

## First report of *Blephephaeus nepalensis* Hayashi, 1981 from India

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### Abstract

The first photographic record of the *Blephephaeus nepalensis* Hayashi, 1981 from Howrah district, West Bengal, India is presented in this paper. During an entomological survey in Howrah district of West Bengal this species photographed and identified the first time for the whole India. *Blephephaeus nepalensis* Hayashi, 1981, a long horn beetle recorded in May, 2017. A large, elongated, pale brown species documented from bushy area of Bagnan block of Howrah, West Bengal, India.

**Keywords:** photographic report, *Blephephaeus nepalensis*, long horned beetle, Howrah, West Bengal, Eastern, India

### Introduction

In the world around 36,000 species of 5,000 genera from eight subfamilies of Cerambycidae documented at present [1]. Members of family Cerambycidae are generally known as longhorned beetles or longicorns [2, 3]. The studies on cerambycidae was started India in 1848 [4]. Then research on this group lead by several peoples [5, 6, 7, 8, 9, 10, 11]. Gahan in 1906 in his "The Fauna of British India including Ceylon and Burma" gave the comprehensive data on Indian Cerambycidae. He documented more than 1200 species from Indian region on 1940's [12] further 300 species were added by Breuning [8, 9, 10, 11]. In a current study of Indian longhorns incorporated 1536 longhorn beetle species classified under 72 tribes, 440 genera and eight subfamilies [12]. Mitra *et al.* reported 146 species of cerambycid from West Bengal [13]. During the entomological survey in Howrah district of West Bengal this species photographed and identified the first time for the entire India.

### Material methods and Study area

Sample was photographed through Pollard Walk Method [19, 20] at some stage in documentation of insects of Howrah district; West Bengal, India (Figure 1). On the day of 2017 (07.05.17) at around 11.56 hrs (11:56:30 AM) during the regular field of this district of West Bengal we photographed one individuals of elongated, pale brownish long horn beetle on small branches of herbaceous plant nearby densely vegetated area, which is situated Bagnan block of Howrah district; West Bengal (extends between 22.430554°N latitude and 88.929237°E longitude) (Figure 2). Information on this species is based on observation from

11.56 AM to 12.35 PM. Specimen was photographed for further identification process with the help of High Resolution Digital Camera (Cannon 550 D with EOS 18-55mm lens) and the identification was identified and confirmed by experts.

### Results

#### Species description

Body was elongated, large, pale brown in colour, head elongated. Antennae were punctuate, pale brownish in colour and longer than body. Legs were also pale brown in colour and femora with flatten bulges. Often found on bushy plants, well camouflaged with surroundings. (Figure 3)



**Fig 1:** Dorsal view of *Blephephaeus nepalensis* Hayashi, 1981

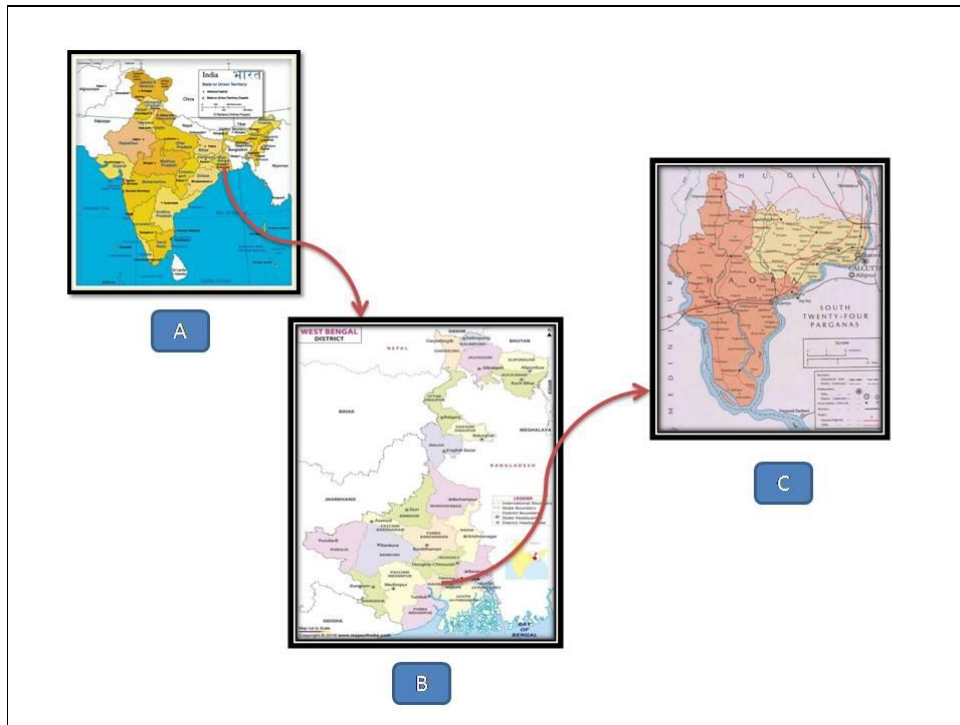


Fig 2: Study area of Howrah (District of record), West Bengal, India through Google map with Latitude and longitude

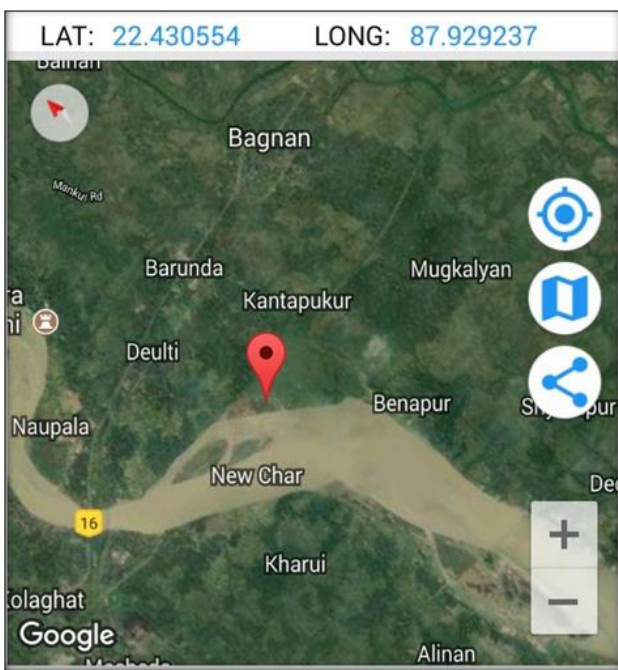


Fig 3: Howrah (District of record), West Bengal, India

**Systematic position of *Blephephaeus nepalensis* Hayashi, 1981**

- Class:** Insecta
- Order:** Coleoptera
- Family:** Cerambycidae
- Sub Family:** Cerambycinae
- Tribe:** Stenopterini
- Genus:** *Blephephaeus*
- Species:** *Blephephaeus nepalensis* Hayashi, 1981

**Discussion**

**Early distributional range**

Previous distribution of *Blephephaeus nepalensis* Hayashi, 1981 was restricted in only one country Nepal [14, 15]. The

actual place of Nepal was Adhabar and Balaju from where Hayashi recorded and described first time in 1981 [14]. Holotype of *Blephephaeus nepalensis* Hayashi, 1981 keep in Entomological Museum, Hokkaido University, Sapporo [14].

**Habitat structure of new locality**

West Bengal is an Eastern state of India, neighbor states of West Bengal are Odisha, Jharkhand, Bihar, Sikkim and Assam. On the eastern face the country Bangladesh is located. Howrah is a petite district of the West Bengal situated near Kolkata with the area of 467 km<sup>2</sup>. The Howrah district situated between 22°48' N and 22°12' N latitudes and between 88°23' E and 87°50' E longitudes. The specimen actually photographed in Bagnan block, one of the 15 blocks of Howrah. The place of record lays 22.430554°N latitude and 88.929237°E longitude. The place is besides of river Damodar and nearby densely vegetated area. Annual normal rainfall in this district is 1461 millimeter per year. Annual maximum temperature varies between 32-39°C, whereas the minimum temperature varies between 8-10°C.

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