

First record of *Oplatocera (Epioplatocera) oberthuri* (Gahan, 1906) (Coleoptera: Cerambycidae) from Meghalaya, North-eastern India

*Amit Rana¹ and Lobeno Mozhui²

¹Zoological Survey of India, North Eastern Regional Centre, Shillong- 793 003, Meghalaya, India.

²Department of Zoology, Nagaland University, Lumami- 798627, Nagaland, India.

(Email: rana.amit13@rediffmail.com)

Abstract

Based on the collection of six specimens from East Khasi Hills District, Meghalaya, we were able to confirm the presence of the long-horned beetle *Oplatocera (Epioplatocera) oberthuri* (Gahan, 1906) in Meghalaya, Shillong. Although, *O. oberthuri* is reported from other parts of India, including the neighbouring North-eastern states, it has not been documented from Meghalaya. In this present communication, we include photographs, brief comments, morphological characters and colour descriptions of the species for better biodiversity assessment.

Keywords: *Oplatocera (Epioplatocera) oberthuri*, Cerambycidae, East Khasi Hills, long-horned beetle, Meghalaya.

Received: 30 March 2022; Revised: 30 December 2022; Online: 31 December 2022

Introduction

Cerambycidae, commonly known as longicorns, longhorns, longicorn beetles, long-horned beetles, long-horned borers, round-headed borers, timber beetles, or sawyer beetles, are among the most diverse and economically important families of Coleoptera (Monné *et al.*, 2017). The genus *Oplatocera* was described by White (1853), and two species *viz.*, *Oplatocera callidioides* (White) and *Oplatocera oberthuri* (Gahan) have been reported by Gahan (1906). Except for Sikkim, West Bengal and Nagaland (Kariyanna *et al.*, 2017; Mozhui *et al.*, 2020), the long-horned, *Oplatocera (Epioplatocera) oberthuri* (Gahan, 1906) has not been recorded from other parts of India. Since this paper confirms the presence of this particular species from East Khasi Hills District, there is every possibility of the distribution of the species extending to the other remaining districts of the state as well. The occurrence of this species has already been documented from other regions which share its borders with North East India, *viz.*, Nepal, Bhutan and China (Kariyanna *et al.*, 2017). Photographs of the collected long-horned beetle specimen have been provided with a note on the characteristic features of the species.

Materials and Methods

The specimens were collected from East Khasi Hills district during the period of May to August, 2021 (Fig.1). Identification of the specimen was made based on the morphological characters as described by Gahan (1906). The beetles were observed alive and later the specimens were collected for morphological study. The map was prepared using ArcGIS. The specimens were dried and examined under Labomed CZM4 stereo zoom microscope, photographed with Canon G3X and scale was added with Adobe Photoshop v7.0. The specimens bearing the registration numbers, I/COL/NERC/283, I/COL/NERC/284, I/COL/NERC/285, I/COL/NERC/286, I/COL/NERC/287 and I/COL/NERC/288 respectively are preserved and deposited at Zoological Survey of India, North Eastern Regional Centre, Shillong.

Results and Discussion

Materials examined: 6 specimens collected from different locations falling within the domain of the district were examined. The morphometric measurements are provided (Table 1).

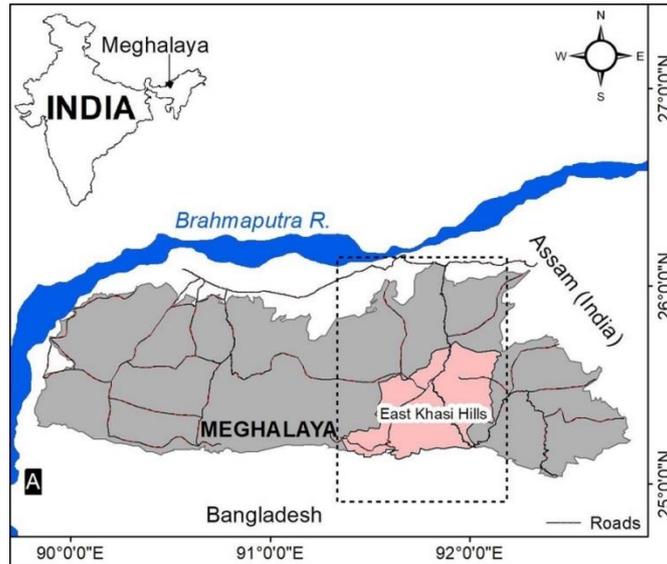


Figure 1: Location of East Khasi Hills, Meghalaya (Source: Survey of India toposheets)

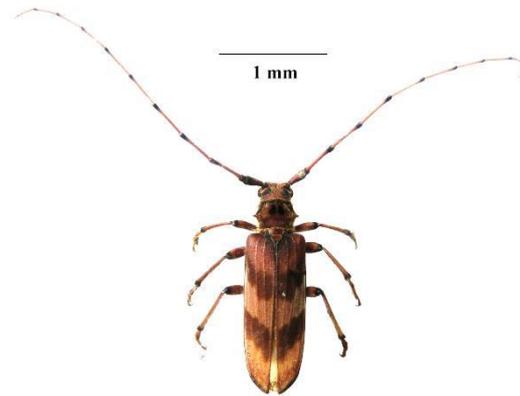


Figure 2: *Oplatocera oberthuri* (Gahan), dorsal view

Table 1. Morphometric measurements of *Oplatocera oberthuri*

Specimen	Body length (cm)	Antennae length (cm)	Locality	GPS Coordinates
1	2.6	3.2	Risa colony forest area	Lat: 25°33'40.52" N Long: 91°53'35.23" E
2	2.2	3.8	Risa colony forest area	Lat: 25°33'40.52" N Long: 91°53'35.23" E
3	2.5	2.8	Risa colony forest area	Lat: 25°33'40.52" N Long: 91°53'35.23" E
4	2.6	2.7	Madanrting	Lat: 25°33'23.49" N Long: 91°54'52.38" E
5	2.6	3.6	Nongrah	Lat: 25°34'49.33" N Long: 91°56'29.58" E
6	1.9	3.4	Mawblei	Lat: 25°33'13.28" N Long: 91°54'24.41" E

Description: The body is cinnamon brown in colour; antennae tipped with deep brown at the top of each joint; prothorax with 2 blackish brown marks on the disc with a narrow dark band on either section; elytra is well characterized, each with 2 slanting blackish brown bands appearing in a series of elongated marks positioned in a side-by-side manner. Head rugulose-punctate (Fig.2).

Gahan reported only two *Oplatocera* species which were *O. callidioides* White, 1853 (from northern India) and *O. oberthuri* Gahan, 1906 (from Darjeeling). There are also reports of *O. halli* Lepesme, 1956 (from Nilgiri Hills and Western Ghats) and *O. khasimontana* Hayashi, 1984 (from Khasi Hills, north-eastern India) (Ghate and Naidu, 2013). Therefore, as per literatures, there are presently four *Oplatocera* species from India. The occurrence of *O. oberthuri* has been observed to extend to Nagaland and now also in Meghalaya. It is evident from literatures and our new record of *O. oberthuri* that, studies on *Oplatocera* species as well as other species belonging to Cerambycidae in India are still poorly known and therefore, needs more interest for better biodiversity assessment.

Acknowledgements

The authors would like to thank Dr. Limasanen Longkumer for preparing the location map. The authors would also like to thank Shri. M. Sonar and Shri. N. Sapkota (Field Attendants, ZSI Shillong), Mrs. S. Synrem and Mrs. M. Kaur (Multi-Tasking

Staffs ZSI Shillong) for their assistance in order to collect the specimens from the various locations within the district jurisdiction.

References

- Gahan, C.J. 1906. The fauna of British India including Ceylon and Burma. Coleoptera-Vol. I. Taylor and Francis. 329pp.
- Ghate, H.V. and Naidu, N.M. 2013. A first record of *Oplatocera halli* Lepesme, 1956 (Coleoptera: Cerambycidae) from Western India. Journal of Threatened Taxa 5(17): 5301-5304.
- Kariyanna, B., Mohan, M., Gupta, R. and Vitali, F. 2017. The checklist of longhorn beetles (Coleoptera: Cerambycidae) from India. Zootaxa 4345(1): 1-317.
- Monné, M.L., Monné, M.A. and Wang, Q. 2017. General morphology, classification and biology of Cerambycidae. In: Q. Wang (ed.) Cerambycidae of the world: biology and pest management, Boca Raton, FL: CRC Press. 76pp.
- Mozhui, L., Rana, A., Neikha, K. and Kakati, L.N. 2020. A checklist of longhorn beetles (Coleoptera: Cerambycidae) of Lumami, Zunheboto District, Nagaland with 23 new records. Halteres 11: 118-128. doi:10.5281/zenodo.4405843.
- White, A. 1853. Catalogue of the coleopterous insects in the collection of the British Museum, Part VII. Longicornia I. Taylor and Francis. 174pp.