

First record of *Batocera rufomaculata* (De Geer, 1775) from Sunderban biosphere reserve, West Bengal

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Abstract

Studies on Longhorn beetles (Coleoptera) in Sunderban region is very poor. Altogether, 8 species under 3 subfamilies are already reported from Sunderban Biosphere Reserve. Present communication reports *Batocera rufomaculata* (De Geer, 1775) for the first time from this Biosphere reserve.

Keywords: Sunderban Biosphere Reserve, Cerambycidae, Lamiinae, Batocera

Introduction

Sunderban region in India is 9600 sq km (4200 sq km of Reserved Forest and 5400 sq km of non-forest, inhabited region) which constitutes the Sunderban Biosphere Reserve (SBR). Indian Sunderban is bound on the west by river Muriganga and on the east by rivers Harinbhahga and Raimangal. Administrative boundary of the Sunderban is spread over two districts *i.e.* North 24-Parganas (Hingaljanj, Hasnabad, Haroa, Sandeskhali - I,II, and Minakhan blocks) and South 24-Parganas (Sagar, Namkhana, Kakdwip, Patharpratima, Kultali, Mathurapur-I,II, Jaynagar-I,II, Canning-I,II, Basanti and Gosaba blocks). The extent of mangrove Reserve Forests in Indian Sunderban is around 4260 sq km, out of which 55% is under land vegetation cover and balance 45% is under water body/ inter-tidal zone.

Studies on beetles and weevils (Coleoptera) in Sunderban region is very poor. There are very scanty information on Longhorn beetles of Sunderbans. Recently, Mitra *et al* (2015) [1], prepared a list of 146 species under 84 genera of 38 tribes belonging to four subfamilies of the family Cerambycidae of West Bengal and reported 4 species from SBR. Afterwards, Mitra *et al.* (2015) [2], added another 4 species and published a comprehensive list of 8 species of cerambycid beetles from this Biosphere Reserve.

Batocera rufomaculata (De Geer, 1775) is the Lamiinae beetle under the tribe Batocerini of the family Cerambycidae, serious pest of many economic plants species including mango plants and also commonly known as mango borer, fig borer and tropical fig borer. It is also reported from West Bengal but only from the northern part of the state (Saha and Raychaudhuri, 2000) [3].

This present communication reports *Batocera rufomaculata* (De Geer, 1775) for the first time from this biosphere reserve. The coordinates of the collection sites were recorded using GPS (Garmin Oregon 550) which were further used in preparing maps of the survey sites. Map has been prepared using Bhuvan Imagery, (<http://bhuvan.nrsc.gov.in>) accessed on dated 26/05/2015 (Fig. 1)

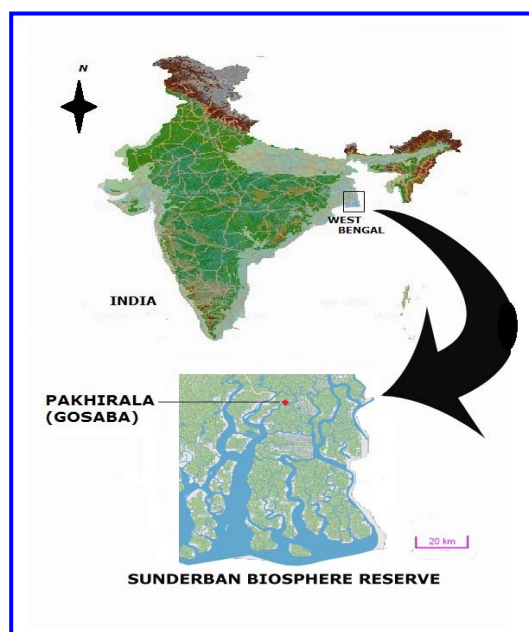


Fig 1: Map showing the collection locality

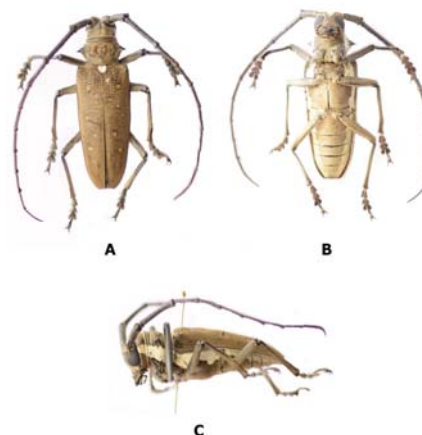


Fig 2: *Batocera rufomaculata* (DeGeer, 1775) Dorsal View, B. Ventral View, C. Lateral view

Batocera rufomaculata (DeGeer, 1775)

Cerambyx rufomaculatus De Geer, Stockholm, Impr. Pierre Hesselberg, 1775, 5: 107 [nov]

Batocera rufomaculata: Sakenin & al., Calodema, 2011, 143:7

Material examined

1 ex. Pakhrala, Gosaba, South 24 Parganas district, dt. 07. X. 2015, at night, coll. B.Mitra & Party. 22°07.959' N, 088°49.542' E.

Diagnostic characters

Body large, robust, greyish yellow throughout, ornamented with different patches and spots.

Head large, black with greyish yellow pubescence, frons wide, wrinkled, sub-squarish in between eyes, clypeus glossy, mandible large, pitchy black, robust, gena short, eyes very large, widely separated by frons, margined with small yellowish hairs, sub-divided posterior lobe much smaller than anterior one, vertex clothed with greyish yellow pubescence, narrow in between the posterior lobe of eyes and antennal tubercles, median line prominent, sulcate in between the posterior lobe, antenna 11-segmented, robust, lack, much longer than body, segment I black, sparsely pubescent, robust, surface wrinkled, apical portion outwardly raised, prominent scar mark at the apex, segment I and IV almost equal, much smaller than III, segment III wrinkled throughout, segment III to X with spines on apical margin, inner margin of segment III to X spined.

Pronotum large, sub-squarish, much broader than long, black, clothed with greyish yellow pubescence, surface wrinkled, two large, acute lateral tubercles on either side of pronotum, two prominent, dark, yellowish orange kidney shaped patch, centrally placed, on either side of the median line.

Scutellum large, U- shaped, clothed with bright yellowish-white pubescence.

Elytra large, basal region wide, gradually converging towards apex, black, clothed with densely greyish-yellow pubescence, ornamented with 8-9 dark yellowish spots/patches on either side of elytra, strongly warty on the basal region, humeral angle with small spines, apex sub-rounded, converging towards sutural margin with small, acute spine.

Venter densely clothed with greyish pubescence, wide, lateral, whitish longitudinal patches on either side of the venter, in between pronotum to last segment of abdomen, procoxal cavities open, slightly raised than prosternal plate, prosternal plate narrow in between the coxal cavities, widened at the base, mesocoxal cavities open, almost at the height of mesosternal plate, mesosternal plate widened in between the coxal cavities.

Legs elongated, robust, black, clothed with greyish pubescence, femur strong, flat, fore femur more warty, tibia elongated, tarsal claw almost at 180° angle.

Distribution

India: Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Jammu & Kashmir, Karnataka, Kerala, Manipur, Madhya Pradesh, Maharashtra, Mizoram, Meghalaya, Nagaland, Punjab, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh and West Bengal.

Elsewhere

Burma, China (Hainan, Xizhang), Indonesia (Java, Sumatra), Myanmar, Malaysia, Nepal, Pakistan, Sri Lanka, Thailand, Tibet, Vietnam, Egypt (Sinai), Israël, Iraq, Jordan, Lebanon, Oman, Syria, Turkey, Yemen, Solomon Islands, Barbados, Br. Virgin Isl. Isl. St. Croix, Isl. S. John, Isl. St. Thomas, Puerto Rico ; Africa: Comores Isl., Réunion, Mauritius, Madagascar, Maldives, Rodriguez, Seychelles, Socotra .

Discussion

The genus *Batocera* now has 55 recognised species, and more than 50 subspecies and varieties are known from world (Tavakilian & Chevillotte, 2013; Liu *et al.*, 2012) [4, 5]. *Batocera rufomaculata* has a very broad host range, larval development being recorded for more than 50 plant species. Oviposition takes place in old trees, usually dead, but also in trunks and branches of living trees. Among the two species of Genus *Batocera* reported from West Bengal, only *rufomaculata* is known from southern Bengal.

References

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