

The first record of *Anax ephippiger* for Thailand and Southeast Asia (Odonata: Aeshnidae)

Andrew J. Pierce

Conservation Ecology Program, School of Bioresources and Technology, King Mongkut's University of Technology Thonburi, Bangkhunthien, Bangkok 10150, Thailand; andyp67@gmail.com

Abstract. *Anax ephippiger* is reported from Thailand for the first time on the basis of photographic records. On 28-ix-2016 one male was found on the outskirts of the village of Saphli, Chumphon province in southern Thailand. *Anax ephippiger* was previously unrecorded in Southeast Asia, being the sixth species in the genus to have been recorded in Thailand.

Further key words. Dragonfly, Anisoptera

Introduction

The genus *Anax* Leach, 1815 currently comprises 31 species (SCHORR & PAULSON 2016), of which five species have been recorded in Thailand, viz. *A. guttatus* (Burmeister, 1839), *A. immaculifrons* Rambur, 1842, *A. indicus* Lieftinck, 1942, *A. nigrofasciatus* Oguma, 1915, *A. panybeus* Hagen, 1867 (cf. HÄMÄLÄINEN & PINRATANA 1999; YEH 1999).

Anax ephippiger (Burmeister, 1839) is native to much of Africa and extends over parts of Central Asia and the Arabian peninsula into the Indian subcontinent. It is an obligate migrant, which spreads north with the seasonal monsoon fronts into southern Europe (cf. KALKMAN & MONNERAT 2015). Some years these migrations take it as far as the United Kingdom, the Faroe Islands, Iceland and Japan (NORLING 1967; UGAI 1996; PARR 2011; JENSEN & NIELSEN 2012; OZONO et al. 2012). The species has even been recorded in Brazil (KALKMAN & MONNERAT 2015) and in the Caribbean it is meanwhile considered as well established (LAMBRET & BODOT 2013; PAULSON et al. 2014). There are, however, no previously documented records for Southeast Asia and this represents the sixth *Anax* species recorded in Thailand.

Study site and methods

The observation was made on the 28-ix-2016 near the village of Saphli, Chumphon province, southern Thailand (10.601490°N, 99.273078°E) on an area of ca 50 m² of concrete where locals come to feed a habituated group of Long-tailed Macaques *Macaca fascicularis*. The area is surrounded by some shrimp ponds and low scrub, less than 5 m tall, with a narrow fringe of degraded mangroves along a small tidal creek, Lam Nak, within 1 km of the coast.

Results

As I was photographing one of numerous migrant *Pantala flavescens* (Fabricius, 1798) present I heard another larger dragonfly's wingbeats as it fell onto sparse vegetation at my feet. It was pinning a *P. flavescens* to the ground and I was able to take a few pictures before it flew off high and out of sight. The following characters recognizable from Figure 1 are diagnostic for *A. ephippiger*: 1) Frons with black bars on crest and at base, without orthogonal connection stripe (no 'T'-marking). 2) Thorax and eyes brown. 3) Abdomen with blue 'saddle' on S2; S8–10 with paired



Fig. 1. *Anax ephippiger* male preying on *Pantala flavescens*. Near Saphli, Chumphon, Thailand (28-ix-2016). Photo: AJP

spots. 4) Upper appendages taper to sharp point. 5) Cubital field with 3 cell-rows, i.e., with several cells enclosed between the field's 2 cell-rows. This combination of characters rules out congeners, including the closely related *A. papuensis* with which *A. ephippiger* is often placed in the genus *Hemianax* Selys (cf. PETERS 2000; THEISCHINGER & HAWKING 2006; BOUDOT 2013). No other sightings were made on that day or subsequently despite brief searches by myself and others.

Discussion

Despite its wide distribution and tendency for vagrancy *A. ephippiger* had not previously been recorded in Thailand or elsewhere in Southeast Asia. *Anax* species are powerful fliers and are often difficult to photograph or see perched both of which make identifying them difficult. In this case I was lucky that it landed with prey in front of me allowing significant records shots to be made. Although there is some scepticism concerning the use of photographic records for scientific purposes the advent of affordable digital photography has opened up a vast potential for the documentation of wildlife by both academics and amateurs. As discussed in DAY et al. (2012) such data cannot be disregarded. If accompanied by appropriate details of the locations, dates and habitat etc., such records can be an invaluable source of information on species distributions (cf. PEELS 2014). This is particularly important with the rapid decline in species habitats, the reduction in the amount of scientific collecting taking place and, perhaps more pressing, documenting the effects of climate change.

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