

The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under Creative Commons Attribution 4.0 International License unless otherwise mentioned. JoTT allows allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

# Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

## NOTE Additional record of the poorly known Argus *Paralasa nepalica* (Paulus, 1983) (Insecta: Lepidoptera: Nymphalidae) in Nepal

Sanej Prasad Suwal, Krishna Dev Hengaju & Naresh Kusi

26 January 2019 | Vol. 11 | No. 1 | Pages: 13173–13174 DOI: 10.11609/jott.3814.11.1.13173-13174





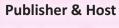
For Focus, Scope, Aims, Policies, and Guidelines visit https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-0 For Article Submission Guidelines, visit https://threatenedtaxa.org/index.php/JoTT/about/submissions#onlineSubmissions For Policies against Scientific Misconduct, visit https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-2 For reprints, contact <ravi@threatenedtaxa.org>

The opinions expressed by the authors do not reflect the views of the Journal of Threatened Taxa, Wildlife Information Liaison Development Society, Zoo Outreach Organization, or any of the partners. The journal, the publisher, the host, and the partners are not responsible for the accuracy of the political boundaries shown in the maps by the authors.

# Partner مندوق محمد بن زاید للمحافظ علی الکائات الحیة

Member







## Additional record of the poorly known Argus *Paralasa nepalica* (Paulus, 1983) (Insecta: Lepidoptera: Nymphalidae) in Nepal

# Sanej Prasad Suwal <sup>1</sup>, Krishna Dev Hengaju <sup>2</sup>, Krishna Hengaju <sup>2</sup>, K

<sup>1</sup>Khwopa College, Department of Environmental Science, Bhaktapur, 44800, Nepal.

<sup>2</sup> IUCN Nepal, Kupondole Rd 162, Lalitpur, 44700, Nepal.

<sup>2</sup> Amrit Science Campus, Department of Environmental Science,

Tribhuvan University, Kathmandu, 44600, Nepal

<sup>3</sup> Resources Himalaya Foundation, Naya Bato, Sanepa,

Lalitpur, 44700, Nepal.

<sup>1</sup>sanej100@gmail.com (corresponding author),

<sup>2</sup> krishd.hju@gmail.com, <sup>3</sup> naresh.kusi@gmail.com

The genus *Paralasa* (Moore, 1891) belongs to the family Nymphalidae which is also linked to the genus *Callerebia*. The recent molecular phylogeny support Miller (1968) who proposed the placement of *Paralasa* within the *Callerebia* series of Ypthimina (Peña et al. 2006), however, the life history and karyotype study by Sauracov & Emmel (2008) showed no new evidence supporting its affinity with Ypthimina. It is usually distributed in the higher mountains of central Asia (NW-Himalaya, Szechwan, East Tibet, Karakorum, Pamir, Tien Shan, Hindukush (Vis & Coene 1987).

This genus is easily identifiable by the presence of a distinct row of 5–7 white points on the underside of the hindwing in the female and reduced white in the male. The underside of females is bicolor since forewing apex and the whole hindwing are covered with a dense layer of

whitish-grey scales. The apex of the forewing is sharpened, the eye-spot is round with a single white pupil (Churkin & Tuzov 1998). The female is somewhat bigger than the male.

There are 30 species of *Paralasa* recorded globally (NHM 2018) and Nepal is home to a single species, *Paralasa nepalica*. In 1973, *Paralasa* material was collected

from northwestern Nepal by Martens. The material was studied by Paulus (1982), who realized that the species was new and described it as *P. nepalica*, representing the easternmost species of the genus *Paralasa* (Vis & Coene 1987). The species is considered endemic to Nepal (Smith 1994).

After the first collection by Martens in 1973 (Vis & Coene 1987), there have been only two additional records till date, one from Chya lekh, Mahakali, northwestern Nepal, at an elevation of 3,740m (Morishita & Innomata 1998) and another above Phoksumdo Village, Dolpa, at 3,500m (Sourakov & Emmel 2008). This is the fourth observation record of this species in Nepal, obtained about 166km north-west from Dolpa and 68.7km north-east from Chya lekh, Darchula, Nepal. Also, no photograph of this species is known to have been taken yet in its natural habitat. The photograph presented here is most likely to be the first for this species in its natural habitat.

We observed the butterfly in Talung Valley (30.203°N & 81.700°E, 4,400m) of upper Humla, Province - 6, on 27 July 2017 at 1:30hr. The butterfly was basking by the roadside along with two other butterflies—Indian Tortoiseshell *Aglais cashmirensis* and Lofty Bath White *Pontia callidice*.

Like most Paralasa species, P. nepalica is mentioned

Ruffor

Date of publication: 26 January 2019 (online & print)

ুहিमालय র ম'ম'খা

DOI: https://doi.org/10.11609/jott.3814.11.1.13173-13174 | ZooBank: urn:lsid:zoobank.org:pub:24FBBFFD-AAA5-41FE-BCF2-2838908A2208

Editor: Monsoon Jyoti Gogoi, Assam University, Silchar, India.

Manuscript details: # 3814 | Received 25 November 2017 | Final received 25 December 2018 | Finally accepted 05 January 2019

Citation: Suwal, S.P., K.D. Hengaju & N. Kusi (2019). Additional record of the poorly known Argus *Paralasa nepalica* (Paulus, 1983) (Insecta: Lepidoptera: Nymphalidae) in Nepal. *Journal of Threatened Taxa* 11(1): 13173–13174; https://doi.org/10.11609/jott.3814.11.1.13173-13174

**Copyright:** Suwal et al. 2019. Creative Commons Attribution 4.0 International License. JOTT allows unrestricted use, reproduction, and distribution of this article in any medium by adequate credit to the author(s) and the source of publication.

Funding: Rufford Foundation, UK.

Competing interests: The authors declare no competing interests.





ISSN 0974-7907 (Online) ISSN 0974-7893 (Print)

PLATINUM OPEN ACCESS



NOTE

#### Additional record of Paralasa nepalica in Nepal

#### Suwal et al.



Image 1. Female Nepal Argus *Paralasa nepalica*, Humla, Nepal, 27 July 2017.

to prefer pine forest belt (Vis & Coene 1987), however, the observation presented in this paper is very different as the habitat is characterized by a wide valley interspersed by big boulders and rocky hills with steep trails that are mostly covered with lichens, grasses, forbs, sedges, and shrubs. The anomaly in the observation calls for further research to better understand the habitat and ecology of the species.

#### References

- Churkin, S.V. & V.K. Tuzov (1998). Revision of *Paralasa hades* species– group from Ghissaro-Darvaz and Pamiro-Alai regions (Lepidoptera, Satyridae). *Neue entomologische Nachrichten* 41: 183–195.
- **NHM (2018).** The global lepidoptera names index; Butterflies and moths of the world; generic names and their type-species.
- Miller, L.D. (1968). The higher classification, phylogeny and zoogeography of the Satyridae (Lepidoptera). *Memoirs of the American Entomological Society* 24: 1–174.



Image 2. Talung Valley, Humla, Nepal, where Nepal Argus *Paralasa nepalica* was photographed on 27 July 2017.

- Moore, F. (1890–1892). Lepidoptera Indica. Vol. I. Rhopalocera. Family Nymphalidae. Sub-families Euploeinae and Satyrinae. Reeve & Co., London, 317pp.
- Morishita, K & T. Inomata (1998). New or little known butterflies from Nepal. Transactions of the Lepidopterological Society of Japan 49(1): 1–8.
- Peña, C., N. Wahlberg, E. Weingartner, U. Kodandaramaiah, S. Nylin, A.V.L. Freitas & A.V.Z. Brower (2006). Higher level phylogeny of Satyrinae butterflies (Lepidoptera: Nymphalidae) based on DNA sequence data. *Molecular phylogenetics and Evolution* 40: 29–49.
- Paulus, H.F. (1982). Paralasa nepalica n. sp. aus Trockengebieten NW-Nepals (Insecta: Lepidoptera: Satyridae: Erebiinae). Senckengbergiana Boilogica, Frankfurt am Main 63(5–6): 337–346.
- Smith, C. (1994). Butterflies of Nepal. Craftsman Press, Bankok, 224pp. Sourakov, A & T.C. Emmel (2008). Life history and karyology of
- Paralasa nepalica (Lepidoptera: Nymphalidai, Satyrinae). Tropical Lepidoptera Research 18(10): 40–42.
- Vis, R. & H.A. Coene (1987). Lepidopterological investigations in Kashmir and Ladakh (India). Nota Lepidopterologica 10(1): 5–24: 31.III.







The Journal of Threatened Taxa (JoTT) is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JOTT are registered under Creative Commons Attribution 4.0 International License unless otherwise mentioned. JoTT allows allows unrestricted use, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

#### ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

January 2019 | Vol. 11 | No. 1 | Pages: 13047-13194 Date of Publication: 26 January 2019 (Online & Print) DOI: 10.11609/jott.2019.11.1.13047-13194

#### www.threatenedtaxa.org

#### Articles

#### **Distribution of the threatened Assamese Macaque** Macaca assamensis (Mammalia: Primates: Cercopithecidae) population in Nepal

- Laxman Khanal, Mukesh Kumar Chalise & Xuelong Jiang, Pp. 13047-13057

#### Redescription of Leposternon octostegum (Duméril, 1851), with an identification key for Brazilian Leposternon species, remarks on meristic methodology, and a proposal for pholidosis nomenclature (Squamata: Amphisbaenidae)

- José Duarte de Barros-Filho, Marco Antonio de Freitas, Thais Figueiredo Santos Silva, Mariana Fiuza de Castro Loguercio & Maria Celeste Costa Valverde, Pp. 13058-13086

#### Communications

#### Annotated checklist and conservation status of mammals of Fars Province, southern Iran

- Fatah Zarei, Sasan Kafaei & Hamid Reza Esmaeili, Pp. 13087-13113

#### Functional sperm assessments of African Lion

Panthera leo (Mammalia: Carnivora: Felidae) in field conditions - Thiesa Butterby Soler Barbosa, Daniel de Souza Ramos Angrimani, Bruno Rogério Rui, João Diego de Agostini Losano, Luana de Cássia Bicudo, Marcel Henrique Blank, Marcilio Nichi & Cristiane Schilbach Pizzutto, Pp. 13114–13119

#### Description of a new species of Pseudophilautus

(Amphibia: Rhacophoridae) from southern Sri Lanka - Sudesh Batuwita, Madura De Silva & Sampath Udugampala, Pp. 13120-13131

### Marine snakes of Indian coasts: historical resume, systematic checklist, toxinology, status, and identification key

- S.R. Ganesh, T. Nandhini, V. Deepak Samuel, C.R. Sreeraj, K.R. Abhilash, R. Purvaja & R. Ramesh, Pp. 13132–13150

#### **Short Communications**

Feeding trails of Dugong Dugong dugon (Müller, 1776) (Mammalia: Sirenia: Dugongidae) in the Gulf of Kachchh, western coast of India - Deepak Apte, Dishant Parasharya & Bhavik Patel, Pp. 13151-13154

Population status and floral biology of Trichopus zeylanicus ssp. travancoricus Burkill ex K. Narayanan (Dioscoreaceae), an important ethnomedicinal plant of the southern Western Ghats, India - Nambi Sasikala & Raju Ramasubbu, Pp. 13156-13161

Taxonomic notes on Grosourdya muriculata (Orchidaceae: Epidendroideae: Vandeae: Aeridinae), a little known endemic orchid from the Andaman & Nicobar Islands, India - Sanjay Mishra, C.P. Vivek, Gautam Anuj Ekka & Lal Ji Singh, Pp. 13162-13167

#### Notes

#### The importance of trans-boundary conservation of the Asiatic Elephant Elephas maximus in Patharia Hills Reserve Forest, northeastern India

- Nazimur Rahman Talukdar, Parthankar Choudhury & Rofik Ahmed Barbhuiya, Pp. 13168–13170

#### Breeding record of Common Hoopoe Upupa epops (Aves: Upupidae) at Satchari National Park in northeastern Bangladesh - Sabit Hasan, Tanvir Ahmed & Hassan Al-Razi, Pp. 13171-13172

Additional record of the poorly known Argus Paralasa nepalica (Paulus, 1983) (Insecta: Lepidoptera: Nymphalidae) in Nepal - Sanej Prasad Suwal, Krishna Dev Hengaju & Naresh Kusi, Pp. 13173-13174

First report of the catfish Nilgiri Mystus Hemibagrus punctatus (Jerdon, 1849) (Bagridae) from Stanley Reservoir, Tamil Nadu, India - Jayasimhan Praveenraj, Nallathambi Moulitharan & M.P. Goutham-Bharathi, Pp. 13175-13179

#### The easternmost distribution and highest elevation record of the rare Desert Cat Snake Telescopus rhinopoma (Reptilia: Colubridae) in Pakistan

- Daniel Jablonski & Rafaqat Masroor, Pp. 13180-13183

#### A checklist of spider fauna of Rajasthan, India

- Neisseril Anirudhan Kashmeera & Ambalaparambil Vasu Sudhikumar, Pp. 13184–13187

#### New records of Chrysomya putoria and C. thanomthini (Diptera: Calliphoridae) from India, with a revised key to the known Indian species

- Meenakshi Bharti, Pp. 13188-13190

#### Lectotypifiction of Impatiens duclouxii Hook.f., a new addition to the flora of India from Arunachal Pradesh

 Rajib Gogoi, Umeshkumar L. Tiwari, Souravjyoti Borah & Bladimir Bajur Theodore Tham, Pp. 13191–13194

Publisher & Host



Member



