

# Studies in Afrotropical Cleomenini (Coleoptera, Cerambycidae, Cerambycinae) V. Description of *Iridoclava congolensis*, a new genus and species from Democratic Republic of Congo

ANDERS BJØRNSTAD

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A new genus and species, *Iridoclava congolensis* **gen. n., sp. n.** from Democratic Republic of Congo is described. The genus differs from other genera in the Cleomenini by its strongly clavate scapi and by the males having 12-jointed antennae twice as long as the body. The relationship between *Iridoclava* **gen. n.** and *Hexarrhopala* Gahan, 1890 is discussed.

Key words: Coleoptera, Cerambycidae, Cleomenini, *Iridoclava*, new genus, *Iridoclava congolensis*, new species, Democratic Republic of Congo.

*Anders Bjørnstad, Høyåsstien 12, NO-3727 Skien, Norway. E-mail: andbjo4@online.no*

## Introduction.

During the author's study of Afrotropical Sestyrini/Cleomenini (Bjørnstad 2013 a–c, 2014) requests were forwarded to different museums hosting collections of African longhorns. The Musée royal de l'Afrique centrale, Tervuren (MRAC) sent a series of six specimens from the Democratic Republic of Congo very different from other known genera of this tribe. These specimens had tentatively been labelled as "*Hexarrhopala* sp?", but they exhibit several important characters, which does not fit the description for this genus. A description of the new genus will be given below.

Collections acronyms. ABS = Coll. Anders Bjørnstad, Skien, Norway; MRAC = Musée royal de l'Afrique centrale, Tervuren, Belgium

## *Iridoclava* **gen. nov.**

**Type species.** *Iridoclava congolensis* sp. n.

**Description.** *Head.* Mandibles strong with an irregular broad base and an almost straight glabrous and shiny apex. Maxillary palpi

reddish brown with ultimate segment widened in the middle and being 1.5 times as long as the penultimate. Labial palpi darker brown with end segment terete and twice as long as wide. Frons nearly rectangular. Eyes finely faceted with strongly convex suborbicular inferior lobes, very small and narrow superior lobes. Antenna tubercles rounded.

*Antennas.* Scapus relatively long, almost reaching anterior end of pronotum, strongly clavate, smooth.

The antennae are 12-jointed and twice as long as the body in males, 11-jointed in females barely reaching elytra apices.

*Pronotum.* Slightly longer than wide in males, slightly shorter than wide in females. Strongly convex both laterally and dorsally with greatest width well behind the middle. There is a small constriction behind the anterior rim of the pronotum, especially in the males.

*Scutellum.* Almost semi-orbicular, glabrous and glossy, but with a fine microstructure.

*Elytra.* Acostate to weakly costate and with rounded apices. Almost parallel-sided in males,



**FIGURE 1.** *Iridoclava congolensis* gen. n., sp. n. HT ♂. 11 mm. (MRAC). Photo: Karsten Sund (NHM, Oslo).

gradually widened posteriorly in females with the greatest width in the apical fifth.

*Legs.* All femora acarinate and clavate. Protibiae curved meso- and metatibiae straight. Tarsi with first segment only slightly longer than the second in protarsi, but 1.5 times longer in metatarsi.

*Ventral surface.* Anterior half of gula smoothly wrinkled and with a few scattered, very thin cilia-like hairs. Posterior part of gula smooth, glabrous. Prosternum more or less smooth, sparsely

ciliate, weakly transversally folded and with a short triangular process. Mesosternum smooth, virtually glabrous with a short, blunt toothlike mesosternal process. Metasternum with a fine microstructure and with long and erect cilia-like hairs. Abdominal sternites with similar surface and tomentum.

**Etymology.** *Irido-* is the combining form referring to the iridescent blue, violet and green colours of head, pronotum, antennae, legs + apical part of elytra; *-clava* is Latin for club, referring to



FIGURE 2. *Iridoclava congolensis* gen. n., sp. n. PT ♀. 17 mm. (ABS) Photo: Karsten Sund (NHM, Oslo).

the shape of the scapi. *Gender*. the gender of the generic name is *femininum*.

***Iridoclava congolensis* sp. n.** (Figures 1, 2)

**Types species.** *Holotype*: ♂ [R.D. Congo] Mayidi. Rev. P. Van Eyen -1942. Coll. Mus.Congo in Coll. MRAC. *Paratypes*: 1♂ with data as HT; 1♂1♀ Musee du Congo. Sankuru: Kondue. Coll. Ed. Luja in Coll.MRAC [the ♀ with the ink label

‘*Ferranti Hintz*’]; 1♂ Musee du Congo. Kasai. L. Achten in Coll. MRAC; 1♀ Coll.Mus.Congo. Yangambi. IV.1960. J. Decelle in Coll. ABS (AB 49861) ex Coll. MRAC.

**Description.** Length: 9–17 mm.

*Habitus*. Medium-sized with iridescent colours in green and blue on head, pronotum and extremities; elytra rufous with deepblue apices.

*Head*. Frons with an irregular, but shiny surface and a deep median fissure. Genae shiny, nearly glabrous. Vertex with scattered punctation practically without any tomentum.

*Antennas*. Iridescent cobalt blue. Scapi shiny with an almost smooth surface except for a few scattered and very shallow punctations, each equipped with a short bristly hair. The rest of the antennae show strong sexual dimorphism. In the *males*, the antennae are 12-jointed, twice as long as the total body length. All antennomeres 2–12 are terete with dark swollen apices. The ultimate joint has a slightly hooked tip with a fine apical brush of stiff yellowish hairs. Antennomere 5 the longest, 8<sup>th</sup>–11<sup>th</sup> joint of equal length. Antennomeres 3–6 ventrally with long erect but scattered ciliae; this ciliation gradually less on remaining joints. In the *females*, the antennae are 11-jointed and almost as long as the body. Antennomeres 3–5 of almost equal length, from then onwards gradually shortened. Antennomeres 2–6 are terete, the remaining last five compressed, and joints 7–10 each with one apical tooth. Ciliation as in males.

*Pronotum*. The pronotal disc is shiny metallic green, but deeply punctate. A long hyaline cilium or seta arises from the centre of each of the depressions.

*Scutellum*. Shiny green.

*Elytra*. The surface of the elytra is deeply punctate, but without any tomentum except for a few erect, bristly hairs along posterior margin. The elytra are largely rufous, but with varying amount of blue in posterior part.

*Legs*. With shiny blueish femora. The femora have a smooth surface and are largely glabrous, but meso- and metafemora with a ventral brush of stiff hairs. Tibiae with an even cover of short erect to semiadpressed hairs. Tarsi purplish brown.

**Distribution.** Democratic Republic of Congo.

## Discussion

The first part of the headline in this publication series has been titled “Studies in Afrotropical Sestyrini”. The African genera in this group have formerly been referred to the tribe Cleomenini Lacordaire, 1868. Bousquet *et al.* (2009) synonymized Cleomenini with Sestyrini Lacordaire, 1868, and therefore this was used in the preceding publications (Bjørnstad 2013a,b,c). Dan Heffern, one of the co-authors of the Bousquet- publication has kindly informed me that the synonymization was based on incomplete knowledge of the underlying publication history and advised that prevailing usage should be given priority until this taxonomic confusion is solved (Heffern 2014 pers. comm.). The prevailing usage for the African genera is Cleomenini Lacordaire, 1868. The forthcoming papers in this series will therefore be published under the heading “Studies in Afrotropical Cleomenini”.

**Related genera.** The new genus shares with *Hexarrhopala* Gahan, 1890 (and some untypical *Apiogaster* like *A. collare* Jordan, 1903) the possession of long, erect cilia arising from pitlike depressions over large parts of the body and extremities. However, the differences are many: *Iridoclava* lacks the median carina of the pronotum found in *Hexarrhopala* (and some untypical *Apiogaster*). Further, the mesosternal process in *Hexarrhopala* is long and tongue-shaped, while in *Iridoclava* it is short and toothlike. The end segment of the maxillary palpi is somewhat compressed, broad and short in *Iridoclava*, while in *Hexarrhopala* it is terete, long, and slender. The most obvious difference however, lies in the structure of the antennae: in *Hexarrhopala*, as well as in *Apiogaster* and *Dere* White, 1855 the antennae are contracted and thickened, always shorter than the body. In *Iridoclava* the male antennae are filiform and twice as long as the body. Besides, the scapi (or scapes) in *Iridoclava* are smooth and strongly clavate, a trait never found in the other three genera.

## Zoogeography, ecology, biology

The records of *Iridoclava congolensis* sp.n. cover a large area in the Congo Dem. Rep. (Congo Centrale, Kasai, Sankuru and Tshopo provinces), but restricted to the part belonging to the Guineo-Congolian Regional Centre of Endemism (White 1983). It has not been recorded from the Southeastern parts of the country (Katanga) belonging to the Zambezian Regional Centre of Endemism. *Iridoclava* thus belongs to the equatorial rain forests, but nothing is known about its biology.

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