

**DREPANOSTICTA BELYSHEVI SPEC. NOV. FROM THE PHILIPPINES  
(ZYGOPTERA: PLATYSTICTIDAE)\***

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*D. belyshevi* sp. n. (holotype ♂: Panaon Is., San Francisco, Anislagon Gamay, August 1988; to be deposited in the Senckenberg Museum, Frankfurt/Main) is described and figured.

INTRODUCTION

*Drepanosticta* Laidlaw, 1917, one of the largest genera in Odonata, is widely distributed in the Oriental and Papuan regions. So far 12 species have been described from the Philippines. A new species from Panaon Island in the Eastern Visayan subregion of the Philippine Islands, quite striking in its prothoracic structures, is described here. It is named in honour of Dr B.F. Belyshev, at the occasion of his 80th birthday, and in appreciation of his studies on odonate biogeography.

**DREPANOSTICTA BELYSHEVI SPEC. NOV.**

Figures 1-4

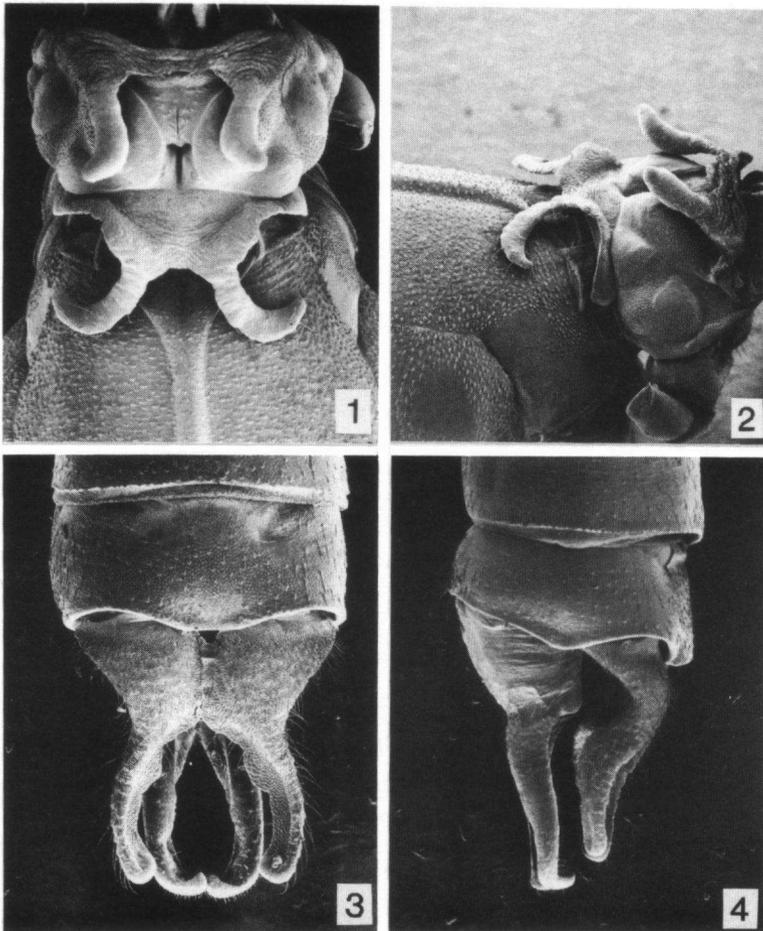
**Material** — **Holotype**: ♂, Philippines, Panaon Is., San Francisco, Anislagon Gamay (200 ft), VIII-1988, W. Catal leg., at present in coll. R.A. Müller (St Gallen, Switzerland), to be deposited at SMF, Frankfurt/Main. — **Paratypes** (all from Panaon Is., San Francisco): 1 ♀, same site and date as the holotype; — 2 ♂, Mt Anislagon (350 ft), VIII-1988; — 2 ♂, 1 ♀, Mt Kaneo (400 ft), VIII-1988; — 2 ♂, Batong Lapad, VIII-1988; — 1 ♂, Panan-awan Creek, VIII-1988; — 1 ♂, Gabing Gamay, big River, X-1988; — 1 ♂, Taboñ R., Lilo-an, X-1988 (all W. Catal leg.); — 3 ♂, 3 ♀, Anislagon R., 10/12-X-1990, T. Borromeo Jr. leg. — 1 ♂ to be deposited in coll. Inst. Biol., Siberian Sect., USSR

\* Results of the Roland Müller Zoological Expeditions to the Philippines, No. 6.

Acad. Sci., Novosibirsk; 1 ♂, 1 ♀ at RMNH, Leiden; the rest in collns R.A. Müller and M. Hämäläinen.

**MALE: Head.** — Labium brown. Labrum, base of mandibles and anteclypeus bluish white; the apical margin of labrum narrowly brown. Head above black, antennae brown. Parorbital and transverse occipital carinae as in *D. myliuta* Cowley, 1936.

**Prothorax.** — Median lobe pale yellow, anterior and posterior lobes brown. Prothoracic structures as in Figures 1-2; anterior lobe produced as two widely



Figs 1-4. *Drepanosticta belyshevi* sp. n., paratype male from Tabon River: (1) prothorax, dorsal view; — (2) prothorax, oblique lateral view; — (3) anal appendages, dorsal view; — (4) anal appendages, lateral view.

distant, swollen lateral processes extending obliquely upwards over the median lobe. Posterior lobe with flat, outcurved caudal processes extending dorsally over the pterothorax. Both processes without any specialised tufts of hairs.

**Pterothorax.** — Brown, with somewhat obscure, blackish bands on both sides of the dorsal carina, the bands tapering at the upper end. A pale bluish spot covering the posterior third of the metepimeron; a similar spot above it in the metepisternum, extending more or less obscurely to the posterior corner of the mesepimeron. Ventral surface blackish brown, poststernum pale yellowish. Legs including the spines and bristles pale yellowish.

**Wings.** — Clear; postnodal cross-veins of the first series 15-17 in fore wing, 14-16 in hind wing. Origin of R4+5 and IR3 variable; R4+5 arising at subnodus or slightly distal to it; IR3 arising about half a cell further distal. Arculus a little distal to Ax2. Quadrangle slightly widened distally in fore wing, scarcely appreciably widened in hind wing. Ac and Ab forming a shortly stalked "Y-vein"; in some specimens the veins are fused just above the wing margin. Pterostigma distinctly longer than high, proximal side a trifle more oblique than the distal side and costal side slightly shorter than the anal side; colour brown. Cells between C and R1 distal to pterostigma undivided, higher than broad.

**Abdomen.** — Brown, with bluish-white dorsal spots at base of segments 3-7; the spots becoming progressively longer towards the apical segments. Ventrolateral edge of segments 3-7 pale yellowish brown at base; the pale colour confluent to the dorsal spot, extending more apicad in segments 3-6. Appendages shaped as in Figures 3-4, shorter than segments 9 and 10 combined, pale yellowish brown.

Measurements (in mm). — Hind wing 18.0-20.0, — abdomen 29.5-33.0.

**FEMALE.** — Very similarly coloured as the male. Prothoracic structures resemble those of the male. The processes of the anterior lobe are somewhat shorter and their apex not outwardly curved; the process of the posterior lobe is also less curved. Abdomen more robust than in male. Anal appendages pale brown. Genital valves not surpassing the apex of appendages.

Measurements (in mm). — Hind wing 19.0-20.0, — abdomen 28.0-29.0.

## DISCUSSION

As pointed out by COWLEY (1936), the prothoracic structures seem to be of great diagnostic value in species distinction in *Drepanosticta*. The prothorax of *D. belyshevi* sp. n. differs strikingly from all other described Philippine species by having long lateral processes in the anterior lobe. In fact it is the first described species in the whole genus with long processes in both the anterior and the posterior lobe.

A discussion of the affinities of the Philippine *Drepanosticta* species would be rather useless at present, since it is quite safe to assume that not more than

half of the species actually occurring in the various islands have so far been described. The major contributions to our knowledge include those by COWLEY (1936) and LIEFTINCK (1961).

#### ACKNOWLEDGEMENT

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#### REFERENCES

- COWLEY, J., 1936. Descriptions of three new species of *Drepanosticta* (Odonata) from the Philippine islands. *Trans. R. ent. Soc. Lond.* 85(6): 157-167.
- LIEFTINCK, M.A., 1961. New and interesting Odonata from the Philippines. *Fieldiana Zool.* 42(10): 119-149.