March 1, 1994

DREPANOSTICTA BERINCHANGENSIS SPEC. NOV. FROM WEST MALAYSIA (ZYGOPTERA: PLATYSTICTIDAE)

R.G. KEMP

33 Bridge Road, Alveley, Bridgnorth, Shropshire, WV15 6JN, United Kingdom

Received June 20, 1993 / Revised and Accepted November 5, 1993

The new sp. is described from a single male (holotype δ : taken on a road, passing through moss forest, close to the summit of Batu Berinchang, alt. 2031 m, Perak/Pahang border, Cameron Highlands; deposited in authors collection).

INTRODUCTION

The genus *Drepanosticta* Laidlaw, 1917, is widely distributed from India through Southeast Asia as far as New Guinea. To date, seven species have been recorded from within the limits of West Malaysia (LIEFTINCK, 1965). The new species, from the Cameron Highlands, stands apart from all others on account of its distinctively shaped inferior appendages.

The single male was collected at the side of the road, close to the radio transmitter station, on the summit of Mount Berinchang. Initially it was discovered by my daughter Rebecca when it perched upon our car radio aerial! Despite spending several hours searching for further individuals, no others were seen. The steep slopes and largely impenetrable nature of the stunted, montane forest, either side of the road, made a thorough search of the area difficult.

The following description is based upon the specimen taken, however reference to colour photographs taken at the time has been made where a post mortem change has occurred.

DREPANOSTICTA BERINCHANGENSIS SPEC. NOV. Figures 1-4

Material. – Holotype 5: Peninsular Malaysia, Summit of Batu Berinchang, Perak/Pahang border, Cameron Highlands, alt. 2031 m. approx., 21-IV-1992, R.G. Kemp, leg. Holotype in R.G. Kemp collection.

MALE holotype. - Abdomen + appendages 37 mm; hind-wing 25 mm.

H e a d. – Labium cream gradually becoming darker rusty brown towards the palps; labrum greyish-cream but bordered anteriorly with black, the black line being well defined and covering just under a third of the labial width. Anteclypeus cream; postclypeus glossy black. Frons, genae and upper part of the head black, the fine, "orange peel-like", texture of the surface of these structures contrast well with the smooth, glossy, surface of the postclypeus, anteclypeus and that part of the head bordering the eye margins as far back as the lateral ocelli. The latter is seen as a glossy black band next to the eye margin, extending from the base of the mandible and terminating at a level just anterior to the lateral ocelli. The glossy band is approximately equal in width to the distance between the antennal socket and the eye margin.

Antennae: socket, first segment and basal half of second segment light brown, rest of second segment grading to dark brown apically. Flagellum black.

Rear of head matt black.

Thorax. – Prothorax: Shaped as in Figures 1 & 2. Anterior collar and apical half of each median lobe pale brown, rest of prothorax dark brown.

Synthorax. – Brown, marked with creamy-green. Dorsum of thorax entirely dark brown except for two, thin, creamy-green stripes immediately bordering the mid-dorsal carina. These extend from the carinal fork anteriorly for approx. 3/4 the length of the carina.

Mesostigmal lamellae pale brown. Mesoepimeron pale creamy-yellow, with a narrow, dark brown stripe covering the entire length of the first thoracic suture. The brown stripe is approximately a quarter of the width of the mesoepimeron, but it abruptly widens, close to the insertion of the wings, to cover almost the entire width. – Rest of thorax below the first lateral suture pale creamy-yellow.

Legs. – Ground colour of all legs very pale brown except for faint, darker, brown banding at the beginning of the apical third of each femur. Knees dark brown.

Wings. – Hyaline. Postnodal cross-veins of the first series 12-12 in fore wing, 11-11 in hind wing. Arculus situated a little distal to Ax2. ab and ac separate in all four wings. Pterostigma quadrangular, longer than high, the costal side shorter than the anal side with the proximal side slightly more oblique than the distal. Pterostigma of hind wings very slightly smaller than those on the fore wings; each is followed by a single row of undivided cells apically. All coloured



Figs 1-4. Drepanosticta berinchangensis sp.n.: (1) dorsal view of prothorax (left side drawn in outline only); -(2) lateral view of left side of prothorax; -(3) dorsal view of anal appendages (right side shaded); -(4) lateral view of anal appendages on left side.

black and framed with a very narrow hyaline border.

A b d o m e n. – Brown. Dorsally, segs 3-6 have poorly defined, basal, yellowbrown spots covering most of the basal eighth of each segment. Laterally, the yellow-brown markings become a little brighter and widen infra-apically to cover a little under one quarter of the segment. Distinct, narrow, dark brown rings border the ends of each of these segments. Dorsum of segs 7, 8 & 10 dark brown. Seg. 9 with yellow-brown basal band covering approx. 2/3 of the segment length; the band is incised to approx 1/2 its length by a narrow, pointed extension from the dark brown basal ring. Appendages of complex structure, shaped as in Figures 3 & 4; their length being very slightly less than the length of segments 9 & 10 combined. Colour of appendages brown; the inferior pair pale brown laterally, becoming translucent medially. Superior appendages with a strong dorsal spine situated approximately halfway along its length. The left superior appendage has what would appear to be an aberrant group of long hairs arising from the dorsal surface of the spine.

FEMALE unknown.

DISCUSSION

LIEFTINCK (1965) divided the West Malaysian Drepanosticta species into two groups, principally upon the presence or absence of a "brush- or beard-like tuft of hairs" on the inner, distal portion of the superior appendage. The new species, without such a tuft of hairs, would therefore fall within the D. quadrata, sharpi and fontinalis group, but it differs from them significantly in a number of respects. The structure of the anal appendages are very distinctive, much more complex and the inferior apps are, relatively, more robust. Abdominal markings in the new species are also different; the lack of any blue colouration contrasts sharply as blue spots on the dorsum of segs 8 & 9 are a characteristic feature of the other three species.

It is quite likely that a diligent search of the Mt Berinchang area will reveal more examples of this interesting damselfly.

ACKNOWLEDGEMENTS

I would like to thank both Dr JAN VAN TOL (RNHL) and Dr MATTI HAMALAINEN for their valued comments and help when comparing the new species with representative *Drepanosticta* species in their care. Special thanks must go to RAY ANDRESS for his excellent drawings.

REFERENCES

ASAHINA, S., 1984. A list of the Odonata from Thailand, III. Platystictidae. Kontyu 52(4): 585-595.

- DAVIES, D.A.L. & P. TOBIN, 1984. The dragonflies of the world: A systematic list of the extant species of Odonata. Vol. 1. Zygoptera, Anisozygoptera. Soc. int. odonatol. rapid Comm. (Suppl.) 3: ix + 127 pp.
- LIEFTINCK, M.A., 1954. Handlist of Malaysian Odonata. A catalogue of the dragonflies of the Malay Peninsula, Sumatra, Java and Borneo, including the adjacent small islands. *Treubia* (Suppl.) 22: xiii + 202 pp.
- LIEFTINCK, M.A., 1965. Some Odonata of the genus Drepanosticta Laidlaw, chiefly from the Malay Peninsula (Platystictidae). Zool. Meded. 40: 171-185.