33(4): 493-506.

ASAHINA, S., 1987a. A list of the Odonata recorded from Thailand. XVIII. Corduliidae, 2. Kontyû 55(4): 699-720.

ASAHINA, S., 1987b. A revised list of the Odonata of Hong Kong. I. Zygoptera. *Tombo* 30: 7-24. ASAHINA, S., 1988. A revised list of the Odonata of Hong Kong. II. Anisoptera. *Kontyû* 56(4): 689-705.

HÄMÄLÄINEN, M., 1985. Idionyx thailandica spec. nov., a new dragonfly species from Thailand

- (Odonata: Corduliidae). Opusc. zool. flumin. 2: 1-6.
- LAI, Y-I., 1971. An introduction to the Odonata of Hong Kong. New Asian College Academic Annual 13: 1-48. (Chin., with Engl. s.).
- LIEFTINCK, M.A., 1939. Critical notes on the Malaysian species of Idionyx, Hagen (Odon.). Treubia 17: 199-204.
- LIEFTINCK, M.A., 1971. Studies in oriental Corduliidae (Odonata). Tijdschr. Ent. 114: 1-63.
- MATSUKI, K., T. YAMAMOTO & H. ICHII, 1990. On a small collection of Odonata of Hong Kong. Gekkan-Mushi 235: 12-18 (Jap., with Engl. title).