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# BIONOTES

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On Any Aspect Related with Life Forms

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Cover Photo of *Athyma nefte* by Rajib Dey

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## REPORT ON A LIVE GYNANDROMORPH OF THE COLOR SERGEANT BUTTERFLY *ATHYMA NEFTE INARA* (INSECTA: LEPIDOPTERA: NYMPHALIDAE) FROM INDIA

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Reviewer: Peter Smetacek

### Abstract

A gynandromorph of *Athyma nefte inara* (Westwood, 1850) was photographed in West Bengal, India. Gynandromorphism in *Athyma nefte inara* was first reported by Wankhar (2020), based on a single, unlabelled museum specimen from India. The present study confirms gynandromorphism in *Athyma nefte inara* in India.

**Keywords:** *Athyma nefte*, Colour Sergeant, developmental architecture, gynandromorphism, India.

### Introduction

Gynandromorphism is an abnormal architecture, resulting in chimeric individuals, which combine patches of both genetically male and female type tissues (Narita *et al.*, 2010). Based on an unlabelled museum specimen, Wankhar (2020) reported gynandromorph specimens of *Athyma nefte inara* (Westwood, 1850) and *Ixias pyrene* (Linnaeus, 1764) from the Wankhar Memorial Museum of Entomology at Riatsamthiah, Shillong, Meghalaya, India. Prior to this, Chaturvedi (1992) reported a gynandromorphy of *Curetis thetis* from India. To date, multiple papers have enlarged the knowledge of the occurrence throughout the world of butterfly individuals presenting phenotypically male and female parts (Emmel & Boender, 1990; Narita *et al.*, 2007; Bolino & Padron, 2016).

An opportunistic field survey was undertaken from 21.xi.2021 to 23.xi.2021 in low elevation dense forest of the Jayanti area in West Bengal, India. A single basking half female-half male *A. nefte inara* was sighted and photographed by all authors at the Indo-Bhutan Asiatic Elephant Corridor (26°42' N; 89°36' E), Jayanti river bed, West Bengal, India on 22.xi.2021 at about 12:30 PM. It was observed for more than two hours at the same place. This identity was confirmed using Kehimkar (2016).

### Results

The sex-related traits of the gynandromorph of *A. nefte inara* examined in the study, show that all distinguishing characteristics (Forewing (Fw) cell streak, Fw spot beyond cell, Fw and Hw discal band) of the left wing are female (bright orange), while all those of the right wing are male.

The authors observed that the female wings are rather larger than the male wings, as is normal for the species. Thus, the present record confirms the presence of gynandromorphism in *Athyma nefte inara* in India.

#### Acknowledgement

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Fig.1: Gynandromorph butterfly of *Athyma nefte inara* from Jayanti riverbed, West Bengal, India.