



ISSN 2347-2677

IJFBS 2014; 1 (5): 22-23

Received: 09-04-2014
Accepted: 01-05-2014**Omar Shahadat**Department of Zoology, Jagannath
University, Dhaka-1100, Bangladesh.**Tanvir Ahmed**Department of Zoology, Jagannath
University, Dhaka-1100,
Bangladesh.**Amit Kumer Neogi**Department of Zoology, Jagannath
University, Dhaka-1100,
Bangladesh.

Confirmation record of a butterfly species *Euploea radamanthus radamanthus* Fabricius, 1793 (Family: Nymphalidae) from Dudpukuria-Dhopachari wildlife sanctuary, Chittagong, Bangladesh.

Omar Shahadat, Tanvir Ahmed, Amit Kumer Neogi

Abstract

A study on butterfly diversity of Dudpukuria-Dhopachari wildlife sanctuary was carried out from October, 2013 to June, 2014. A total 64 species were recorded belonging 7 families and one species *Euploea radamanthus radamanthus* Fabricius, 1793 (Magpie Crow) under family Nymphalidae (order: Lepidoptera) was newly recorded in Bangladesh as distribution. The findings of the present study is to contribute and to update the butterfly checklist and is documented as new species as distribution in Bangladesh.

Keywords: Butterfly, Magpie Crow, Nymphalidae, Lepidoptera, Bangladesh, Distribution.

1. Introduction

Butterflies are generally regarded as one of the best taxonomically studies groups of insects [12]. Since early 18 century about 19,238 species of butterflies have been documented worldwide [7]. Studies on butterfly fauna are very few in Bangladesh. Very few studies on butterfly fauna in Bangladesh are well documented. Since 1947 very little research on butterflies has been conducted. According to Larsen only 311 butterfly species had been recorded from Bangladesh [10]. Neogi AK *et al.* has added 5 more new species to the checklist which takes the total number of butterflies to 316 [13]. Bangladesh for its rich natural properties has long been considered a realm of a number of butterfly species. But it is important to know the exact number of butterfly species that currently exist. Systematic data collections from all parts of the country are essential to compile the checklist to be updated about butterfly fauna of Bangladesh. In due course of an ongoing study on butterflies covering the core area of Dhopachari forest range under the Dudpukuria-Dhopachari wildlife sanctuary, a new butterfly species *Euploea radamanthus radamanthus* Fabricius, 1793 (Magpie Crow) was recorded for the first time in Bangladesh as distribution in the coordinate of 22°13'35.8" N & 92°06'78.8" E. According to Larsen, it should be in Srimangal forests and in the Chittagong hill tracks in Chittagong division [10].

2. Materials and Methods

The butterflies were recorded from the study area during the butterfly survey from October, 2013 to June, 2014. Butterflies were primarily identified directly in the field by capturing photographs (using Nikon D3200 with 70-300 mm lens). Few cases specimen were collected with sweep nets, placed in plastic bottle or plastic bag and carried to laboratory for further identification. Specimens were killed also by killing jar with chloroform and reserved in a plastic bottle. Sometimes specimens were caught for identification and then released without any harm. Collected butterflies were identified using field guides and following the identification key developed by Evans (1932) [5].

3. Results & Discussion

To protect the biodiversity, Dudpukuria-Dhopachari forest had been declared as a wildlife sanctuary in 2010 comprises a total area of 4,717 ha reserve evergreen and semi evergreen tropical forest. The sanctuary is situated along with a borderline of Chittagong, Rangamati and Bandarban districts at the foot of the Karnafuly and Sangu River. Most of parts of the

Correspondence:

Tanvir AhmedDepartment of Zoology,
Jagannath University, Dhaka-
1100, Bangladesh.Email:
shaikot2023jnu@gmail.com

Dudpukuria-Dhopachari wildlife sanctuary consists of Chittagong hills tracks area, is located under Dudpukuria east and west Kurushia, west Dhopachari and single Dhopachari mouza. The wildlife sanctuary is located in kurushia range of Rangunia upazilla and dohazari range of Chandanaish upazilla. While surveying for the butterfly diversity, seasonality, availability of larval host plants, observed broad habitat types, ecological, behavioral observations, flight pattern and status of butterflies in the study area during October 2013 to June 2014 around Chittagong hill tracts and total 64 species were identified. The individual *Euploea radamanthus radamanthus* Fabricius, 1793 (Magpie Crow), was photographed at the time of mud puddling near the cow shed on 10th April, 2014.

9 species from Nymphalidae family has been recorded by previous study under the genus *Euploea*. Such as *Euploea mulciber mulciber* Cramer, 1777 (Striped Blue Crow), *Euploea midamus rogenhoferi* Felder & Felder, 1865 (Blue-Spotted Crow), *Euploea klugii kiugii* Moore, 1858 (Blue-king Crow), *Euploea klugii kollari* Felder & Felder, 1865 (Brown King-Crow), *Euploea algae deione* Westwood, 1848 (Long-Branded Blue Crow), *Euploea core core* Cramer, 1780 (Common Crow), *Euploea crameri nicevillei* Moore, 1890 (Sundarbans Crow), *Euploea doubledayi doubledayi* Felder & Felder, 1865 (Striped Black Crow), *Euploea sylvester coreta* Godart, 1819 (Double-Branded Crow). According to Larsen, *Euploea radamanthus radamanthus* Fabricius, 1793 (Magpie Crow) occurs widely in the Arakan and was common in Cachar. It should be both in the Srimangal forests and in the Chittagong Division [1, 2, 3, 10].

Wing span of Magpie Crow is: 80-90 mm.

Geographical distribution: India, Bhutan, Myanmar, Sri Lanka, and Singapore. Morphological characteristics: Upper fore wings of male are velvety bluish black with pale blue sub-marginal spots. A pale blue band present in 1b of upper fore wings. Large white patch present in discal area. Upper hind wings have few long, broad whitish streaks in basal to discal area. Some pale blue spots present in sub-marginal area of upper hind wings. Pale blue spots also present in sub-marginal areas of under hind wings and also white streaks present in basal to discal of under hind wings.

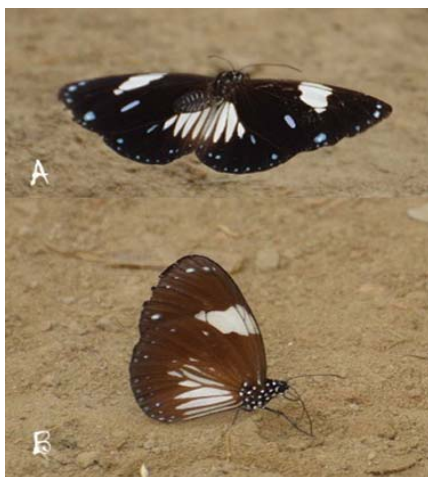


Fig A: Dorsal view of *E. radamanthus radamanthus* during flying after mud puddling

Fig B: Ventral view of *E. radamanthus radamanthus* during mud puddling

4. Conclusion

These records decisively confirm the presence of *Euploea radamanthus radamanthus* Fabricius, 1793 (Magpie Crow), a

new butterfly species for Bangladesh as distribution. This kind of finding is significantly important in updating the status and regional distribution of butterfly fauna of Bangladesh.

5. Acknowledgements

Authors would like to acknowledge Professor Dr. Gulshan Ara Latifa, Department of Zoology, University of Dhaka for her logistic support during study time. Authors also thankful to Mohan Kumar Dash for his excellent participation during survey time.

6. References

- Ahmad M, Kabir SMH, Ahmed ATA, Rahman AKA, Ahmed ZU, Begum ZNT, Hassan MA, & Khondker M (Eds.). Encyclopedia of Flora and Fauna of Bangladesh. Vol. 21. Asiatic Society of Bangladesh, Dhaka. 2009; 460.
- Chowdhury SH, Hossain M. Butterflies of Bangladesh-A Pictorial Handbook (Revised and Enlarged Version I): Skylark printers, Dhaka, Bangladesh. 2013; 260.
- Bashar MA, Mamun MA, Aslam AFM, Chowdhury AK. Biodiversity maintenance and conservation of butterfly plant association in some forests of Bangladesh. Bangladesh Journal of Zoology 2006; 34(1):55-67.
- Donald WB, Donald PS, Tement WJ. New records of butterflies from the Eastern Caroline Island, Micronesia. Journal of Pacific Science 2005; 59(1):97-103.
- Evans W H, The Identification of Indian Butterflies, Bombay Natural History Society, Bombay; Edn 2, Reprinted by Today and Tomorrow's Printers and Publishers, New Delhi, 1932, 454.
- Emmett RE, Pun WW. New records of Butterflies from Macau, Southeast China (Lepidoptera: Papilionidae). Journal of Tropical Lepidoptera 1997; 8(2):60-66.
- Heppner J. Classification of Lepidoptera (Part I): Introduction of Holarctic Lepidoptera, 1998, 5:148.
- Kehimkar I. The book of Indian Butterflies. Bombay Natural History Society, 2013, 497.
- Kunte KJ. Butterflies of Peninsular India. Indian Academy of Sciences, Bangalore and University Press, Hyderabad. 2000; 254.
- Larsen TB. Butterflies of Bangladesh- an annotated checklist, IUCN Bangladesh Country Office, Dhaka, Bangladesh. 2004, 104.
- Rangnekar P, Dharwadkar O. Three additions to the known butterfly fauna of Goa, India. Journal of Threatened Taxa. 2009; (5):298-299.
- Robbins RK & Opler PA. Butterfly diversity and a preliminary comparison with bird and mammal diversity. Biodiversity II, Understanding and Protecting Our Biological Resources. Joseph Henry Press, Washington, DC. 1997.
- Neogi AK, Baki MA, Sadat MN, Selim SR, Bhuiyan NA. Five New Records of Butterfly Species from Dhaka, Pirojpur and Cox's Bazar Districts of Bangladesh. Journal of Entomology and Zoology Studies 2014; 2(2):197-200