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## The larva of the genus *Palaeosynthemis* Förster, 1903 (Odonata: Anisoptera: Synthemistidae) and a generic key to the larvae of non-New Caledonian Synthemistidae

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### Abstract

The larva of *Palaeosynthemis* Förster, 1903, based on *P. cyrene* (Lieftinck, 1953), is described and illustrated for the first time. A diagnosis of the genus is given. A larval generic key to all known non-New Caledonian genera of Synthemistidae is provided.

**Key words:** larva, *Palaeosynthemis cyrene*, generic diagnosis, Synthemistidae, Gomphomacromiinae, Papua New Guinea, dragonfly

### Introduction

Förster (1903) established *Palaeosynthemis* as a subgenus of *Synthemis* for *Synthemis* (*Palaeosynthemis*) *primigenia*, Förster, 1903. Carle (1995) considered *Palaeosynthemis* as a genus of its own comprising eight species in addition to the type species: *P. alecto* (Lieftinck, 1953), *P. cervula* (Lieftinck, 1938), *P. cyrene* (Lieftinck, 1953), *P. evelynae* (Lieftinck, 1953), *P. feronia* (Lieftinck, 1938), *P. gracilentia* (Lieftinck, 1935), *P. kimminsi* (Lieftinck, 1953), and *P. wollastoni* (Campion, 1915). The *Palaeosynthemis* species are endemic to the Papuan region and their larvae were hitherto unknown.

Several synthemistid larvae were collected in apparently permanent small streams in Eastern Papua New Guinea. The successful rearing of some of them allows us to describe the last instar larva of *Palaeosynthemis cyrene* and to propose the first larval diagnosis of the genus.

### Material and methods

Abbreviations: F-0 and F-1, respectively ultimate and penultimate larval stadia; S1-S10, abdominal segments 1 to 10.

**Material studied:** 3 F-0 exuviae (reared, two ♂ and one ♀) and 2 F-0 larvae (one ♂ and one ♀), Papua New Guinea, Woitape (8°37'S, 147°14'E), about 1550 m asl, 7–10.XII.2004, G. Fleck coll.

### *Palaeosynthemis cyrene* (Lieftinck, 1953)

**Description (F-0).** Larva of typical synthemistid type, elongated and rather robustly built, with general color of the body brownish and abdomen remarkably patterned with green, yellow and orange with white spots (Figs. 1, 2); larva covered by small scale-like setae and distinctly pilose, with long and strong pale setae predominantly distributed on frontal margin, on lateral parts of the body, and on trochanters, femora and tibiae.