

ADDITIONS TO THE ODONATE FAUNA OF THE ANDAMAN AND NICOBAR ISLANDS, INDIAN OCEAN

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Abstract — 9 spp. are recorded for the first time from the Andaman and Nicobar islands, of which *Neurothemis r. ramburii* and *Zyxomma obtusum* are new for the fauna of the territories of the Indian Union. New spp. for the fauna of each of the 2 island groups, the Andamans and the Nicobars, are also presented.

Introduction

The Andaman and Nicobar islands, situated in the eastern Bay of Bengal in the Indian Ocean are a group of 572 islands, islets and rocks, stretching between 6° and 14° N latitude. These islands experience both the SW and NE monsoons, lasting from the end of April to the end of November. Although the mean annual rainfall exceeds 3000 mm, there is a distinct dry period between February and mid April, when the majority of the fresh water sources dry up.

While evaluating the status of the natural history studies in the Andamans and Nicobars, McVEAN (1976) pointed out that with the exception of butterflies, all insect groups are poorly known on these islands.

We commenced these studies during the monsoon of 1996 and found a number of hitherto unrecorded species, not only from the relatively less surveyed islands like Great Nicobar, the southernmost island of the archipelago, but also from South Andaman, the island which has been studied most intensively for its biodiversity.

This report is the first of a series, aiming to comprehensively document the odonate fauna of these islands. This objective, however, cannot be achieved before a number of taxonomic puzzles concerning the endemic taxa will have been solved.

All the specimens reported here have been identified by the first author. Voucher specimens are deposited at the Central Agricultural Research Institute, Port Blair, India and in the collection of the first author.

Earlier publications

Although the first dragonfly species from these islands, viz. *Libellago blanda* (Hagen in Selys, 1853), was described soon after the first scientific visit to the area by the Danish corvette

Galathea in 1846, only a few scattered records became published before FRASER (1924) provided the first faunal list from the Andaman Islands, adding 9 species to the known fauna of the archipelago. Later CHHOTANI et al. (1983) reported on material in the Andamans and Nicobars collected in 1928 and in 1960's, and provided a total list of 34 species. LAHIRI & MITRA (1993) added 8 species as novelties to the Andamans and Nicobars and MITRA (1995) listed 11 additional species from the Great Nicobar island.

Species new to the Andaman and Nicobar islands

– *Ceriatrion a. auranticum* Fraser, 1922 (syn. *C. latericum* Lieftinck, 1951). – Great Nicobar: Campbell Bay, 12-XII-1996, 2 ♂. – Nearest to the Nicobars this species is known from Sumatra.

– *Pseudagrion pilidorsum* (Brauer, 1868). – Middle Andaman: Shyamkund, Nullah, 9-VI-1997, 1 ♂. – The subspecific status of the Andaman populations remains to be studied. Nearest in Sumatra.

– *Gynacantha bayadera* Selys, 1891. – Great Nicobar: Campbell Bay, 27-XII-1996, 1 ♂. – Earlier three other *Gynacantha* species have been reported from the islands, of which *G. hyalina* Sel. however, is likely misidentified.

– *Brachydiplax c. chalybea* Brauer, 1868. – South Andaman: Manpur, rice field, 24-VII-1996, 1 ♂; – South Andaman: Garacharma, C.A.R.I. Campus, 28-VII-1996, 1 ♀; – North Andaman, Keralapuram agric. farm, 23-X-1996, 2 ♂; – Great Nicobar, Campbell Bay, 12-XII-1996, 1 ♂, 23-XII-1996, 1 ♂. – It is strange that this apparently common species has so far remained unrecorded.

– *Cratilla lineata* (Brauer, 1878). – South Andaman: Mt Harriet, 25-VII-1996, 1 ♀; – Middle Andaman: Bakultala, Shyamkund Road, 10-XI-1996, 1 ♀. – In both specimens all wing tips are darkened. The subspecific status of the Andaman populations remains open until males have become available.

– *Neurothemis r. ramburii* (Brauer, 1866). – South Andaman: Sipighat, stream in dwarf coconut block, 24-VII-1996, 1 ♂; – Sipighat, WCGC entrance, 4-X-1996, 1 ♀; – Garacharma, C.A.R.I. Campus, 26-VII-1996, 1 ♀; – Wandoor, 14-V-1997, 1 ♂. – This widespread species is

new for the political territory of India.

– *Tramea transmarina euryale* Selys, 1878. – South Andaman: Mt Harriet, 27-VII-1990, 1 ♂; – Great Nicobar: Campbell Bay, 15-XII-1996, 1 ♂. – *Tramea virginia* (Ramb.) is also known from the area.

– *Zyxomma obtusum* Albarda, 1881. – Great Nicobar: Campbell Bay, 14/15-XII-1996, 2 ♂, 25-XII-1996, 1 ♀. – This species is also a new record for India. Sumatra is the nearest locality from where it is known.

– *Zyxomma petiolatum* Rambur, 1842. – Middle Andaman: Rangat, 8-XI-1996, 1 ♂; – South Andaman: Garacharma, C.A.R.I. Campus, 27-VII-1996, 1 ♀, 27-V-1997, 1 ♂. – This widespread species was to be expected on these islands.

Species new to the Andamans

– *Agriocnemis pygmaea* (Rambur, 1842). – North Andaman: Madhupur, 21-X-1996, 1 ♂, 1 ♀; – South Andaman: Wandoor, 8-X-1996, 1 ♂. – Earlier recorded from Great Nicobar by CHHOTANI et al. (1983).

– *Brachythemis contaminata* (Fabricius, 1793). – North Andaman: Diglipur, 21-X-1996, 1 ♂; – North Andaman: Madhupur, 21-X-1996, 1 ♂. – Reported from Great Nicobar by LAHIRI & MITRA (1993).

– *Rhyothemis v. variegata* (Linnaeus, 1763). – Little Andaman: 7 km from Hut Bay along the main road, 18-II-1996, 1 ♀ photographed. – LAHIRI & MITRA (1993) reported it as new from Great Nicobar. However, an old record from the Nicobars is also available.

Species new to the Nicobars

– *Ischnura senegalensis* (Rambur, 1842). – Great Nicobar: Campbell Bay, 20-XII-1996, 1 ♂, 1 ♀. CHHOTANI et al. (1983) listed it from South Andaman.

– *Agriocnemis f. femina* (Brauer, 1868). – Great Nicobar: Campbell Bay, 11/12-XII-1996, 5 ♀, 23-XII-1996, 2 ♂. – The recent material includes also specimens of *A. femina* from North, Middle and South Andaman. CHHOTANI et al. (1983) list this taxon as *A. femina oryzae* Lieftinck from South Andaman and LAHIRI & MITRA (1993) use the same name. The subspecific division of *Agriocnemis femina* within its vast range is still

unclarified. However, the Andaman and Nicobar populations cannot be linked with the subspecies *oryzae*, known from the northern part of the range of *femina* (Ryukyu islands, E China, Hainan and Taiwan).

— *Pseudagrion andamanicum* Fraser, 1924. — Car Nicobar: Tee Top, 9-XII-1996, 1 ♂; — Great Nicobar: Campbell Bay, 15-XII-1996, 1 ♂. — Originally described on basis of a pair from Mt Harriet, South Andaman. A revision of related taxa is necessary to find out the status of the widespread *P. microcephalum* (Ramb.) and *P. andamanicum*.

— *Lathrecista a. asiatica* (Fabricius, 1798). — Great Nicobar: Campbell Bay, 15-XII-1996, 1 ♂. — Listed by CHHOTANI et al. (1983) from South Andaman.

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