

ISSN 0972- 1800



BIONOTES

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	48
<i>DIOSCOREA ESCULENTA</i> (LOUR.) BURKILL AS A LARVAL HOST PLANT OF <i>TAGIADES</i> <i>JAPETUS</i> (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 <i>ALBULINA ARCASEIA</i> AND <i>ALBULINA PHARIS</i> (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 <i>ANTHENE EMOLUS</i> (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	67
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	70
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

- MURRAYA KOENIGII* (RUTACEAE), A NEW LARVAL HOST PLANT OF *ANTHENE LYCAENINA* (INSECTA: LEPIDOPTERA: LYCAENIDAE)
by Tanmoy Bhowmick 78
- EGG CANNIBALISM BY CATERPILLARS OF THE TAWNY COSTER BUTTERFLY, *ACRAEA TERPSICORE* (LEPIDOPTERA: NYMPHALIDAE) IN INDIA
by Raghavendra Rajadhyaksha & Raju Kasambe 81
- NEW RECORD OF FREAK *CALINAGA* (INSECTA: LEPIDOPTERA: NYMPHALIDAE) FROM EASTERN HIMALAYA, NEPAL
by Sanjaya Raj Tamang & Shristee Panthee 83
- FOUR ADDITIONS TO THE LANTERNFLY (INSECTA: FULGOROIDEA: FULGORIDAE) FAUNA OF NEPAL
by Sajjan K.C. & Bishnu Prasad Neupane 86
- GENERA OF ANTS ASSOCIATED WITH LARVAE OF PLAINS CUPID (*CHILADES PANDAVA*, 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 (INSECTA: 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 *OROLESTES SELYSI* (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 Sajjan K.C 111
- NEW RECORDS OF *PSEUDANAPHES SIKKIMANUS* (INSECTA: CHALCIDOIDEA: MYMARIDAE) FROM MEGHALAYA, INDIA
by Bankerdonbor Kharbisnop & Sudhanya R. Hajong 117
- EXTENSION OF THE KNOWN FLOWERING PERIOD OF *RHODODENDRON ARBOREUM* TO JUNE IN NAINITAL DISTRICT, UTTARAKHAND, INDIA
by Ambica Agnihotri 119
- A NEW SPECIES OF *LEMAIREIA NÄSSIG & HOLLOWAY* (LEPIDOPTERA: SATURNIIDAE, SATURNIINAE) FROM NORTH-EASTERN INDIA
by Stefan Naumann & Peter Smetacek 122

<i>LYMANTRIA (PORTHETRIA) APICEBRUNNEA</i> (INSECTA: EREBIDAE: LYMANTRIINAE) IN ARUNACHAL PRADESH: AN ADDITION TO THE INDIAN FAUNA by Peter Smetacek & Ambica Agnihotri	127
SYMPATRY OF <i>B. LUDLOWI</i> AND <i>B. LIDDERDALII</i> AND RANGE EXTENSION OF <i>BHUTANITIS LUDLOWI</i> IN BHUTAN by Sonam Dorji & Kuenga Tshomo Dorji	129
THE SMALLEST KNOWN INDIAN CABBAGE WHITE <i>PIERIS CANIDIA</i> (INSECTA: LEPIDOPTERA: PIERIDAE) by Shristee Panthee & Ambica Agnihotri	132
FEEDING ECOLOGY OF THE INDIAN EAGLE OWL <i>BUBO BENGALENSIS</i> (AVES: STRIGIDAE) IN LUCKNOW DISTRICT, UTTAR PRADESH, INDIA by Daya Shanker Sharma, Ankit Sinha, Adesh Kumar & Amita Kanaujia	134
INDIVIDUAL VARIATION IN <i>NYCTEMERA ADVERSATA</i> (INSECTA: LEIPDOPTERA: EREBIDAE) IN THE INDIAN HIMALAYA by Peter Smetacek & Ambica Agnihotri	145

INDIVIDUAL VARIATION IN *NYCTEMERA ADVERSATA* (INSECTA: LEIPOPTERA: EREBIDAE) IN THE INDIAN HIMALAYA

PETER SMETACEK¹ AND AMBICA AGNIHOTRI²

¹*Butterfly Research Centre, Bhimtal, Uttarakhand, India 263 136*
petersmetacek@gmail.com

²*JRF, Uttarakhand Forest Research Institute, Haldwani, Uttarakhand 263 139, India*

Reviewer: Sankararaman H.

Introduction

Nyctemera adversata (Schaller, 1788) is a wide spread moth that occurs throughout the Indian subcontinent (Hampson, 1894). Holloway (1988) ignored the peninsular Indian records and reported the species from the Himalaya, west and south China, Japan, Peninsular Malaysia, Sumatra and Borneo. It often occurs in large numbers and is by far the commonest member of the genus throughout the subcontinent. It occurs in several broods through the year and the larvae have been bred on *Debregeasia*, *Girardinia*, *Urtica* (Urticaceae) and *Gynura* and *Crassocephalum* (Asteraceae) in Bhimtal (Smetacek & Smetacek, 2011). Holloway (1988) compiled earlier information on the subject to report *Erechtites*, *Erigeron*, *Gynura*, *Picris*, *Senecio* and other Asteraceae as larval host plants.

The Arctiinae are known to be subject to some individual variation, especially in the Arctiini. The range of individual variation within a species has never been documented in this species. Holloway (1988) noted that the row of brown patches on the hind wing were of various sizes but did not note any other individual variation in this species. Similarly, Hampson (1894) did not note any individual variation in the species. Barlow (1982) noted that there is "considerable variation in the extent of the black markings on the wings". He did not clarify whether the variation was geographical, seasonal or individual. Although the fuscous markings on both the wings varied

greatly in the specimens examined in the present study, the distinctive abdominal markings served to easily separate it from the sympatric and similar *N. cenis* (Cramer [1777]).

We have here depicted the range of individual variation in this species.

In the current study the species has been recorded from 400 – 1500 m, although Kishida (1992) reported it at 1600 m elevation in Nepal.

Methodology

Moths were surveyed using an ultraviolet lamp of 250 watts in Roing, Lower Dibang Valley district, Arunachal Pradesh and at the Butterfly Research Centre, Bhimtal (1500 m) and Jeolikote (1200 m), both in Nainital district, Uttarakhand. In addition, specimens in the reference collection of the Butterfly Research Centre (BRC) were examined.

Material examined: 27 exs.: BRC, Bhimtal, Sattal and Jeolikote, Nainital district, Uttarakhand. 1200 – 1500 m.

Leg. Fred Smetacek Sr.; Peter Smetacek and A. Agnihotri: 6.vi.1981 (1 ex.); 7.vi.1981 (1 ex.); 15.ix.1983 (1 ex.); 13.x.1983 (1 ex.); 28.iv.1986 (1 ex.); 20.iv.1992 (1 ex.); 3.v.1992 (1 ex. Female); 28.v.1992 (2 exs.); 30.v.1992 (1 ex.); 31.v.1992 (2 exs.); 3.vi.1992 (2 exs.); 20.ix.1992 (1 ex.); 2.x.1993 (1 ex.); 26.x.1993 (1 ex.); 27.x.1993 (2 exs.); 23.v.1998 (1 ex.); 11.x.1998 (1 ex.); 23.x.1998 (1 ex.); 14.xi.1998 (1 ex.); 28.xi.1999 (1 ex.);

22.x.2020 (1 ex.); Roing (390m) Arunachal Pradesh: 28.iv. – 15.vi.2021 (2 exs.)

Forewing length: 24 - 28 mm.

Discussion

Of the 27 specimens examined, 23 match the specimens figured in Hampson (1894), Holloway (1988), Kishida (1992) and Spitsyn *et al.* (2015). Holloway's (1988) specimen is a little darker than that depicted by Hampson (1894) and Spitsyn *et al.* (2015). Barlow (1982) depicted a much darker specimen, quite as dark as the darkest specimen examined in this study.

In this study, specimens of *N. adversata* have been recorded from April to June and from September to November, suggesting that there are at least two generations in the western Himalaya. It has also been recorded in April, May and November at low elevation in Arunachal Pradesh although specimens were not taken from the eastern Himalayan autumn brood.

A specimen with remarkably reduced fuscous markings on both the wings was recorded in BRC on 23.x.1998 (fig. 1a); subsequently a specimen only a little more heavily marked was recorded from Roing in May, 2021 (fig. 1b) among dozens of individuals similar to those depicted in Hampson (1894) and Holloway (1988) (fig. 1c). During the same period a heavily marked individual (fig. 1d) similar to that depicted in Barlow (1982) was recorded at the same time in Roing. This confirms that, although rare, the extent of

fuscous markings on the wings of *N. adversata* is individually variable and not linked to geography or the seasons. However, no heavily marked individual has ever been recorded from the western Himalaya in over 50 years of observation.

References

Barlow, H. S. 1982. *An introduction to the moths of south east Asia*. Southdene Sdn. Bht., Kuala Lumpur. vi+ 305 pp., 1+ 50 pl.

Hampson, G.F. 1894. *The fauna of British India including Ceylon and Burma*. Moths. Volume 2. Taylor & Francis, London. xxii + 609 pp.

Holloway, J.D. 1988. *The moths of Borneo: family Arctiidae, subfamilies Syntominiinae, Euchromiinae, Arctiinae: Noctuidae misplaced in Arctiidae (Camptoloma, Aganainae)*. Southdene Sdn. Bht., Kuala Lumpur. 101 pp., 168 figures, 6pl.

Kishida, Y. in Haruta, T. (ed.). 1992. Moths of Nepal Part I. *Tinea* 13 (Supplement 2): 72-75.

Smetacek, P. & R. Smetacek. 2011. Additions to the known larval host plants of Indian Lepidoptera. *Journal of Threatened Taxa* 3(12): 2272-2276.

Spitsyn, V.M., I.N. Bolotov, M.Y. Gofarov, I.V. Vikhreva & N.I. Bolotov. 2015. First record of *Nyctemera adversata* (Schaller, 1788) and *N. carissima* (Swinhoe, 1891) (Lepidoptera, Erebididae, Arctiinae) from Myanmar. *Check list* 11(4): 1684.

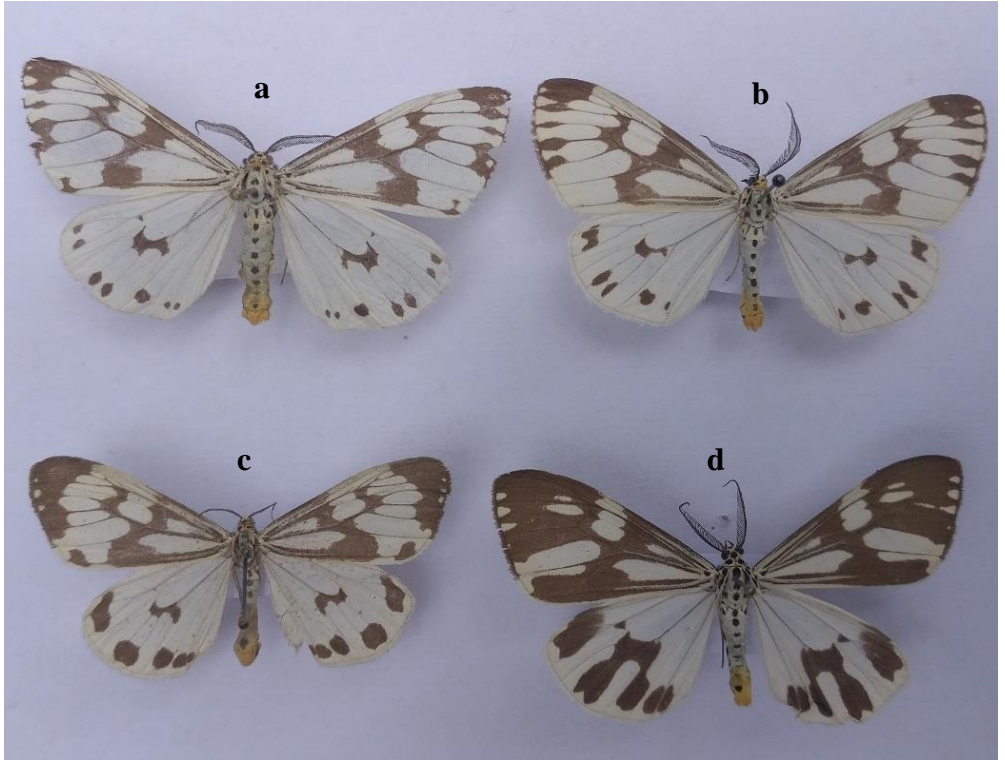


Fig.1: *N. adversata*, a. reduced fuscous markings on both the wings b. specimen only a little more heavily marked, c. similar to those depicted in Hampson (1894) & Holloway (1988) & d. heavily marked individual