

Antennal morphology: the so odd *Dendrokara* case (Hemiptera Derbidae)

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Abstract

From a morphological point of view, planthoppers have already delivered some of the most surprising and extraordinary morphological structures. Between these, antenna have retained interest because of the large sensory plate organs of the antennal pedicel. A first review of the different types known, evolved from a proposed plesiomorphic form and including a morphological terminology to use, were published by Bourgoïn & Deiss (1994). These results were completed later by a study of the flagellum by Shih & Yang (1996) in Cixiidae and several others but punctual studies have been published since.



Fig 1. *D. monstrosa* Melichar, 1914, frontal view. Fig 2. *D. monstrosa* Melichar, 1914, right antenna, SEM photo, x 160. - Fig 2. *D. monstrosa* Melichar, 1914, left side.

Derbids antennae are already well known for their unusual aspects, often genus specific, but they have been poorly investigated from a precise morphological point of view. Particularly, while incidentally noticed by Melichar (1914) when he described the genus and named two species, the so odd and fantastic case of the endemic Philippine genus *Dendrokara* has never been studied in detail. We take here the opportunity of the recent collecting of a few

specimens of these genus to deliver in advance of publication, the results of a SEM study of these extraordinary antennae. The most noticeable data are:

- the presence of a postero-antennal carina bearing a scale-like lamella
- a long scape directed anteriorly
- a pedicel bearing three long barbed wire-like autapomorphic appendices bearing elongated sensory plate organs modified from the supposed (Bourgoin & Deiss, 1994) plesiomorphic projected setae-like type and showing sexual dimorphism
- sensory plate organs of the type
- a flagellum relatively short, with a fringed opening of Bourgoin's organ.

References

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