

**First occurrence of Silvery Hedge Blue *Celastrina gigas* (Hemming, 1928)
(Insecta: Lepidoptera: Polyommatinae) in West Bengal, India**

Primera aparición de *Celastrina gigas* (Hemming, 1928) (Insecta: Lepidoptera:
Polyommatinae) en Bengala Occidental, India

Rajib Dey¹ 

¹Amarabati Road, Madhyamgram, North 24 Parganas, West Bengal 700130, India.  rajibdey88@gmail.com

ZooBank: urn:lsid:zoobank.org:pub:975F4E91-2A56-4DD1-A859-731C16530BA6
<https://doi.org/10.35249/rche.47.2.21.07>

Abstract. *Celastrina gigas* is recorded for the first time from Jayanti riverbed (26°41'57" N, 89°36'36" E). The information on the known and the new distribution is provided along with the photograph. This report will be helpful in updating the distribution of *C. gigas* in eastern Himalayas.

Key words: Butterfly; Buxa Tiger Reserve; new record; north eastern Himalayas.

Resumen. Se registra por primera vez a *Celastrina gigas* en el lecho del río Jayanti (26°41'57" N, 89°36'36" E). Se proporciona información sobre la distribución conocida y nueva junto con la fotografía de la especie. Este reporte será de utilidad para actualizar la distribución de *C. gigas* en el este del Himalaya.

Palabras clave: Mariposa; noroeste del Himalaya; nuevo registro; Reserva de Tigres de Buxa.

Eastern Himalayas is one of the 18 biodiversity hotspots of the world and one of the three in India. Buxa Tiger Reserve (BTR) is an extension of Sub-Himalayan West Bengal with an area of 760.87 sq. km, which includes a core area of 385 sq. km and a buffer area of 376 sq. km. Geographically it lies between the latitudes of 26°30' N and 26°55' N and the 89°20' E and 89°55' E. This tropical reserve forest lies between the Bhutan international border in the north, Cooch Bihar district in the south, Assam in the east, and the Jaladpara Wildlife division in the west. The overall geography of the area is enveloped with an amalgamation of plains and hills (Sankar and Das 2015). The area (Fig. 1) was well studied in terms of butterflies. However, more taxonomic works on butterflies from Buxa Tiger Reserve have been done in the last decade (Das *et al.* 2012; Dey 2019; Sinha *et al.* 2019; Dey & Biswas 2020). 9 subspecies belonging to 6 species of *Celastrina* Tutt, 1906 genus are recorded from India till now (Varshney & Smetacek 2015), out of which only *Celastrina argiolus* (Linnaeus, 1758) and *Celastrina lavendularis* (Moore, 1877) were recorded from West Bengal (Sinha *et al.* 2019).

Author surveyed butterflies at Jayanti area and Buxa Fort of Buxa Tiger Reserve between 23.1.2019 and 27.1.2019. A single mudpuddling individual of *Celastrina gigas* (Hemming, 1928) (Fig. 2) was sighted and photographed at Jayanti riverbed, Buxa Tiger Reserve (26°41'57" N, 89°36'36" E), on 24.1.2019 at 01:10 PM (GMT+5.30). It was observed for more

Received 17 March 2021 / Accepted 12 April 2021 / Published online 23 April 2021
Responsible Editor: José Mondaca E.



Este es un artículo de acceso abierto distribuido bajo los términos de la licencia Creative Commons License (CC BY NC 4.0)

than half an hour at the same place. However, the species was not further observed in that location during the remaining part of the survey despite thorough searching. The species was primarily identified using Kehimkar (2016), and later confirmed by Dr. Trek Lin Seow, Singapore at web-based resources forum (<http://www.butterflycircle.com>). The observation (<https://www.inaturalist.org/observations/68449850>) has also been classified as a “Research grade observation” in iNaturalist following peer reviewed identification and archived at Global Biodiversity Information Facility (GBIF) (Ueda 2021).

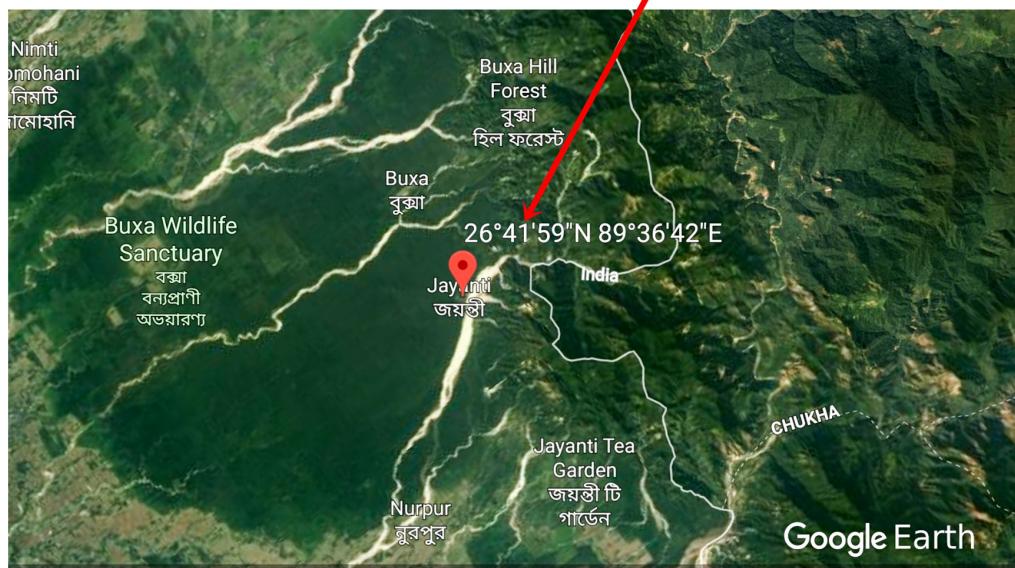
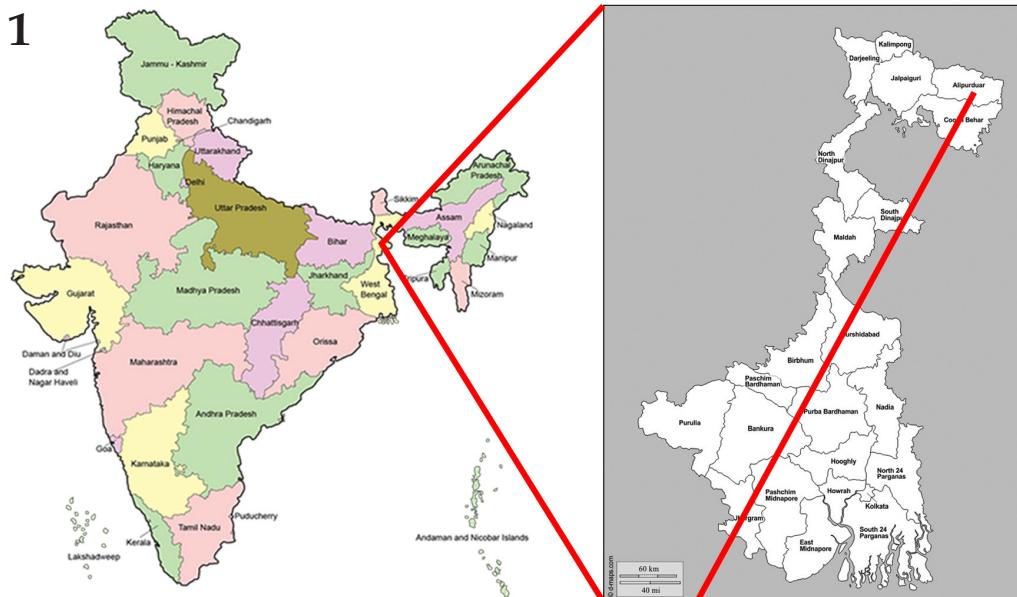


Figure 1. Study area showing new location record of *Celastrina gigas* in West Bengal, India. / Área de estudio que muestra el nuevo registro de ubicación de *Celastrina gigas* en Bengala Occidental, India.



Figure 2. Close-wing puddling behaviour of *Celastrina gigas* butterfly. / Comportamiento de alas cerradas de la mariposa *Celastrina gigas*.

The global distribution of *C. gigas* is in Pakistan, Nepal, and India (Jammu & Kashmir, Uttarakhand) (Van Gasse 2013; Varshey & Smetacek 2015). From the eastern Himalayas, *C. gigas* apparently is not yet recorded. Very recently Sandeep Das recorded this species from Rani Forest ($26^{\circ}33'00''$ N, $91^{\circ}21'00''$ E) in Kamrup district of Assam, about 330 km further east of the present study site. That observation is uploaded on Wikimedia commons website (<https://en.wikipedia.org>). Kehimkar (2016) also stated that the updated distribution of the species in north-west India through the BNHS Field guide “Butterflies of India”. Thus, the present report of *Celastrina gigas* (Hemming, 1928) in West Bengal will help to make an updated checklist.

Acknowledgement

The author is grateful to Dr. T.L. Seow, Singapore for the identification of species.

Literature Cited

- Das, R.P., Saha, G.K., De, J.K. and Sanyal, A.K. (2012)** Diversity and habitat preferences of butterflies in Gorumara National Park, West Bengal, India. *Journal of Research in Biology*, 2(4): 303-314.
- Dey, R. (2019)** Confirmation of *Eurema simulatrix* (Staudinger, 1891) (Lepidoptera: Coliadinae) in West Bengal, India. *Bionotes*, 21(2): 28.
- Dey, R. and Biswas, S. (2020)** First record of *Prosotas pia* Toxopeus (Lepidoptera: Lycaenidae: Polyommatinae) in West Bengal, India. *Revista Chilena de Entomología*, 46(4): 735-738.
- Kehimkar, I. (2016)** Butterflies of India. *Bombay Natural History Society*, Mumbai. xii + 528 pp.

- Sarkar, A. and Das, P. (2015)** Subsistance use of floral elements in Jainti under Buxa Tiger Reserve in West Bengal, India. *Pione*, 9(2): 301-310.
- Sinha, R.K., Sengupta, S., Roy, A.B., Baidya, S., Roy, S., Das, N., Paul, A. and Pal, A. (2019)** Butterflies of Buxa Tiger Reserve. Kolkata, India: CITADEL. 248 pp.
- Ueda, K. (2021)** iNaturalist Research-grade Observations. iNaturalist.org. Occurrence dataset. <https://doi.org/10.15468/ab3s5x> accessed via GBIF.org on 2021-02-16. <https://www.gbif.org/occurrence/3031717439>
- Van Gasse, P. (2013)** Butterflies of India-Annotated Checklist. Available at: https://www.ifoundbutterflies.org/images/PaulVanGasse/Butterflies_of%20_India-Annotated_checklist-1.pdf Accessed November 28, 2020
- Varshney, R.K. and Smetacek, P. (2015)** A Synoptic Catalogue of the Butterflies of India. Butterfly Research Centre, Bhimtal and Indinov Publishing, New Delhi, India, ii + 261 pp., 8 pl.