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A NEW SPECIES OF CHLOROLESTES (ODONATA) FROM NATAL

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(With 5 Text-figures)

THE specimens on which this work is based have been collected by ▲ myself in January 1954 in the Drakensberg range (Mont Aux Sources area). In their size and general habitus the insects resemble Chlorolestes elegans Pinhey (1950), but a careful comparison with Pinhey's type specimens in the Transvaal Museum showed that my specimens belong to a distinctly different species.

Chlorolestes draconica n.sp. (Fig. 1)

Description. Labium ochreous yellow, genae lemon yellow, labrum metallic green, anteclypeus pale ochreous yellow with two darkly marked incisions on anterior edge, post-clypeus, frons and vertex metallic green, occiput black laterally, yellow medially.

Pronotum velvety black with green metallic sheen and with lemon-yellow dorso-lateral longitudinal bands. The posterior edge of the pronotum is drawn out into a broad almost rectangular lobe with distinct angles and subparallel sides (Fig. 2a). Thoracic dorsum very bright metallic green with bright lemonyellow humeral stripes; the latter cross the humeral suture leaving a strip of metallic green above the suture anteriorly and passing completely on to the mesepimeron at posterior end (Fig. 2b). Most of the mesepimeron metallic green. Part of the metepisternum also metallic green, but anterior end including the area of the metastigma, a strip at the lower edge, and cuneiform spot at postero-dorsal angle yellow. Metepimeron light yellowish with black upper edge, covered by heavy whitish pruinosity in mature specimens. Legs black on lateral surfaces and brown on mesial surfaces.

Wings hyaline with a light yellow tinge, especially distinct on petioles and at anterior edges. Pterostigma elongate, 2·8-3·1 mm., covering 3½-5 cells, distinctly bicolorous, black proximally and yellow to reddish brown (depending on degree of maturity) distally. No banding on wings of available specimens. R_{4+5} at subnodus (see Fig. 1). The cell between R_1 and R_{2+5} is often crossed, but there is much variation in this respect, even between right and left wings of the same specimen.

Abdomen dorsally metallic green with yellow mid-dorsal line on segments 2-5 (Fig. 2c). An indistinct transverse crescentic black spot near posterior edge of each segment, distal to which the median line becomes abruptly narrower. Heavy bluish pruinosity on proximal part of tergite 1 and on tegites 9 and 10. Abdomen ventrally light brown with black mid-ventral line. Posterior edge of 10th tergite cut out medially and projecting backwards dorso-laterally (Fig. 4b); the projections marked with reddish brown.

The Q is very similar to the d in coloration, but there is no pruinosity on the

Material. Holotype 3, Mt. Aux Sources, Gorge, (Natal), 29 January 1954; Allotype Q, Mt. Aux Sources, Gudu River (Natal), 31 January 1954; and two Paratype of from the same area, in the Transvaal Museum collection. Further Paratype specimens (333 and 19) in the private collection of the author.

Remarks. The possession of a hook at the end of the penis, of bifid inferior anal appendages, and the subnodal position of R₄₊₅ place C. draconica in the fasciatatessellata-longicauda group (Barnard, 1937). My species shows the greatest affinity to C. elegans Pinhey (1950). In common with this latter species it has the inner lobes of the inferior anal appendages reduced to strongly chitinized spines, and flattened and rounded posteriorly outer lobes of the same. There are, however, numerous distinctions between the two species.

(1) The lateral lobes of inferior anal appendages are narrower in the middle and broadened towards the ends in C. draconica, of approximately uniform breadth in C. elegans.

(2) The superior anal appendages are uniformly curved in C. draconica, bent

at an angle in C. elegans,

(3) The fossa at the end of the penis appears to be shorter and much wider in C. draconica than in C. elegans (as seen in preparation of the penis mounted with Pinhey's holotype).

(4) The posterior edge of the pronotum projects in the form of a rectangular

lobe in C. draconica; it is curved posteriorly in C. elegans.

(5) The pterostigma in C. draconica is distinctly longer: 2.8-3.1 mm. as against 2.3-2.55 mm. in C. elegans (measured with the aid of an ocular micrometer on Pinhey's type specimens—Pinhey gives the length as 2 mm.).

(6) The abdomen in C. draconica is slightly shorter than in C. elegans,

42-45 mm. in 33 as against 46-47 mm. in the latter species.

(7) The abdomen/hindwing ratio is slightly lower in C. draconica: 1.32-1.41 as against 1.4-1.5 in C. elegans.

(8) The yellow humeral stripe crosses the humeral suture in C. draconica,

whilst in C. elegans it follows the humeral suture on both sides. (9) In C. draconica the metallic green is present on the metepisternum, whereas

it does not spread beyond the 1st lateral suture in C. elegans.

(10) The light (yellow) mid-dorsal stripe on the abdomen is present in C. draconica, absent in C. elegans.

(11) The posterior edge of the 10th abdominal tergite is sinuate in C. draconica, almost straight in C. elegans.

(12) The posterior protrusions of the 10th abdominal tergite are marked with reddish brown in C. draconica, but the posterior edge of the same tergite is black without markings in C. elegans.

ACKNOWLEDGEMENTS

I am very grateful to the administration of the Transvaal Museum for granting me facilities to study Pinhey's type specimens of C. elegans, and more especially to Dr G. van Son, of the Transvaal Museum, for valuable advice in the course of this investigation.

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oth and toth territes of the abdomen. The shape of the proportion is the same in

both sexes. The posterior edge of the 10th tergite is evenly convex in the Q, not

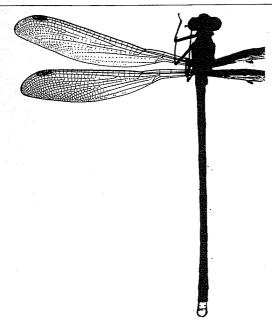


Fig. 1. C. draconica n.sp., holotype of (magnified by about 1.4).

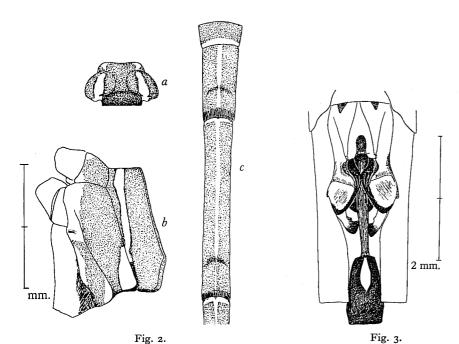


Fig. 2. C. draconica n.sp., a, prothorax, dorsal view; b, synthorax, lateral view; c, 1st, 2nd, 3rd, and beginning of 4th abdominal segments, dorsal view.

Fig. 3. C. draconica n.sp., accessory genitalia of 3.

sinuous. Cerci slender, brown with black tips.

Genitalia, 3. Posterior hamules with distinct subterminal notch on inner edge (Fig. 3). Penis (Fig. 4) with short and broad fossa subterminally, and with a terminal hook, partially covered by the membraneous flap at the tip of the penis.

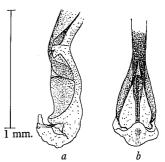


Fig. 4. C. draconica n.sp., terminal part of penis in lateral (a) and ventral (b) view.

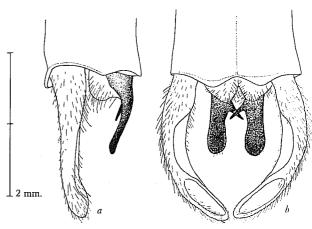


Fig. 5. C. draconica n.sp., 10th abdominal segment of $\mathcal S$ with anal appendages in lateral (a) and dorsal (b) view.

Superior anal appendages without teeth or lobes on inner margin, evenly curved in the horizontal plane, the tips only slightly bent downwards (Fig. 5). Inferior anal appendages bifid, outer lobe flat, broadened posteriorly and rounded at the tip, inner lobe reduced to a strong spine pointing inwards and slightly dorsad (Fig. 5).

Abdomen	ð	42–45 mm.	2	42-42·5 mm.
Hindwing length	ð	31–34 mm.	우	34 mm.
Hindwing breadth	♂	6–6·5 mm.	우	6·5 mm.
Ratio abdomen/hindwing	♂	1.32–1.41	우	1.23-1.25

Localities. Found along streams on the eastern slopes of the Drakensberg in the Mont Aux Sources area, only at higher altitudes, as on Gudu River, just below the Gudu Falls, and on the Tugela River above the Tugela Gorge.