

First report of the termite *Odontotermes obesus* near Madan Kamdev Temple, Assam



Odontotermes obesus. © Nitul Ali.

Madan Kamdev Temple (26.3195 N & 91.7420 E) in Assam is a famous archaeological site that contains a group of temples with distinctive sculptures, offering an insight into the state's prehistoric society. It is situated on Dewangiri Hill, near Baihata Chariali, in Kamrup District. The terrain surrounding the temple area, along with its nearby villages, is divided into hills,

plains, and low-lying areas. This well-known location is abundant in culture as well as biodiversity (Mehjebin & Ali 2024).

Odontotermes obesus is a type of termite that is a member of the isopteran order of insects, and it constructs its nests under the soil. It is one of the major termite species that has been

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Nest of *Odontotermes obesus*. © Nitul Ali.

identified as residents in Assam (Saikia et al. 2024). On May 2024, *Odontotermes obesus* was spotted for the first time at Madan Kamdev Temple area.

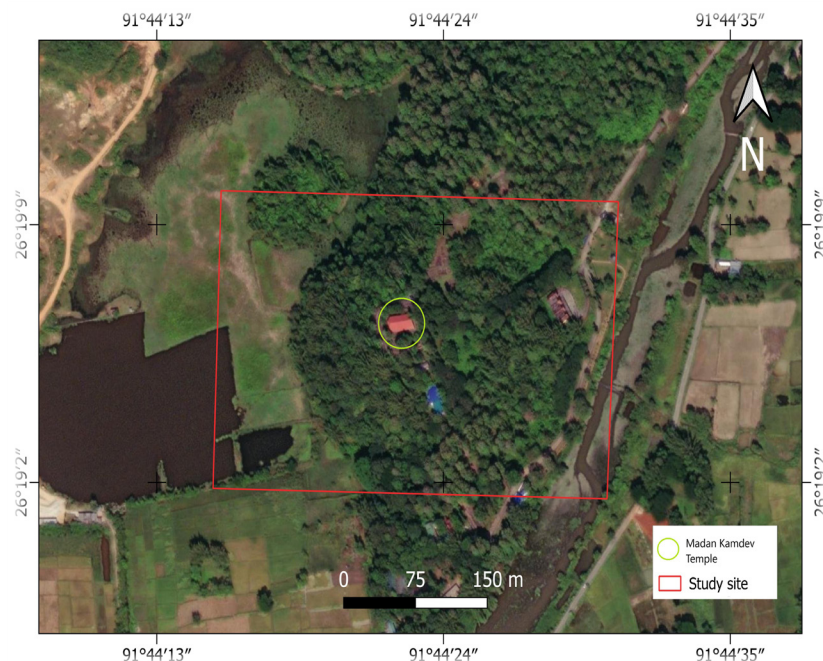
Materials and method:

For identification of the correct species, soldiers and worker members were collected and brought to the laboratory using the method of Pearce (1997). The taxonomic keys of Roonwal & Chhotani (1989) and Chhotani (1997) were used to accomplish the identification process. During identification, the samples were examined under a binocular microscope by placing them on little glass

dishes with 70–80 % ethyl alcohol, and various parts were measured with the help of an ocular micrometer.

Odontotermes obesus has 16–17 antennal segments; the third segment is the shortest of the 17 segments.

They contain falciform mandibles with a length of approximately 0.75–1.03 mm. The length and width of the postmentum are 0.74 mm and 0.48 mm, respectively. The anterior lobe of the species is semicircular, while the pronotum is saddle-shaped with variably notched ends (width: 0.80–1.07 mm, length: 0.5–0.65 mm) (Zaman et al. 2022).



The study site. Source: QGIS Software version 3.16.

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