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Νοτε

A REPORT OF FALSE TIBETAN CUPID *TONGEIA PSEUDOZUTHUS* HUANG, 2001 (LEPIDOPTERA: LYCAENIDAE) FROM THE UPPER DIBANG VALLEY, ARUNACHAL PRADESH - AN ADDITION TO THE INDIAN BUTTERFLY FAUNA

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A REPORT OF FALSE TIBETAN CUPID *TONGEIA PSEUDOZUTHUS* HUANG, 2001 (LEPIDOPTERA: LYCAENIDAE) FROM THE UPPER DIBANG VALLEY, ARUNACHAL PRADESH - AN ADDITION TO THE INDIAN BUTTERFLY FAUNA

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The lycaenid genus Tongeia Tutt, 1908 has 14 valid species distributed in East and South-east Asia. Most of the recent species within this genus have been described from China (D'Abrera 1986, 1993; Bridges 1988; Huang & Chen 2006). The only validated Tongeia species known so far from India is Tongeia kala (Black Cupid), originally described as Everes kala by Marshall & De Niceville (1882). T. kala has been reported from the northeastern region of India (Khasi Hills, Naga Hills and Manipur), to South Shan States of Myanmar and is known to be rare throughout its range (Evans 1932; Wynter-Blyth 1957; Jeratthitikul et al. 2011). The life history and morphology of T. kala was recently described from the northern part of the Chin State of Myanmar (Jeratthitikul et al. 2011). In 2012, T. kala was recorded from Djulekie, Nagaland, India after more than 100 years (Vidya Venkatesh pers comm. 13 August 2015).

Tongeia potanini Alphéraky, 1889 (previously Everes potanini) has been described from Tenasserim, Myanmar. It is distributed in southern and Southeast Asia from Myanmar to Thailand, Laos, Vietnam and South China (http:// yutaka.it-n.jp/lyc4/80650001. html). It is likely that the species may be present in the far-eastern



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regions of India, bordering Myanmar and southern China (Tibet). Similarly, *Tongeia menpae*, which has been recorded from Laohuzui, Metok, (1,500m elevation) in the Dihang/Lower Tsangpo Valley, which is close to Arunachal Pradesh, may also be found within the political boundaries of India. However, there are no known records of these two *Tongeia* species from India so far.

In this paper we report *Tongeia pseudozuthus* Huang (2001) from India based on the two recent records, which is described in detail below. This is the only other *Tongeia* species known so far from India apart from *T. kala*.

Taxonomic history and salient features of *Tongeia pseudozuthus*: This species was first described from specimens obtained from Chayu area, southeastern Tibet by Huang (2001) who noted that *T. pseudozuthus* was, in fact, first collected in 1911 from Chayu in Tibet by Bailey (1912). These specimens were misidentified as *T. ion* (originally named as *Everes ion*) and *T. zuthus* (originally named as *Everes xuthus*) (South 1913; Huang 2001). South (1913) had also identified *E. ion* from Kahao and *E. xuthus* from Minzong whose identification needs to be further checked and verified. Both these places fall within the present day Anjaw District of Arunachal

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False Tibetan Cupid recorded in India

Pradesh, India.

Systematic account of *Tongeia pseudozuthus* Huang, 2001:

Order: Lepidoptera Super family: Papilionoidea Family: Lycaenidae Sub-family: Polyommatinae Tribe: Polyomattini Genus: Tongeia Species: pseudozuthus

Length of fore-wing of *Tongeia pseudozuthus* is 11– 13 mm. In *T. pseudozuthus* (False Tibetan Cupid; Image 1a–c) the under hind-wing discal spots are square and beige, but in the similar looking species *T. kala* (Black Cupid; Image 1d) and *Shijimia moorei* (Bicolor Cupid), it is round and black. *T. menpae* may be separate from *T. pseudozuthus* by the discal band not being joined with the sub-marginal band. The mainly black under hindwing basal spots are a distinctive character for this species and separate it from its close Chinese allies. Details of the separation of *T. pseudozuthus*, based on morphology and genital (both male and female) characteristics from the other closely related species such as *T. zuthus*, *T. ion* and *T. amplifascia* has been described in detail by (Huang 2001).

Reporting Tongeia pseudozuthus from India: The

Karimbumkara et al.

most recent record of this species from India, both from Ithun Valley, Upper Dibang Valley District, come from collections made on 16 August 1987 by PR (Purnendu Roy) and from an individual sighted and photographed by SNK (Seena Narayanan Karimbumkara) (Image 1a) on 10 June 2013. These records from India forms the first report of this species 74 and 100 years after the last collections made in 1913. The specimen collected by PR is deposited in the Lepidoptera Collection at Natural History Museum, London (Image 1b,c).

PR, who collected it at an approximate altitude of 1,067m, had tentatively identified his single specimen as *Everes* sp. However, it was in 2012 that the Indian specimen deposited at the Natural History Museum, London was compared against *Tongeia pseudozuthus* after which it was confirmed to be the same. Within a year, on 10 June 2013, SNK recorded this species from Mishmi Hills between Mayodia and Hunli on the side of the main road approximately 5km from the Hunli settlement. A single individual was spotted on a rock near a small hill stream. The habitat was disturbed, with a state highway passing right through it.

During our visit, road improvement and widening activity was on-going, which escalated the disturbance levels. The recorded altitude of the site of collection, as per the hand-held Garmin GPS 60 CSX, at 3m accuracy, was 1,450 m (Fig. 1). The butterfly took off straight



Image 1. a - *Tongeia pseudozuthus*, False Tibetan Cupid; © SNK; b - *T. pseudozuthus* UP; c - *T. pseudozuthus* UN from the specimen collected by PR, deposited at the Natural History Museum, London; d - *T. kala*, Black Cupid; © Vidya Venkatesh



Figure 1. The location of *Tongeia* pseudozuthus records from India

almost vertically upwards in a single flight movement and although we waited for a good 30 mins for it to come back, it never returned. We returned to the same spot the next day and searched the adjoining areas, but were not able to locate any individuals of the species. The surrounding forest around the stream has been classified as sub-tropical broad leaved evergreen forests, typical of mid-elevation areas of eastern Himalaya (Champion & Seth 1968).

Conclusion: Our report of the *Tongeia pseudozuthus* from two individuals, both from the Upper Dibang Valley, Arunachal Pradesh, adds a species to the existing butterfly fauna of India. The Upper Dibang Valley, like most part of Arunachal Pradesh, is remote and remains one of the least explored regions of India in terms of butterfly fauna. Detailed surveys are strongly recommended, particularly within its vast dense forest tracts, which would likely reveal numerous important and significant butterfly records.

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Articles

Low genetic diversity in Clarias macrocephalus Günther, 1864 (Siluriformes: Clariidae) populations in the Philippines and its implications for conservation and management

-- Marc Timothy C. Tan, Joycelyn C. Jumawan & Jonas P. Quilang, Pp. 8849-8859

On the reproductive ecology of Suaeda maritima, S. monoica and S. nudiflora (Chenopodiaceae)

-- A.J. Solomon Raju & Rajendra Kumar, Pp. 8860-8876

Communications

The Nilgiri Tahr (Mammalia: Cetartiodactyla: Bovidae: Nilgiritragus hylocrius Ogilby, 1838) in the Agastyamalai range, Western Ghats, India: population status and threats -- Ponniah Hopeland, Jean-Philippe Puyravaud & Priya Davidar, Pp. 8877-8882

All that glitters is not gold: A projected distribution of the endemic Indian Golden Gecko Calodactylodes aureus (Reptilia: Squamata: Gekkonidae) indicates a major range shrinkage due to future climate change

-- Aditya Srinivasulu & Chelmala Srinivasulu, Pp. 8883-8892

Description of a new species of Umairia Hayat (Hymenoptera: Aphelinidae) with additional distribution records of aphelinids from India

-- Sagadai Manickavasagam, Chakaravarthy Menakadevi & Mani Ayyamperumal, Pp. 8893-8897

Egg parasitoids from the subfamily Scelioninae (Hymenoptera: Platygastridae) in irrigated rice ecosystems across varied elevational ranges in southern India

-- M. Shweta & K. Rajmohana, Pp. 8898-8904

Short Communications

Perch height and the hunting success of the Indian Eagle Owl Bubo bengalensis (Franklin) (Aves: Strigiformes: Strigidae) targeting anuran prey -- Eric Ramanujam, Pp. 8905-8908

A checklist of avifauna from Malgaon-Bagayat and Malvan towns of Sindhudurg District, Maharashtra, India -- Mayura Khot, Pp. 8909-8918

Rediscovery of Penicillium paradoxum (Ascomycete: Aspergillaceae) from Maharashtra, India

-- Kunhiraman C. Rajeshkumar, Sayali D. Marathe, Sneha S. Lad, Deepak K. Maurya, Sanjay K. Singh & Santosh V. Swami, Pp. 8919-8922

Notes

A first record of the Lined Wrasse Anampses lineatus Randall, 1972 (Perciformes: Labridae) in the Gulf of Mannar, Tamil Nadu, India

-- S. Prakash & T.T. Ajith Kumar, Pp. 8923-8926

A report of False Tibetan Cupid Tongeia pseudozuthus Huang, 2001 (Lepidoptera: Lycaenidae) from the Upper Dibang Valley, Arunachal Pradesh - An addition to the Indian butterfly fauna -- Seena N. Karimbumkara, Rajkamal Goswami & Purnendu Roy, Pp. 8927-8929

Recent sightings of Kaiser-I-Hind Teinopalpus imperialis Hope, 1843 (Lepidoptera: Teinopalpani) from Manipur, India -- Baleshwor Soibam, Pp. 8930-8933

On the occurrence of Theobaldius(?) tristis (Blanford, 1869) (Caenogastropoda: Cyclophoridae) in the northern Western Ghats, Maharashtra, India

-- Amrut R. Bhosale, Tejas S. Patil, Rupesh B. Yadav & Dipak V. Muley, Pp. 8934-8937

Are exotics Amynthas alexandri (Beddard, 1900) and Metaphire peguana (Rosa, 1890) (Clitellata: Oligochaeta: Megascolecidae) a threat to native earthworms in Kerala, India?

-- S. Prasanth Narayanan, S. Sathrumithra, Dinu Kuriakose,

G. Christopher, A.P. Thomas & J.M. Julka, Pp. 8938-8942

New phytogeographically noteworthy plant records from Uttarakhand, western Himalaya, India

-- Amit Kumar, Bhupendra Singh Adhikari & Gopal Singh Rawat, Pp. 8943-8947

Aira (Poaceae): a new generic record for Nicobar Islands, India -- Kumar Vinod Chhotupuri Gosavi, Arun Nivrutti Chandore & Mayur Yashwant Kamble, Pp. 8948-8949

Notes on three new records of foliicolous lichens from Karnataka Western Ghats, India

-- S. Shravan Kumar & Y.L. Krishnamurthy, Pp. 8950-8952



