



### **First record of *Gynacantha millardi* (Odonata: Aeshnidae) from Sri Lanka**

Sri Lanka is a tropical island in the Indian Ocean, with a land area of 65,610 km<sup>2</sup>. In spite of its small size, the island has a variety of ecosystems with significant species diversity (MOE, 2007). There are 124 dragonfly and damselfly species identified from the island; 49.2% of them are endemic to Sri Lanka comprising 52 species and 9 subspecies (Bedjanić *et al.*, 2014). Although a listing of 124 species is substantial, not all species are common; some may be widespread and uncommon.

The first two authors observed a *Gynacantha millardi* Fraser, 1920 male specimen (Fig.1.a, b, c, d, e) in the dry zone of Sri Lanka, in Bodigama, Uva province/Kuda Oya in Monaragala District (06°32'15.6"N, 081°07'18.3"E; alt. 188 m a.s.l.) on 5 January 2015 at 06:33 PM. *Gynacantha millardi* has not been recorded in Sri Lanka previously though it is common in India (Fraser, 1936). Only a single species of *Gynacantha* has been recorded from Sri Lanka i.e. *Gynacantha dravida* Lieftinck, 1960 (MOE, 2012; Bedjanić *et al.*, 2014). Fraser (1936) illustrated the anal appendages of the male and provided a description of *G. millardi*. The features of the newly captured specimen completely match with Fraser's description of the adult male. The new specimen is deposited in the research laboratory of the National Wildlife Research and Training Center (NWRTC), Giritale, Sri Lanka; under the voucher number DBM008. With this new record the number of *Gynacantha* species from the island goes up to two while the species checklist of the Odonata of Sri Lanka reaches 125.

Prior to February 9, 2015, the World Odonata List (Schorr & Paulson, 2015) listed *G. millardi* as a synonym of *G. bayadera* Selys, 1891 though the source of this could not be traced (D.

Paulson, pers. comm.). Though *G. millardi* is recorded as being common in India in Poona and the Coorg (Fraser, 1936), it does not appear in the most recent checklist (Subramanian, 2014) because the author followed the World Odonata List (Subramanian, pers. comm.). Jan van Tol (pers. comm.) shed some light on the matter: he suggested that the confusion may have arisen due to comments in Lieftinck (1930). Lieftinck wrote that a specimen of a female from Java that had been identified as *G. millardi* in Fraser (1926) was certainly that of *G. bayadera* but since this comment was listed under the synonym listing it may have been interpreted to mean that *G. millardi* was a synonym of *G. bayadera*, rather than that a single specimen had been misidentified. Fraser (1926) did note that the specimen differed in some respects from that of *G. millardi*. Further, van Tol translated a manuscript note of Lieftinck's that indicates that Lieftinck considered *G. millardi* and *G. bayadera* to be two distinct species though they have some similarities.

The outcome of these discussions and a review of the literature leads us to accept that *G. millardi* is a valid species, and not a synonym of *G. bayadera*. Paulson has indicated (pers. comm.) that in the light of this information, he will amend the World Odonata List to indicate *G. millardi* as a valid species and not a subspecies of *G. bayadera*. Further studies including molecular work will hopefully be undertaken to settle the matter conclusively.

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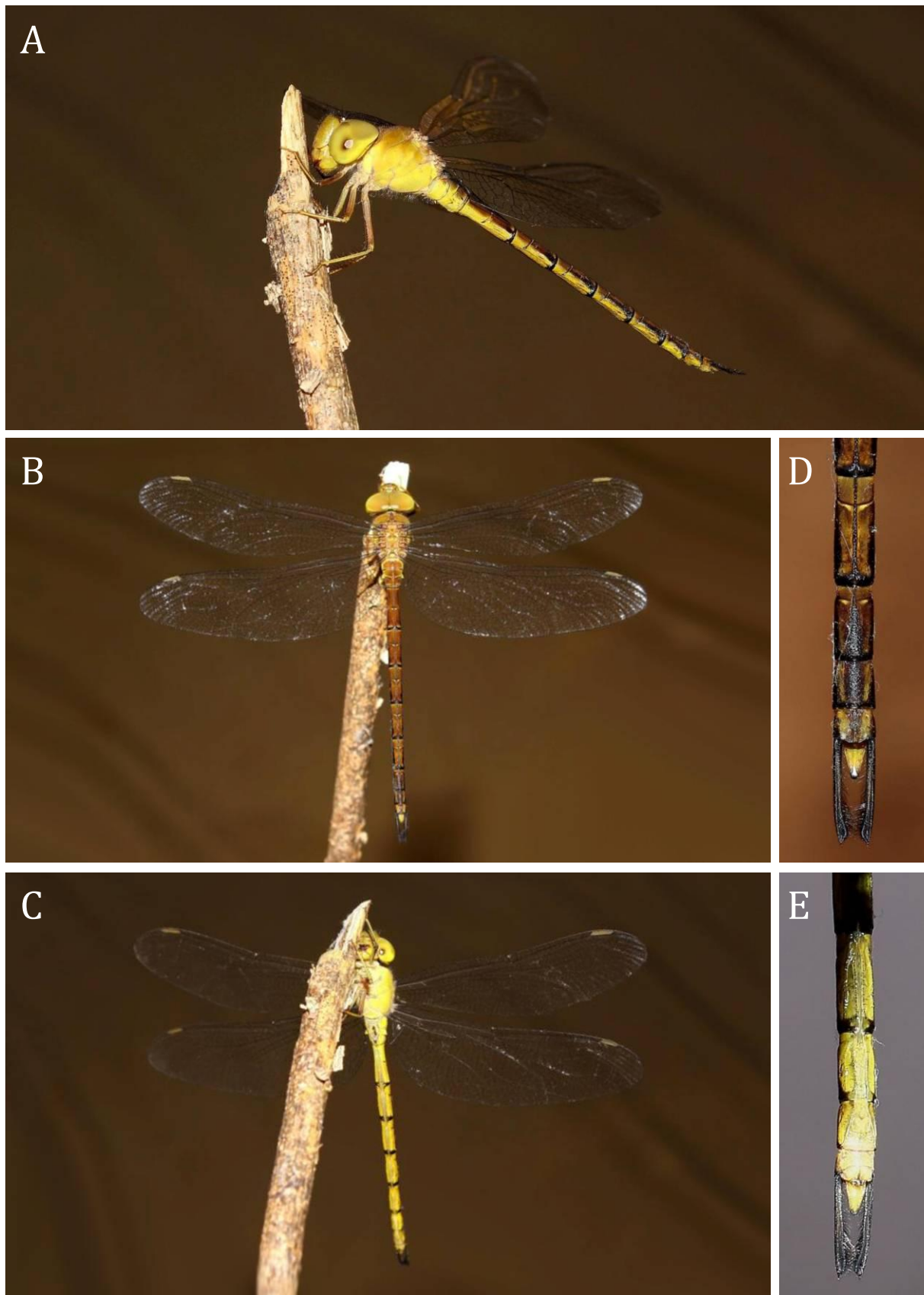
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# PLATE 12



**Figure 1:** *Gynacantha millardi* male specimen recorded from Sri Lanka (A) lateral view, (B) dorsal view, (C) ventral view, (D) dorsal view of anal appendages, and (E) ventral view of anal appendages.