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A NEW *PRODASINEURA* Cowley FROM ZAMBIA (ODONATA: PROTONEURIDAE)

by

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ABSTRACT

Description of both sexes of *Prodasineura flavifacies* spec. nov. from North Mwinilunga, N.W. Zambia. Near *P. vittata* (Selys) and *P. odzala* Aguesse. Variation in length of the anal vein suggests that *Prodasineura* is probably, in reality, only a subgenus of *Elatoneura* Cowley.

INTRODUCTION

Five African species of *Prodasineura* Cowley (1934) have previously been recorded: *P. vittata* (Selys, 1886), described originally in *Disparoneura* Selys (1860); *P. villiersi* Fraser (1948); *P. incerta* Pinhey (1962a); *P. perisi* Comte Sart (1964) and *P. odzala* (Aguesse, 1966), described as a *Disparoneura*. All are from equatorial Africa. The type species, *P. dorsalis* (Selys, 1860) is Oriental. All the African ones except *odzala* are represented in the collections of the National Museum, Bulawayo.

The new Zambian species was found in the Ikelenge district of North Mwinilunga, N.W. Zambia, on National Museum expeditions in 1963 and 1965. Since only 2 ♂ and 1 ♀ were collected altogether, the description has been delayed in the hope of obtaining more material. This has not been possible. A distinctive feature of the male is the yellow face.

References

- N.B. For references prior to 1960, see Pinhey (1962b).
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DESCRIPTION

PRODASINEURA FLAVIFACIES spec. nov. ("yellow face")

Fig. 1.

Holotype, mature ♂ (Isombo River). Approximately the size of the common *Elattonneura glauca* (Selys, 1860); thorax, abdomen at base and on terminal segments with traces of white pruinosity.

Labium black, yellow laterally. Anteclypeus dark brown. Rest of face and front of orbits to upper level of frons, yellow (Fig. 1a); a black basal dot on labrum and a fine black basal line on postclypeus. Remainder of head above and posteriorly, as well as the orbits, black.

Prothorax (Fig. 1b) black; anterior collar, lateral tumours, central twin-spots on middle lobe, and lateral corners of hindlobe all orange to orange-yellow. Synthorax black down to first lateral (mesothoracic) suture, and slightly below this at dorsal end; with complete narrow, pale green antehumeral stripes (possibly bluer in life); sides pale green to greenish yellow, with a continuous black band, broadened ventrally, on second lateral suture (metathoracic). Sternites greenish yellow with black lateral margins and central dots.

Legs black, with slight pruinosity, yellow anteriorly in basal zone.

Venation black, pterostigmata black, finely edged with yellow, between black veins. Forewing with 12-13 Px, hindwing 11-12. Anal vein extending to about two-thirds of sub-quadrangle in three wings, but only one-third in left forewing. This is a sign of instability, not infrequent in *Prodasineura*.

Abdomen black with yellow lateral fasciae: segment 1 with a yellow antero-ventral triangle and a trilobed lateral fascia, one of its arms extending dorsad. Segment 2 with an inverted lateral "7"; segments 3-6 with latero-basal spot followed by a decreasing yellow line; segment 7 with only the basal spot. Segment 9 with a post-dorsal spot; 10 with a dorsal yellow saddle.

Anal appendages formed like the *Elattonneura* Cowley (1936) group, black; the superior appendage bearing a single, well curved ventral tooth. Prophallus simple, as in some *Elattonneura*.

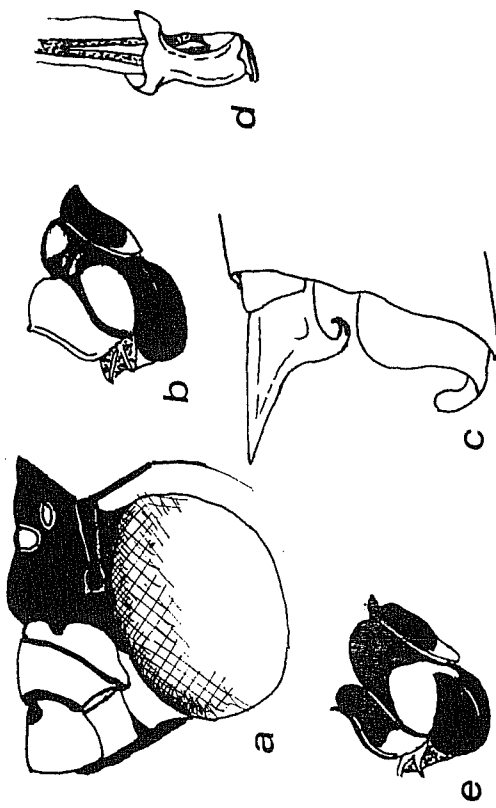
Abd. (without append.) 27 mm, hindw. 19 mm.

The mature paratype ♂ differs in having a minute black, antero-lateral dot on postclypeus; thorax with slightly more lateral pruinosity and the synthoracic pale markings greener. Forewing with 13 and 12 Px.

Allotype, mature ♀. No pruinosity.

Labium black, pale yellow posteriorly and laterally. Labrum, genae and front of orbits glossy black; anteclypeus brownish black. A yellow transverse band covers the whole postclypeus and extends laterally across the frons and orbits, but it is finely broken on centre of frons. Remainder of head and orbits black.

Prothorax black, except a broad greenish-yellow lateral band, which extends on to the lateral ends of the hindlobe. There are no stylets, but the hindlobe is divided medially by a U-shaped invagination which probably takes the effective place of stylets in tandem linkage. Synthorax as in ♂ but the antehumeral stripe still more slender and the sternites, although black at sides, have no central dots.



1. *Prodasineura flavifacies*. ♂: a. left side of head, showing the yellow face; b. left side of prothorax; c. anal appendages, from right; d. prophallus of holotype. ♀: e. left side of prothorax.

Legs as in male. Wings as in male, but the anal vein is longer, sloping almost to level of distal end of sub-quadrangle in left forewing and right hindwing, and distinctly to the end in the other two wings; almost like an *Elattonneura*. Forewing with 15 Px, both sides, hindwing with 14 Px.

Abdomen black, marked with yellow as in male, but segments 8-10 with narrow, mid-dorsal yellow line. Cerci broadly conical, slightly shorter than segment 10.

Abd. 29,8 mm, hindw. 20 mm.

This North Mwinilunga species is readily distinguished in the male by its yellow face and is the only *Prodasineura* known in south-central Africa. The synthoracic pattern is similar to *odzalae*; the anal appendages nearer the black appendages of *vittata*, not the yellow ones found in other species. Females of the other species either have prothoracic stylets or modifications of the bisected hindlobe, as in the new *flavifacies*, but more strongly developed: for instance, in *vittata* and *perisi* the fractured portions of the hindlobe curve up to form stylets.

The variations in length of anal vein in male *flavifacies*, as in *incerta*, and the longer anal vein in the female, imply that *Prodasineura* is probably not a distinct genus, only a subgenus under evolutionary change (see Pinhey, 1962a: 27). However, this point will not be decided here, since it would necessitate a revision of the entire *Elattonneura* group of Protoneuridae.

Material. The three specimens were all taken in the Ikelenge district of North Mwinilunga, N.W. Zambia: holotype ♂ Isombo River, April 1963 (E. Pinhey); paratype ♂ Kanyita stream, March 1963 (E. Pinhey); allotype ♀ Kalla Farm swamp, 20 Jan. 1965 (E. Pinhey). Type series in National Museum, Bulawayo.

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