

SECOND REPORT OF *HYBLAEA PUERA* INFESTATION ON *AVICENNIA* SPP. FROM THE MANGROVES OF WEST BENGAL (LEPIDOPTERA : HETEROCERA : HYBLAEIDAE)

BALARAM PANJA, OLIVE BISWAS, PUJA PATI and BULGANIN MITRA

Zoological Survey of India, Kolkata.

Moth *Hyblaea puera* (Cramer, 1777), belonging to Hyblacidae family, is commonly known as the 'Teak defoliator' and is regarded as a notorious pest of Teak (*Tectona grandis* L.f.) plantations. This major pest of teak is now underway to damage mangroves and is alarmingly found to infest *Avicennia* spp. in varying zones, with varying seasonal occurrence in the world. It is reported as a pest of *Avicennia officinalis* in Bangladesh, on *Avicennia marina* in Maharashtra and on *Avicennia alba* from Sundarban Biosphere Reserve, India (Biswas et al., 2017).

Genus *Avicennia* holds three species in India, namely, *Avicennia officinalis* L., *Avicennia marina* (Forsk.) Vierh. and *Avicennia alba* Blume. The dominant species is *Avicennia officinalis*. During a recent survey (from mid-November, 2017 to mid-January, 2018) of insect fauna at the mangrove forest patches in coastal areas, along Haldi River, at Haldia of Purba Medinipur, West Bengal, complete defoliation on the

all three *Avicennia* species by a lepidopteran insect was observed. The defoliator was later identified as *Hyblaea puera* (Cramer, 1777). This is the first report of infestation from the mangroves of Purba Medinipur and the second report of infestation on *Avicennia* spp. from West Bengal.

The infested plants were completely defoliated and turned brown like a dead tree, at the study site (Map 1). The type of infestations, pupation and conditions of the trees were very much similar to the observation of Biswas et al. (2017). Photographs were taken in the field and the coordinates of the collection sites were recorded using GPS (Garmin Etrex-22x).

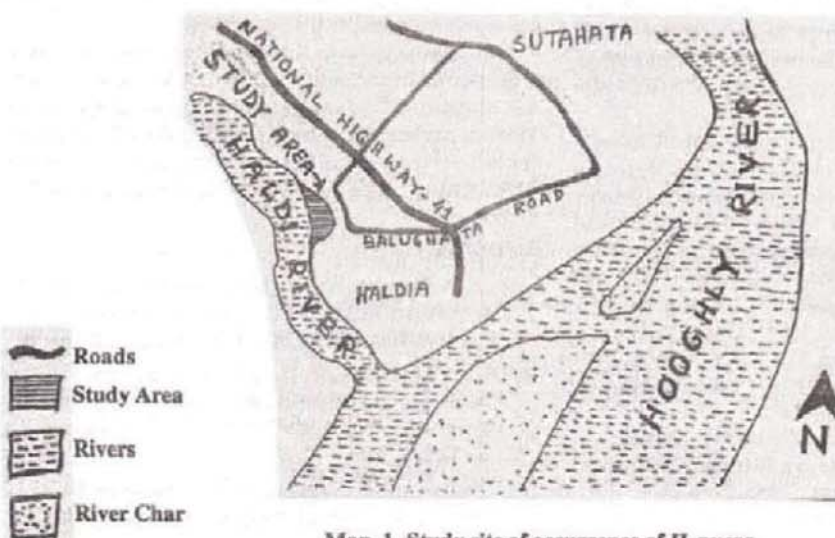
According to Biswas et al. (2017), *Hyblaea puera* outbreak in mangroves occurs between March and July in Equatorial Brazil and September to January in Mumbai and in the months of August to October in Indian Sundarban. In the year 2016, an early outbreak of *Hyblaea puera* was observed during February to May in Indian Sundarban. In Haldia, the infestation of this major pest was observed during November to January.

Being a polyphagous pest in agricultural sector, *Hyblaea puera* has adapted to survive in mangroves as an alternate host, where its population management is a big challenge as the mangrove ecosystem is ecologically sensitive zone where conventional control measures for pest control are difficult issue.

This communication reports the initial findings of the infestation of *Hyblaea puera* on *Avicennia* spp. in mangroves of Purba Medinipur. Further studies and monitoring, are required to understand the nature and extent of damage of this moth species, besides observations of changing infestation time, impact on climate change and other environmental factors.

Reference

Biswas, O., Panja, B., Garain, P.K., Roy, S., Shah, S.K., Modak, B.K., & Mitra, B. 2017. *Hyblaea puera* (Cramer, 1777) [Lepidoptera : Hyblacidae] infestation on *Avicennia alba* Blume in Sundarban Biosphere Reserve. *Proc. Zool. Soc.* DOI 10.1007/s 12595-017-0216-0



Map. 1.-Study site of occurrence of *H. puera*.