

Short Communication

First record of *Gynacantha limbalis* Karsch, 1892 from Thailand
(Odonata: Anisoptera: Aeshnidae)

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Abstract

Gynacantha limbalis Karsch, 1892 is reported for the first time from Thailand based on photographs taken at San Kala Khiri National Park, Songkhla province (Figure 1). This extends the northern limit of the species and increases the number of *Gynacantha* species recorded in Thailand to nine.

Keywords: Aeshnidae, dragonfly, *Gynacantha limbalis*, Odonata, Thailand

1. Introduction

Gynacantha Rambur, 1842 is a genus of dragonfly species distributed in the tropics and subtropics throughout the world (Asahina, 1986). All members of this genus are usually elusive and crepuscular, often seen hawking at dawn or just before and after dusk. Some species are attracted to artificial light at night (Orr, 2003). Globally, it comprises 95 species (Schorr & Paulson, 2019) of which eight species have been recorded in Thailand, viz. *G. basiguttata* Selys, 1882, *G. bayadera* Selys, 1891, *G. corbeti* Lempert, 1999, *G. demeter* Ris, 1911, *G. incisura* Fraser, 1935, *G. phaeomeria* Liefstinck (1960) *G. saltatrix* Martin (1909), and *G. subinterrupta* Rambur 1842 (Day, 2013; Hämäläinen & Pinratana, 1999).

Gynacantha limbalis is an uncommon species found in various habitats in Malaysia, Sumatra, Java and Borneo (Liefstinck, 1954; Orr, 2003, 2005). It is recognized by its large size (hindwing, 59-61 mm) and distinctive brown streak along leading edge of both wings (Orr, 2003, 2005). Even though it is widespread in Sundaland, there are few recent records of this species (Aziz, 2018; Choong, 2007; 2014; Dolný *et al.*,

2011; Norma-Rashid, 2009) and there are no previously documented records of this species for Thailand. Here we document the first such record from southern Thailand representing the ninth *Gynacantha* species for the country.



Figure 1. *Gynacantha limbalis*, 7 April 2019, San Kala Khiri National Park, Songkhla province, southern Thailand
Photo credit: A. J. Pierce

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2. Study Site and Observations

Observations were made on 7 and 8 April 2019 near the headquarter of the proposed San Kala Khiri National Park, Songkhla province, southern Thailand (6.328 °N, 100.925 °E).

While walking a narrow trail on 7 April 2019 AP flushed a dragonfly, which then landed a few meters away within 0.5 m of the ground. Being unfamiliar with the species some photographic record shots were taken from which NM was able to confirm its identity as *G. limbalis*. Under similar circumstances another individual was seen and photographed on 8 April a few hundred meters away from the first sighting. Both individuals were in dense, dark understorey and only flew when nearby vegetation (< 2 m away) was disturbed. The area of both sightings is well-forested old secondary growth but containing large amounts of tall bamboo more than 100 m away from any running water.

The shape and habits of *G. limbalis* were typical of the genus. Frons with black T-mark. Abdominal segment 3 strongly constricted. Cerci long and narrow with pointed apex. Epiproct about one third shorter than that of cerci and clear brown lines present on the leading edges of the both wings. These match well with the description in Orr (2003, 2005).

3. Discussion

The discovery of this species in southern Thailand not only increases the number of *Gynacantha* species in Thailand to nine, but also extends its distribution northwards. Hence it is now found in southern Thailand to Sumatra, Java and Borneo.

The dragonfly was observed twice incidentally while bird watching suggesting the species is not uncommon in the park but maybe easily overlooked as, like many of its congeners, it often spends much of its time inside forested areas away from water and is crepuscular when active. In addition, San Kala Khiri has yet to receive full National Park status and there are scant details of its wildlife. However, the area is increasingly visited by birdwatchers and AP observed two species during this visit, Large Green Pigeon *Treron capellei* and Red-throated Sunbird *Anthreptes rhodolaemus* which are considered vulnerable and near-threatened, respectively, by IUCN (2016). This emphasizes the importance of the proposed park and calls for better protection and conservation of it. Furthermore, intensive surveys are required to properly document its fauna and flora which, as this note shows, remain little known.

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