ISSN 0972-1800



VOLUME 23, NOS. 2 & 3

QUARTERLY

APRIL--SEPTEMBER, 2021



Date of Publication: 4th October, 2021

BIONOTES

A Quarterly Newsletter for Research Notes and News On Any Aspect Related with Life Forms

Founder

Late Dr. R. K. Varshney, Aligarh, India

Board of Editors

Peter Smetacek, Butterfly Research Centre, Bhimtal, India

petersmetacek@gmail.com

V.V. Ramamurthy, New Delhi, India vvrento@gmail.com

Zdenek F. Fric, Biology Centre, Czech Academy of Sciences, Institute of Entomology, Branisovska 31, CZ-37005 Ceske Budejovice, Czech Republic. fric@entu.cas.cz.

Stefan Naumann, Berlin, Germany sn@saturniidae.com

R.C. Kendrick, Hong Kong SAR hkmoths@gmail.com

Devanshu Gupta, Zoological Survey of India, Kolkata, India

devanshuguptagb4102@gmail.com

Publication Policy

Information, statements or findings published are the views of its author/ source only.

Manuscripts

Please E-mail to petersmetacek@gmail.com.

Guidelines for Authors

BIONOTES publishes short notes on any aspect of biology. Usually submissions are reviewed by one or two reviewers.

Kindly submit a manuscript after studying the format used in this journal

(http://www.entosocindia.org/).

Editor reserves the right to reject articles that do not adhere to our format. Please provide a contact telephone number. Authors will be provided with a pdf file of their publication.

Address for Correspondence

Butterfly Research Centre, Bhimtal, Uttarakhand 263 136, India. Phone: +91 8938896403.

Email: butterflyresearchcentre@gmail.com

From Volume 21

Published by the Entomological Society of India (ESI), New Delhi (Nodal Officer: V.V. Ramamurthy, ESI, New Delhi)

And

Butterfly Research Centre, Bhimtal Executive Editor: Peter Smetacek Assistant Editor: Shristee Panthee Butterfly Research Trust, Bhimtal

Cover Photo of founder of BIONOTES Late Dr. R.K. Varshney

TABLE OF CONTENTS

OBITUARY: OUR FOUNDER, DR. RAJENDRA KUMAR VARSHNEY by Ashutosh Varshney & Anurag Varshney 35
PORTRAIT OF A GENTLEMAN by Peter Smetacek 37
PUBLICATIONS OF DR. R.K. VARSHNEY by Bandana Subedi 40
CITY IF NOT FOREST: NEW HABITAT RECORD OF <i>MACROMIA CINGULATA</i> RAMBUR,1842 (ODONATA, MACROMIIDAE) by C. Susanth Kumar & Arya Meher.B. S
DIOSCOREA ESCULENTA (LOUR.) BURKILL AS A LARVAL HOST PLANT OF TAGIADES JAPETUS (STOLL, [1781]) (INSECTA: LEPIDOPTERA: HESPERIIDAE) by Smritirekha Bortamuly & Rajib Dey 52
RECORD OF <i>STUENINGERIA NEPALENSIS</i> LEHMANN, 2019 (INSECTA: LEPIDOPTERA: METARBELIDAE) IN BHUTAN by Jatishwor Singh Irungbam 56
FIRST RECORDS FOR NEPAL OF ALBULINA ARCASEIA AND ALBULINA PHARIS (LYCAENIDAE) FROM THE HREBLAY COLLECTION by Piet Van Der Poel & Zsolt Bálint 59
SIGHTING OF PLAIN TIGER (<i>DANAUS CHRYSIPPUS</i> , LINN., 1758) FORM <i>DORIPPUS</i> IN NEW DELHI, INDIA by Rajesh Chaudhary 64
FIRST RECORD OF COMMON CILIATE BLUE BUTTERFLY ANTHENE EMOLUS (INSECTA: LEPIDOPTERA: LYCAENIDAE) FROM UTTAR PRADESH, INDIA by Sushmita, Babita Sharma & Ashok Kumar 65
ARECA PALM <i>DYPSIS LUTESCENS</i> (ARECACEAE) AS NEW LARVAL HOST PLANT FOR THE GIANT REDEYE BUTTERFLY <i>GANGARA THYRSIS</i> (INSECTA: LEPIDOPTERA: HESPERIIDAE) by Raju Kasambe
REPORT OF A LIVE RECORD OF <i>NEPTIS ASPASIA</i> (SYN: <i>PHAEDYMA ASPASIA</i>), LEECH, 1890, (LEPIDOPTERA: NYMPHALIDAE: LIMENITIDINAE: NEPTINI) FROM INDIA AFTER 68 YEARS by Chandrasekharan VK, Balakrishnan Valappil, Vidya Venkatesh, Gauri D Desai & Purnendu Roy
AVIAN DIVERSITY IN URBAN AREAS OF LAKE TOWN, KOLKATA, WEST BENGAL by A. Chowdhury 73
FIRST REPORT OF GENUS <i>PADENIA</i> MOORE, 1882 (LEPIDOPTERA: EREBIDAE: ARCTIINAE: LITHOSIINI) FROM ASSAM, INDIA by Monish Kumar Thapa 76

FOUR ADDITIONS TO THE LANTERNFLY (INSECTA: FULGOROIDEA: FULGORIDAE) FAUNA OF NEPAL
by Sajan K.C. & Bishnu Prasad Neupane 86
GENERA OF ANTS ASSOCIATED WITH LARVAE OF PLAINS CUPID (<i>CHILADES PANDAVA</i> , HORSFIELD, 1829) (INSECTA: LEPIDOPTERA: LYCAENIDAE) INFESTING CYCAS, IN DELHI, INDIA, AND AN INSIGHT INTO THE NATURE OF THEIR INTERACTION
by Rajesh Chaudhary & Vinesh Kumar 90
CHECKLIST OF BUTTERFLIES (INSECTTA: LEPIDOPTERA) FROM FOUR DISTRICTS OF CHHATTISGARH, INDIA WITH THREE ADDITIONS TO THE STATE FAUNA OF BUTTERFLIES OF CHHATTISGARH
by H. N. Tandan, Gulab Chand, Ravi Naidu, Swati Tandan, Gulshan Kumar Sahu, Ramanand Agrawal & Tanuja 98
OBSERVATION OF <i>OROLESTES SELYSI</i> (INSECTA: ODONATA: LESTIDAE) FROM ASSAM, INDIA
by Reji Chandran, Thomson Saburaj, Suresh V Kurup & A. Vivek Chandran 109
SOME IMPORTANT RECORDS OF BUTTERFLIES FROM DHANKUTA AND SUNSARI, NEPAL
by Sajan K.C 111
NEW RECORDS OF <i>PSEUDANAPHES SIKKIMANUS</i> (INSECTA: CHALCIDOIDEA: MYMARIDAE) FROM MEGHALAYA, INDIA
by Bankerdonbor Kharbisnop & Sudhanya R. Hajong 117
EXTENSION OF THE KNOWN FLOWERING PERIOD OF <i>RHODODENDRON ARBOREUM</i> TO JUNE IN NAINITAL DISTRICT, UTTARAKHAND, INDIA
by Ambica Agnihotri 119
A NEW SPECIES OF <i>LEMAIREIA</i> NÄSSIG & HOLLOWAY (LEPIDOPTERA: SATURNIIDAE, SATURNIINAE) FROM NORTH-EASTERN INDIA
by Stefan Naumann & Peter Smetacek 122

MURRAYA KOENIGII (RUTACEAE), A NEW LARVAL HOST PLANT OF ANTHENE

EGG CANNIBALISM BY CATERPILLARS OF THE TAWNY COSTER BUTTERFLY,

NEW RECORD OF FREAK CALINAGA (INSECTA: LEPIDOPTERA: NYMPHALIDAE)

LYCAENINA (INSECTA: LEPIDOPTERA: LYCAENIDAE)

by Raghavendra Rajadhyaksha & Raju Kasambe

FROM EASTERN HIMALAYA, NEPAL by Sanjaya Raj Tamang & Shristee Panthee

ACRAEA TERPSICORE (LEPIDOPTERA: NYMPHALIDAE) IN INDIA

by Tanmoy Bhowmick

78

81

83

SYMPATRY OF <i>B. LUDLOWI</i> AND <i>B. LIDDERDALII</i> AND RANGE EXTENSION C	F
	29
THE SMALLEST KNOWN INDIAN CABBAGE WHITE <i>PIERIS CANIDIA</i> (INSECTALE)	A :
·	32
FEEDING ECOLOGY OF THE INDIAN EAGLE OWL <i>BUBO BENGALENSIS</i> (AVE STRIGIDAE) IN LUCKNOW DISTRICT, UTTAR PRADESH, INDIA	S:
, · · · · · · · · · · · · · · · · · · ·	34
INDIVIDUAL VARIATION IN <i>NYCTEMERA ADVERSATA</i> (INSECTA: LEIPDOPTERA EREBIDAE) IN THE INDIAN HIMALAYA	4 :

LYMANTRIA (PORTHETRIA) APICEBRUNNEA (INSECTA: EREBIDAE: LYMANTRIINAE)

IN ARUNACHAL PRADESH: AN ADDITION TO THE INDIAN FAUNA

by Peter Smetacek & Ambica Agnihotri

by Peter Smetacek & Ambica Agnihotri

127

145

NEW RECORD OF FREAK CALINAGA (INSECTA: LEPIDOPTERA: NYMPHALIDAE) FROM EASTERN HIMALAYA, NEPAL

SANJAYA RAJ TAMANG¹ AND SHRISTEE PANTHEE²

*IKathmandu Forestry College, Lalitpur, Nepal sanjaytamang841@gmail.com

²CAS Key Laboratory of Tropical Forest Ecology, Xishuangbanna Tropical Botanical Garden, University of Chinese Academy of Sciences, Menglun, Mengla, Yunnan, China

Reviewer: Peter Smetacek

Abstract

This paper presents the first record of a Freak, *Calinaga* Moore, 1857 from Taplejung district of Eastern Nepal. Three individuals were recorded from a forest edge alongside Cardamom plantation. The confirmation was made from a photograph of an individual perching on an epiphyte growing on a branch of *Ficus* spp.

Kevwords: Calinaga, Eastern Nepal, New Record

Introduction

Calinaga is placed in the monobasic nymphalid subfamily Calinaginae. The genus occurs in South Asia and China. There is considerable confusion over the taxa in this genus. Some authors recognize 11 species, of which 4 were believed to occur on the Indian subcontinent (Beccaloni et al., 2003; Savela, 2015). However, Todisco et al. (2017) found that for six taxa of this genus they studied, only four were valid. Since only one of these, C. aborica Tytler, 1915 was an Indian taxon, we have treated the remaining taxa, i.e. buddha Moore, 1857, brahma Butler, 1885 and gautama Moore, 1901 as subspecies of C. buddha, following Varshney & Smetacek (2015) until reliable work is carried out on the Indian taxa.

Although the genus was known from both east as well as west of Nepal, i.e. from Himachal Pradesh to Uttarakhand (*buddha*) and from Sikkim to Arunachal Pradesh and Myanmar (*gautama*, *brahma* and *aborica*) (Evans, 1932), there was no report of this genus from

Nepal, although it was assumed that one or the other taxon occurred here.

Material and Method

A study was carried out on butterfly diversity of the Eastern Himalaya, Nepal in 2018 where three individuals of Calinaga were recorded from Taplejung district, Province 1, Nepal. The individuals were recorded from Tamor river basin, one of the main tributaries of Koshi river at an altitude of 1286 m a.m.s.l (27.4911836 E; 87.746465 N). The individuals were seen fluttering along the edges of hill forests bordering cardamom plantation. The individuals were found perching on an epiphyte growing in the branch of a Ficus tree. Though in flight it resembled *Parantica* spp., a careful examination of the photograph (Fig 1) confirmed the species to be a *Calinaga*. We tentatively place the individuals observed by us under C. b. gautama, since the presence of pale brown underside hind wing and more elongated forewing separates it from C. b. brahma (Kehimkar, 2016). The markings of the species along with the orange-red thorax are similar to *C. b. buddha* but the ground color is darker brown, especially on the underside. The forewings are a bit more elongated and produced and the hind wings are narrower and more angular compared to *C. buddha* (Moore, 1902; Evans, 1932).

Results and Discussions

This is the first record of the genus and subfamily Calinaginae from Nepal. As Todisco, 2017 noted, evolutionary history of this Calinaga species is still uncertain and therefore we are not assigning a species level name to it. This species is most likely to be gautama, known from Sikkim, which adjoins the current study area. However, the status of the taxon gautama is not certain. It was recorded in May, which coincides with its short flying period from March to May (Kehimkar, 2016). Though the study was conducted extensively, this species was recorded only from the specific forestagriculture edge. The species was found perching on the epiphyte for more than two hours around noon which might provide some basis for further research in ecology of the species. Lack of research coverage and localised habitat of the species might be the reason for the lack of evidential data of the species in Nepal.

At the recorded site, continual agricultural land extensions were observed. However, traditional agroforestry was practiced in the area, which makes its impact difficult to predict on the status of the species. Also, the lack of evidential data of the larval host plant of the species makes difficult to recommend specific conservation measures. Other members of the genus feed on *Morus* species in the larval stage and this species might feed on *Ficus*. This study confirms the presence of a small local population of the species in Nepal

but further research is essential to assess its overall distribution.

References

Beccaloni, G., M. Scoble, I. Kitching, T. Simonsen, G. Robinson, B. Pitkin, A. Hine & C. Lyal (eds.). 2003. The Global Lepidoptera Names Index (LepIndex). World Wide Web electronic publication.

http://www.nhm.ac.uk/entomology/lepindex (accessed 31 December 2020)

Evans, W.H. 1932. *The Identification of Indian Butterflies* - 2nd Revised Edition. Bombay Natural History Society, Bombay. x+454pp+32pl.

Kehimkar, I. 2016. Butterflies of India. Bombay Natural History Society, Mumbai. xii + 528 pp.

Moore, F. 1901–1903. Lepidoptera Indica. Rhopalocera Vol V. Family Nymphalidae. Sub-family Nymphalinae (continued), Groups Melitaeina and Eurytelina. Sub-families Acraeinae, Pseudergolinae, Calinaginae, and Libytheinae. Family Riodinidae. Sub-family Nemeobiinae. Family Papilionidae. Sub-families Parnassiinae, Thaidinae, Leptocircinae, and Papilionae. Lovell Reeve & Co., London, 248 pp.

Savela, M. 2015. Lepidoptera and some other life forms.

http://www.nic.funet.fi/pub/sci/bio/life/warp/lepidoptera-list. html#lepidoptera (accessed 31 December 2020).

Todisco, V., V. Nazari, D. Cesaroni & V. Sbordoni. 2017. Preliminary molecular phylogeny and biogeography of the monobasic subfamily Calinaginae (Lepidoptera, Nymphalidae). *Zoosystematics and Evolution* 93(2): 243-254.

Varshney, R.K. & P. Smetacek (eds.). 2015. A Synoptic Catalogue of the Butterflies of India. Butterfly Research Centre, Bhimtal and

Indinov Publishing, New Delhi. ii + 261 pp., 8 pl.



Fig 1: Calinaga sp. perching on an orchid