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Apatani Glory *Elcysma ziroensis* (Zygaenidae, Chalcosiinae)

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Front Cover - Apatani Glory *Elcysma ziroensis* (Zygaenidae, Chalcosiinae), India, Arunachal Pradesh. Photo by Sanjay Sondhi.

Back Cover - *Metallolophia taleensis* (Geometridae, Geometrinae), India, Arunachal Pradesh. Photo by Sanjay Sondhi.

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Moths of Tale Wildlife Sanctuary, Arunachal Pradesh, India with seventeen additions to the moth fauna of India (Lepidoptera: Heterocera)

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Abstract: Moth biodiversity assessments at Tale Wildlife Sanctuary in Arunachal Pradesh, India, which consisted of over 29 days of survey during the months of April, May, August and September in 2011 and 2019, resulted in a checklist of 497 moth species of which 460 species are identified to species level, while 37 are identified to genus level. There are 17 species for which no published records exist from India and are additions to the known moth fauna of India, and more than a hundred species for which no published records exist from Arunachal Pradesh. Over 200 species still remain to be identified. We also include two additional plates with species identified after the submission of the manuscript and some prominent unidentified species.

Key words: biodiversity, eastern Himalaya, range extension, Subansiri

INTRODUCTION

The hill state of Arunachal Pradesh in northeast India is situated at the junction of the Oriental and Palearctic biogeographic regions. The state is part of the Himalayan Biodiversity Hotspot, which stretches from NE Pakistan eastward to the Dibang Valley in eastern Arunachal Pradesh. The parts of Arunachal Pradesh further east of the Brahmaputra River are in the Indo-Myanmar Biodiversity Hotspot. Arunachal Pradesh has 79.63% of its land area forested (Forest Survey of India, 2019) supporting unusually high species diversity and many prominent endemic species and making this a globally important biodiversity area.

Arunachal Pradesh is the largest amongst the seven “sister” states of northeast India. Historically, this area was called the North-East Frontier Agency (NEFA), and until 1972, it remained constitutionally a part of the state of Assam. In 1972, NEFA became the Union Territory of Arunachal Pradesh, and it became a full-fledged state in 1987. The state is bordered by the Indian states of Assam and Nagaland on its southern border, Bhutan on its western border, China on its northern border and Myanmar on its eastern border. Arunachal Pradesh has 26 major tribes, mostly inhabiting the hill forests of the state.

The moth diversity of Arunachal Pradesh has been very poorly studied. Historically, during the time of British occupation, the best-studied sites in the Himalayan region were around hill stations. Consequently, in northeast India, most historical records for moths are near cities such as Darjeeling and Shillong. The other areas that were well surveyed were the Naga Hills and Khasi Hills. Arunachal Pradesh, without any major hill city, was historically poorly studied.

In recent times, there have been only a handful published reports on the moth diversity of Arunachal Pradesh. Gupta &

Shukla (1977a,b) reported on a few moth species from Siang district in Arunachal Pradesh. Ghosh & Chaudhury (1990) listed 15 species of moths from Arunachal Pradesh. Arora & Chaudhury (1982) listed 55 species of Arctiinae from Arunachal Pradesh and Assam. Kirti *et al.* (2005) published a checklist of Arctiinae from northeast India, which included records from Arunachal Pradesh. Kirti & Saxena (2012) listed 103 species of Geometridae from northeast India. Chandra & Sambath (2013) list 113 species of moths from Tawang district, Arunachal Pradesh. Gogoi *et al.* (2014) listed 12 species of silkmoths from West Siang district, while Kumar *et al.* (2016) listed 29 species of Saturniidae from northeast India, with their surveys including numerous districts of Arunachal Pradesh. Grehan & Ismavel (2017) published a short note on Ghost moths of northeast India. Sondhi & Kunte (2018) listed 148 species of moths from Pakke Tiger Reserve, East Kameng district, Arunachal Pradesh. The State Fauna Series by the Zoological Survey of India does not cover any moths in the invertebrate part of this series for Arunachal Pradesh (Editor-Director, 2006). Chandra *et al.* (2019) surveyed Lepidoptera across the Indian Himalaya between 2016 and 2018, and listed 1274 moth species. In this study, two protected areas in Arunachal Pradesh, Dihang-Dibang Biosphere Reserve and Namdapha National Park, were surveyed. The Moths of India website (Sondhi *et al.*, 2020a) lists over 500 species of moths from Arunachal Pradesh. From the neighboring state of Assam, which shares a long border with Arunachal Pradesh, Rose (2002) listed 81 species of moths from Jatinga, Dima Hasao district. Arandhara (2016) listed 31 species of hawkmoths from Digboi, Tinsukhia district in Assam. Arandhara *et al.* (2017) published a list of 333 macro moth species from the Tinsukhia district, Assam. Despite, these publications, there are few detailed biodiversity assessments of moths from Arunachal Pradesh, highlighting the

need for scientific collections and biodiversity assessments to document the moth fauna of the state. In this paper, we list 497 species of moths recorded during our biodiversity assessments, with many first records for India.

MATERIALS AND METHODS

Tale Wildlife Sanctuary, with an area of 337 km², is located 14 km northeast of Ziro, the headquarters of Lower Subansiri district in Arunachal Pradesh (Fig. 1). The sanctuary was established in 14 June 1995 from Tale Reserved Forests, which was notified on 15 May 1979. The wildlife sanctuary has the Pange River on its eastern boundary and the Sipu River on the south. The Tale River and the Sipu River flow through parts of the WLS, and there are numerous small streams and rivulets that crisscross it.

There are two campsites within the WLS, Pange and Tale Valley, as shown in the map of the WLS (Fig. 2). The Pange campsite is on the southwest edge of the WLS, while Tale Valley is part of the core area in the centre of the WLS. A 7 km jeep track connects Monipoliyang village to the Pange campsite, with the highest point being at the Tarin Tiibe Khoke

Pass. The Tale Valley campsite is 14 km from Pange, on a track that is accessible only on foot for most of the year, though a vehicle can access part of the track during the dry months. The sanctuary gets its name from the plant “Tale”, which grows abundantly in the WLS. Tale, in Apatani dialect, is the name of a wild variety of onion, *Allium hookeri* (Amaryllidaceae), which is referred to by the Nyishi tribe as ‘Tala’.

The primary vegetation in the WLS is subtropical broadleaved forest, temperate broadleaved forest and temperate conifers. The floral diversity of the area comprises species of oak and rhododendron, and numerous species of bamboo and conifer species such as *Tsuga dumosa* and *Abies densa* (Pinaceae). In Tale Valley, conifers grow in the valley, while broad-leaved forests grow on the hilltops. Images showing the habitat at Pange and Tale are included (Fig. 3, Plate 21).

Moths were surveyed at Tale WLS from 17 to 24 September 2011, 17 to 23 April 2019, 21 to 23 May 2019 and 26 August to 6 September 2019 at multiple locations, namely Pange Range Office, Tale Valley, Pamluk, Suchusi village and the Inspection Bungalow at Hapoli-Ziro. The GPS coordinates and altitudes as well as survey month and survey effort for these survey sites are listed in Table 1 and indicated in Fig. 1.

Table 1. List of study sites at Tale Wildlife Sanctuary, Arunachal Pradesh, India.

Sr. No.	Name of site	GPS reading	Altitude	Months surveyed	No. survey nights
1	Pange Range Office (PN)	N27° 32.867' E93° 53.898'	1858 m	Apr, May, Aug, Sep	21
2	Tale Valley (TV)	N27° 32.050' E93° 57.083'	2353 m	Sep	2
3	Inspection Bungalow Ziro-Hapoli (ZI)	N27° 32.088 E93° 49.224	1584 m	Apr, Sep	2
4	Pamluk (PM)	N27° 40.279 E93° 55.027'	1110 m	Sep	3
5	Suchusi, Ziro-Hapoli (SU)	N27° 30.938' E93° 50.246'	1523 m	Sep	1

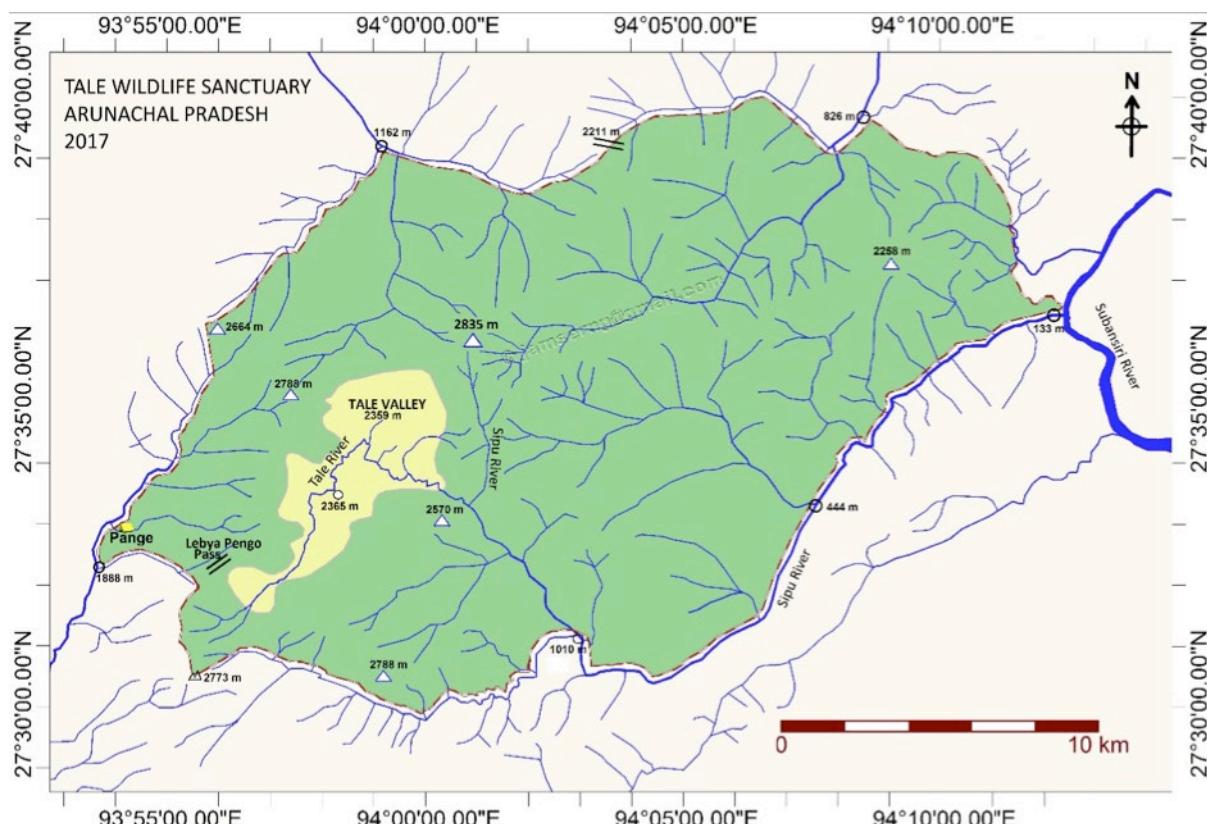


Figure 1. Map of Tale WLS, courtesy Hapoli Forest Division, Arunachal Pradesh Forest Department. The Map of Tale WLS was provided to us by the DFO, Tale WLS, Arunachal Forest Department with permission to use.

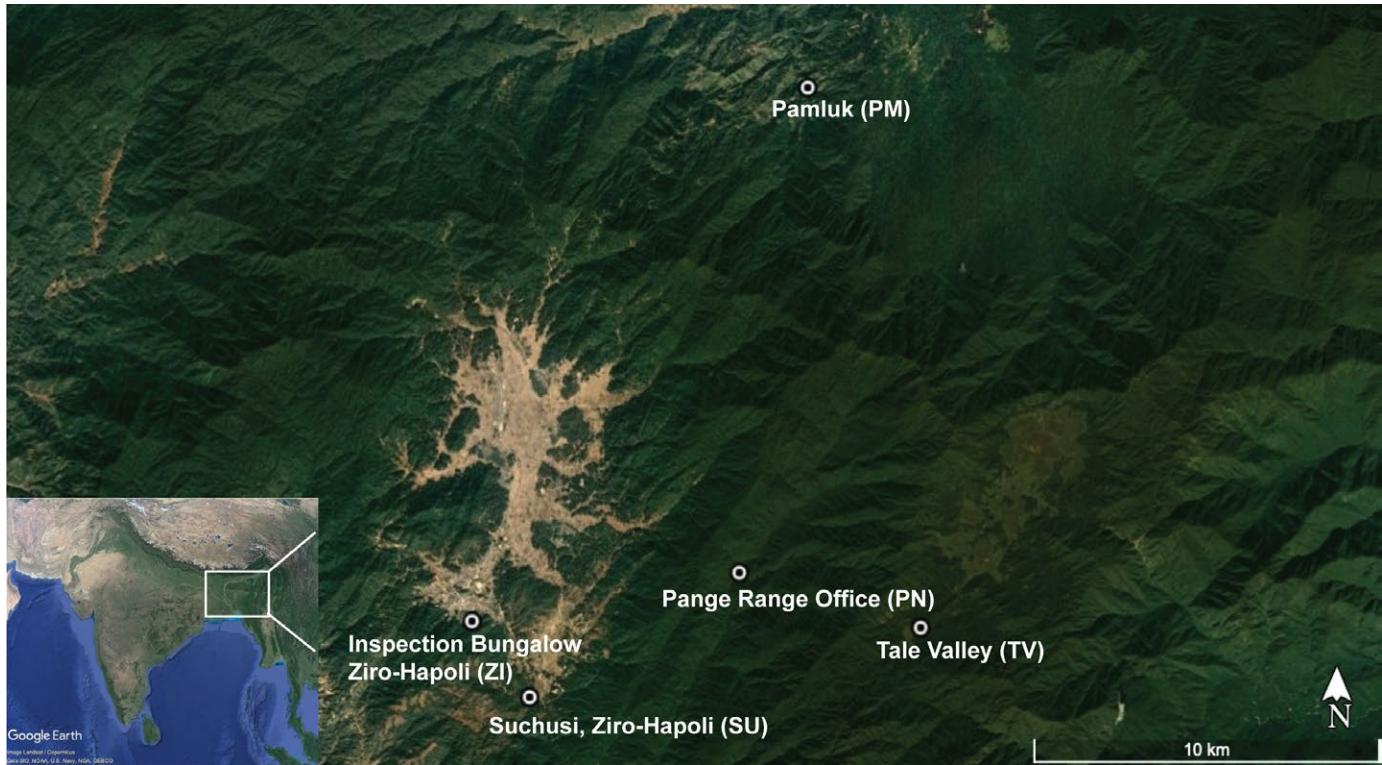


Figure 2. Map of survey sites, Tale WLS.



Figure 3. Survey habitats and sites. **A:** Tale River habitat at Pange. **B:** Pange campsite landscape. **C:** Tale Valley habitat. **D:** Research team at Tale Valley.

Moth surveys were conducted at night using a 160 W mercury vapour bulb on a 1.2 m by 1.5 m white cloth screen powered with a Honda™ EP1000 portable generator in September 2011, April 2019 and May 2019. In August and September 2019, surveys were conducted with LepiLED Maxi supported by three 20,000-mAH Li-Polymer power banks. No

collection was done in September 2011 and moths were only photographed on the moth screen. We also conducted diurnal surveys by walking various trails and opportunistically searching for species. All moths were collected on the moth screen at night, unless specifically mentioned. All field photographs were taken using Nikon™ D300 and Nikon™ D750 cameras with an

AF-S VR Micro-Nikkor™ 105mm f/2.8G IF-ED lens.

The biodiversity assessment for Lepidoptera at Tale WLS was undertaken at the behest of Koj Rinya, Divisional Forest Officer, Tale WLS, with Pratibha Riswadkar as the principal investigator (PI) for butterflies and Sanjay Sondhi as the PI for moths. A collection permit for Lepidoptera was obtained from the Office of the Principal Chief Conservator of Forests (WL & BD), Arunachal Pradesh Forest Department (Letter No. CWL/Gen/173/2018-19/Pt. VII/3993-94 dated 8/3/2019). Hence, moth collection was conducted during the April, May, August and September 2019 field surveys. Specimens are deposited in the Research Collections (<http://collections.ncbs.res.in/>) of the National Centre for Biological Sciences, Bengaluru, India (NCBS). Both dry and wet specimens were collected, and each specimen is assigned a unique specimen code. If multiple specimens of the same species were collected, each specimen received a separate specimen code. Tissue (three legs each) was collected from many of the specimens and stored in molecular grade (100%) ethanol and these tissue samples are also deposited in the Research Collections of NCBS. Over 500 specimens were collected during the biodiversity assessment. Images of pinned specimen are shown with dorsal and ventral views along with a 10 mm scale for size. The sex of the species, if known, is mentioned in the notes and the plates. Photographs of all the live individuals were taken in the survey area.

Identification of both pinned specimens as well as photographs was done using existing literature, which includes: Barlow (1982), Bell & Scott (1937), Černý & Pinratana (2009), Dey *et al.* (2018), Hampson ([1893], 1894, 1895, 1896, 1897), Han & Xue (2011), Haruta (1992, 1993a, 1994, 1995, 1998, 2000), Holloway (1983, 1985, 1986, 1987, 1988, 1989, 1993, 1996, 1997, 1998, 1999, 2003, 2011), Inoue *et al.* (1982), Inoue *et al.* (1997), Irungbam *et al.* (2016), Kendrick (2002), Kirti & Singh (2015, 2016), Kirti *et al.* (2019), Kitching (2020), Kononenko & Pinratana (2005, 2013), Pinratana & Lampe (1990), Pinratana & Kononenko (2015), Prout (1920-1939), Ratnasingham & Hebert (2007), Robinson *et al.* (1994), Sanyal *et al.* (2017), Schintlmeister & Pinratana (2007), Shashank & Twinkle (2018), Shubhalaxmi (2018), Sondhi & Sondhi (2016), Sondhi & Kunte (2018), Sondhi *et al.* (2020a), Whitaker *et al.* (2014) and Zolotuhin & Pinratana (2005). Experts were consulted, wherever deemed necessary. The species checklist and species notes are organised based on the phylogenetic arrangement of superfamilies and families proposed by Nieuwerken *et al.* (2011) and Kawahara *et al.* (2019).

The following abbreviations are used: **BR**: Biosphere Reserve; **FWL**: forewing length ; **IB**: Inspection Bungalow; **NCBS**: National Centre for Biological Sciences; **NE**: northeast; **NHM**: Natural History Museum, London; **NP**: National Park; **OD**: Original description; **TL**: Type locality; **TR**: Tiger Reserve; **WLS**: Wildlife Sanctuary.

RESULTS AND DISCUSSION

The biodiversity assessment at Tale WLS resulted in a partial checklist of 497 species of moths, which are listed in Table 2. At least another 200 species still need to be identified. Four hundred and sixty species were identified to species level,

while 37 species were identified only to the genus level. Thirty-nine species were identified tentatively to species level, and these are listed as "cf." indicating that they are provisionally identified, and their identity needs confirmation through further investigation. Many of these provisionally identified species will need to be compared with extralimital congeners for species confirmation. Seventeen species or subspecies are new records for India (Table 3). More than 100 species and subspecies are reported here from Arunachal Pradesh for the first time, which is not surprising given the previous paucity of information of moth fauna for the state. Images for all the species recorded are included in this paper. Brief notes on the 153 interesting species that are either new records for India or Arunachal Pradesh, or are rarely reported species, are mentioned below with information on the specimens collected or photographs taken, along with taxonomic and distribution notes.

Family Sesiidae

Subfamily Sesiinae

Tribe Melittiini

Melittia hampsoni Beutenmüller, 1894 (Image 2)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM564).

Notes: Axel Kallies identified this rare sesiid (pers. comm. Sanjay Sondhi). Hampson [1893] described this species as *Melittia grandis* from Sikkim. However, as this species name had already been assigned to a North American species, *Melittia hampsoni* Beutenmüller, 1894 was suggested as its replacement name (Pühringer & Kallies, 2004).

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). There are no recent published records of this species from India and this is the first published record of this species from Arunachal Pradesh.

Family Limacodidae

Subfamily Limacodinae

Melinaria cf. repanda (Walker, 1865) (Image 5)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.xiii.2019.

Notes: *Melinaria repanda*, *M. pseudorepanda* (Hering, 1933) and *M. campagniei* (de Joannis, 1929) all have a similar fascia of the silver line separating the green area of the wing from the brown border and it is not possible to separate these species without examining genitalia. The second and third species are extralimital.

Distribution: India: Sikkim, Assam (Hampson, [1893]), Nagaland (Sondhi *et al.*, 2020a), Arunachal Pradesh (Tale WLS). Elsewhere: Bhutan (Irungbam *et al.*, 2017), Nepal, NE India, Myanmar (Solovyev, 2014).

Family Zygaenidae

Subfamily Chalcosiinae

Elcysma ziroensis Chadha, Gogoi & Young, 2017 (Image 9)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 06.ix.2019.

Notes: This species, which has Tale WLS as its type locality, is known from a handful of records around the sanctuary area. We recorded a single worn individual with a damaged hindwing, at 13:30. The moth was inactive and continued to sit motionless for over 30 minutes at the same spot.

Distribution: India: Arunachal Pradesh (TL: Tale WLS).

Eterusia raja Moore, [1858] (Image 10)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange to Tarin Tiibe Khoke Pass trail, 28.viii.2019. Wings photographed.

Notes: Wing of a dead individual collected on the Pange to Tarin Tiibe

Khoke Pass trail, which was sufficient for identification.

Distribution: India: West Bengal (TL: Darjeeling), Nagaland (Sondhi et al., 2020a), Arunachal Pradesh (Tale WLS). This is the first published record of this species from Arunachal Pradesh.

***Milleria hamiltoni* Swinhoe, 1891 (Image 12)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange to Tarin Tiibe Khoke Pass trail, 19.ix.2011.

Notes: Recorded at 09:40, feeding at carnivore seat and moist soil, in the company of Pale Hedge Blues *Udara dilectus* (Moore, 1879).

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). There are no recent published records of this species from India, and this is the first record from Arunachal Pradesh.

***Pseudarbusas ochrea* (Elwes, 1890) (Image 14)**

Material examined: India, Arunachal Pradesh, Tale WLS, Tale Valley-Pange trail, 30.ix.2019, leg. SS (NCBS-BM188). Wings and tissue collected.

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley-Pange trail, 30.ix.2019.

Notes: Four individuals spotted on the jungle trail during the day, with a weak, fluttering flight. The moth resembles a small yellow butterfly in flight. The FWL of the specimen is 12 mm with an expanse of 21 mm. *Pseudarbusas efetovi* Tarmann, 2012 is a similar species from the Khasi Hills, which is larger with a FWL of 14 mm, but is best separated from *P. ochrea* by examining genitalia (Tarmann, 2012).

Distribution: India: Nagaland (TL: Naga Hills), Arunachal Pradesh (Tale WLS). This is the first published record of this species from Arunachal Pradesh since its original description.

Family Thyrididae

Subfamily Siculodinae

Tribe unassigned

***Pyrioides sinuosus* (Walker, 1896) (Image 16)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 21.v.2019, leg. TK, (NCBS-BK030).

Distribution: Manipur (TL), Nagaland (Sondhi et al., 2020a), Arunachal Pradesh (Tale WLS). Elsewhere: Japan (Inoue et al., 1982), Hong Kong (Kendrick, 2002), Taiwan, China, Vietnam (iNaturalist, 2020). This is the first published record of this species from Arunachal Pradesh.

Tribe Siculodini

***Herdonia osacesalis* Walker, 1859 (Image 17)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pamruk, 31.viii.2019, leg. SS, (NCBS-BL002).

Distribution: India: NE India (Inoue, 1993), West Bengal (Neora Valley NP), Arunachal Pradesh (Namdapha NP, Tale WLS) (Chandra et al., 2019). Elsewhere: Nepal, Bangladesh (TL: Sylhet), Myanmar, Thailand (Inoue, 1993). While Inoue (1993) mentions the distribution of this species as "NE India", it does not mention any specific locations.

Family Crambidae

Subfamily Acentropinae

***Agassiziella cf. albividiva* Warren, [1896] (Image 18)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamruk, 01.ix.2019.

Notes: Appearance close to the original description and image in Whitaker et al. (2014). The primary discrepancy is in this individual is that the postdiscal line of the hindwing is black without a white inner edge.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Thailand, W. Malaysia, Vietnam, Hong Kong (Whitaker et al., 2014). This is the first published record of this species from Arunachal Pradesh.

Subfamily Spilomelinae

Tribe Margaroniini

***Glyphodes lacustralis* Moore, 1867 (Image 31)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.v.2019.

Distribution: India: West Bengal (TL), Sikkim (Hampson, 1896), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yamanaka, 1995). This is the first published record of this species from Arunachal Pradesh.

***Glyphodes orbiferalis* Hampson, 1896 (Image 32)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamruk, 31.viii.2019.

Notes: *Glyphodes prothymalis* Swinhoe, 1892 is a similar species in which the postmedial white patch is triangular, while in *G. orbiferalis* it is rounded (Hampson, 1896).

Distribution: India: Uttarakhand, Nagaland (Zunheboto district), Arunachal Pradesh (Sessa Orchid WLS, Pakke TR and Tale WLS) (Sondhi et al., 2020a). Elsewhere: Nepal (Yamanaka, 1995), China, Myanmar, Borneo (Hampson, 1896). While Mathew (2006) lists this species in his checklist of Indian pyralids, there are no previous published records of this species from India, though Hampson (1896) lists it from Myanmar. Hence this is the first published record of this species from India.

***Glyphodes prothymalis* Swinhoe, 1892 (Image 33)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011.

Notes: Similar species: *Glyphodes orbiferalis*. See notes above.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Pakke TR and Tale WLS) (Sondhi et al., 2020a). These are the first published records of this species from Arunachal Pradesh.

***Tyspanodes fascialis* (Moore, [1868]) (Image 41)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pamruk, 01.ix.2019, leg. SS, (NCBS-BM473).

Distribution: India: Bengal (TL), Meghalaya (Hampson, 1896), Arunachal Pradesh (Tale WLS). This is the first published record of this species from Arunachal Pradesh.

Tribe unassigned

***Goniorhynchus cf. butyrosa* (Butler, 1879) (Image 49)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Notes: Provisionally identified as *G. butyrosa*, but no specimen was collected. (Ratnasingham & Hebert, 2007).

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: China, Thailand and Japan (Ratnasingham & Hebert, 2007). Mathew (2006) does not list this species in his checklist of Indian pyralids, and there are no previous published records of this species from India; hence this represents a provisional addition to Indian moth fauna.

Family Pyralidae

Subfamily Pyralinae

Tribe Pyralini

***Orybina kobesi* Roesler, 1984 (Image 54)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pamruk, 31.viii.2019, leg. SS, (NCBS-BM461).

Distribution: India: West Bengal (Neora Valley NP), Arunachal Pradesh (Namdapha NP, Tale WLS) (Chandra et al., 2019). Elsewhere: Nepal (Yamanaka, 1995). China, Brunei, Indonesia, Myanmar, Malaysia, Thailand (Qi et al., 2017).

Family Drepanidae

Subfamily Drepaninae

Tribe unassigned

Ditrigona quinaria quinaria (Moore, 1867) (Image 57)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Notes: Very similar to *Ditrigona idaeoides* (Hampson, [1893]). *Ditrigona quinaria nivea* (Hampson, [1893]) lacks sub-basal fuscous line and has the three outer waved fuscous line equidistant on forewing. *Ditrigona idaeoides* has a sub-basal fuscous line, has discal spot and the three outer waved lines are not equidistant on forewing. Numerous subspecies of *D. quinaria* are listed, but it is likely that this is the subspecies that occurs in the E. Himalayas, which is the nominate subspecies *quinaria*, rather than *nivea*, which occurs in the Khasi Hills, south of the Brahmaputra.

Distribution: India: Ssp. *quinaria*: West Bengal (Darjeeling), Arunachal Pradesh (Eaglenest WLS and Tale WLS). Ssp. *nivea*: Meghalaya (Khasi Hills; Shillong) (Wilkinson, 1968). Elsewhere: Ssp. *quinaria* Tibet (Wilkinson, 1968). Joshi *et al.* (2020) did not report this species from Arunachal Pradesh in the checklist of Indian Drepanoidea; however, records by SS from Eaglenest WLS and Tale WLS in Arunachal Pradesh establish its presence in the state.

Ditrigona regularis Warren, 1922 (Image 58)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM562).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS), Nagaland (Sondhi *et al.*, 2020a), Sikkim, Assam (Wilkinson, 1968). Elsewhere: Nepal (Haruta, 1993a), Myanmar (Wilkinson, 1968). Joshi *et al.* (2020) did not report this species from Arunachal Pradesh in the checklist of Indian Drepanoidea; hence these are the first published records from Arunachal Pradesh.

Tribe Drepanini

Canucha miranda Warren, 1922 (Image 66)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, NCBS-BM161.

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019.

Notes: The specimen and images match the original description by Warren (1922).

Distribution: India: Meghalaya (TL: Khasi Hills). Arunachal Pradesh (Tale WLS). Elsewhere: Taiwan (Watson, 1968; Joshi *et al.*, 2020). There are no recent published records of this species from India. These are the first published records of this species from Arunachal Pradesh.

Leucoblepsis fenestraria (Moore, [1868]) (Image 67)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS (NCBS-BM602).

Distribution: India: Bengal (TL), Arunachal Pradesh (Tale WLS), Nagaland (Fakim) (Sondhi *et al.*, 2020a), NE Himalaya (Holloway, 1998). Elsewhere: Taiwan; Peninsular Malaysia, Borneo (Holloway, 1998). This is the first published record of this species from Arunachal Pradesh, though Holloway (1998) mentions its distribution in “NE Himalaya” without mentioning any specific locations.

Paralbara muscularia (Walker, 1866) (Image 71)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019.

Distribution: India: Nagaland, Meghalaya, Sikkim, West Bengal (Watson 1868), Arunachal Pradesh (Pakke TR, Tale WLS) (Sondhi *et al.*, 2020a). Elsewhere: Myanmar, China (Watson, 1868). Joshi *et al.* (2020) did not report this species from Arunachal Pradesh in the

checklist of Indian Drepanoidea; however, records from Pakke TR and Tale WLS in Arunachal Pradesh establish its presence in the state.

Paralbara perhamata (Hampson, [1893]) (Image 72)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Notes: *Paralbara spicula* Watson, 1968, an extrazonal species from China, is best separated from *P. perhamata* by genitalia (Watson 1968). *Distribution:* India: Nagaland, Meghalaya (Hampson, [1893]), Sikkim (Watson, 1968), Arunachal Pradesh (Eaglenest WLS, Namdapha NP, Pakke TR, Tale WLS,) (Sondhi *et al.*, 2020a). Elsewhere: Borneo (Holloway, 1998). Joshi *et al.* (2020) did not report this species from Arunachal Pradesh in the checklist of Indian Drepanoidea; however, records from Eaglenest WLS, Namdapha NP, Pakke TR and Tale WLS in Arunachal Pradesh establish its presence in the state.

Tridrepana sadana (Moore, 1865) (Image 74)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Distribution: India: West Bengal (TL: Darjeeling), Uttarakhand, Arunachal Pradesh (Sondhi *et al.*, 2020a). Elsewhere: Nepal (Haruta 1992), China, Tibet, Myanmar (Song *et al.*, 2011). Joshi *et al.* (2020) did not report this species from Arunachal Pradesh in the checklist of Indian Drepanoidea; however, records from Eaglenest WLS and Tale WLS in Arunachal Pradesh establish its presence in the state.

Tribe Oretini

Oreta ancora Wilkinson, 1972 (Image 75)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM589).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Notes: The specimen matched the description of *O. ancora* in Song *et al.* (2012) and the image in Haruta *et al.* (1992). *Oreta ancora* is similar to another extrazonal species, *O. flavobrunnea* Watson, 1967 from China, but *ancora* has a more falcate forewing apex and has a black tornal spot on the forewing, which *flavobrunnea* lacks. This species is often incorrectly referred to as *Oreta ancora* Chu & Wang, 1987, whereas Wilkinson described this species from the Nepal Himalaya in 1972.

Distribution: India: Tale WLS, Arunachal Pradesh. Elsewhere: Nepal (TL), China (Sichuan), Tibet, (Chu & Wang, 1987; Song *et al.*, 2012). Joshi *et al.* (2020) did not list this species in the checklist of Indian Drepanoidea. Hence, these records from Tale WLS represent an addition to Indian moth fauna.

Oreta fuscopurpurea Inoue, 1956 (Image 76)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011 and 26.viii.2019.

Notes: *Oreta fuscopurpurea* is similar to *O. extensa* Walker, 1855, but can be separated as follows: in *O. fuscopurpurea*, the forewing apex is shorter, the outer margin below the apex is almost straight (outer margin protrudes outwardly in *O. extensa*), the black patch on the tornal patch of the forewing in *O. extensa* is replaced by a broad black wavy line, pale pink scales are present on the forewing costa, apex and near the tornal patch, and white speckles are distinct on both angles of the cell on both wings in *O. fuscopurpurea* (Song *et al.*, 2012).

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: China, Japan (Song *et al.*, 2012). Joshi *et al.* (2020) did not list this species in the checklist of Indian Drepanoidea. Hence, these records from Tale WLS represent an addition to Indian moth fauna.

Oreta insignis (Butler, 1877) (Image 77)

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro-Hapoli, 27.viii.2019 and 04.ix.2019.

Notes: *Oreta insignis* is similar to another Indian species, *O. pavaca* Moore, [1866], but *O. insignis* has a more protruding forewing apex compared to *O. pavaca*. In addition, *O. insignis* is unicolorous on both sides of the black postmedial line, and the hindwing margin is more rounded and less protruding. *Oreta insignis* also lacks the silvery scales present in *O. pavaca*.

Distribution: India: Tale WLS, Arunachal Pradesh. Elsewhere: China, Tibet, Taiwan, Japan. Joshi *et al.* (2020) did not list this species in the checklist of Indian Drepanoidea. This record from Tale WLS represents an addition to Indian moth fauna.

***Oreta obtusa* Walker, 1855 (Image 78)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 21.iv.2019, leg. SS, (NCBS-BF483).

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro-Hapoli, Ziro IB, 17.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 22.iv.2019.

Notes: *Oreta obtusa* occurs in two forms, a brown form and a brown and yellow form. Here we recorded the brown and yellow form. A similar species to *O. obtusa* is the extrazonal *O. speciosa* (Bryk, 1943), which was previously considered a subspecies of *obtusa* but was raised to species status on account of differences in genitalia (Song *et al.*, 2012).

Distribution: Ssp. *obtusa* India: Kashmir, Sikkim (Hampson, [1893]), West Bengal, Uttarakhand (Smetacek, 2008), Arunachal Pradesh (Eaglenest WLS, Pakke TR, Tale WLS), Nagaland. Elsewhere: Nepal. Numerous other ssp. China, Myanmar, Malaysia, Indonesia (Watson, 1867; Song *et al.*, 2012). SS has also recorded the species from Eaglenest WLS and Pakke TR in Arunachal Pradesh and Phek district, Nagaland. Joshi *et al.* (2020) did not list this species from Arunachal Pradesh or Nagaland in the checklist of Indian Drepanoidea; hence these are the first published records from these states.

***Oreta vatama vatama* Moore, [1866] (Image 79)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 22.v.2019, leg. TK, (NCBS-BK045). India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM152).

Distribution: India: Ssp. *vatama* West Bengal (TL: Darjeeling), Arunachal Pradesh, Manipur (Sondhi *et al.*, 2020a). Ssp. *luculenta* Kashmir, Himachal Pradesh, Uttarakhand, (Chandra *et al.*, 2019; Joshi *et al.*, 2020; Sondhi *et al.*, 2020a). Elsewhere: Bangladesh (TL: Sylhet), Nepal (Haruta, 1992), Bhutan, Myanmar (Watson, 1967).

Subfamily Thyatirinae

***Gaurena aurofasciata* Hampson, [1893] (Image 81)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 29.viii.2019.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Dihang-Dibang BR, Eaglenest WLS and Tale WLS) (Chandra *et al.*, 2019; Sondhi *et al.*, 2020a). Elsewhere: China, Myanmar (Joshi *et al.*, 2020).

***Habrosyne violacea argenteipuncta* (Hampson, [1893]) (Image 84)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM155). India, Arunachal Pradesh, Tale WLS, Pange, 30.viii.2019, leg. SS, (NCBS-BM191).

Distribution: India: ssp. *argenteipuncta* Sikkim (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yoshimoto, 1993), China (Yunnan, Tibet), Myanmar, Vietnam (Jiang *et al.*, 2015). These are the first published records of this species from Arunachal Pradesh. In India, it was previously known only from Sikkim.

***Nothoploca nigripunctata nigripunctata* (Warren, 1915) (Image 85)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 23.ix.2011.

Distribution: Ssp. *nigripunctata* India: Sikkim (TL), Arunachal

Pradesh (Tale WLS). Elsewhere: Nepal (Jiang *et al.*, 2015; László *et al.*, 2007; Joshi *et al.*, 2020). This is the first published record of this species from Arunachal Pradesh. In India, it was previously known only from Sikkim.

***Parapsestis lichenea lichenea* (Hampson, [1893]) (Image 86)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM549). India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM343).

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Distribution: Ssp. *lichenea* India: Sikkim, Naga Hills (Hampson, [1893]; Joshi *et al.*, 2020), Arunachal Pradesh (Dihang-Dibang BR, Eaglenest WLS, Tale WLS) (Chandra *et al.*, 2019; Sondhi *et al.*, 2020a). Elsewhere: Nepal, Myanmar, Thailand (Haruta, 1994; László *et al.*, 2007; Chandra *et al.*, 2019).

***Psidopala undulans* (Hampson, 1893) (Image 87)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, Leg. SS, (NCBS-BM524).

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro, 17.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Notes: Described by Hampson (1893) as *Thyatira undulans* from Khasi Hills, Meghalaya. Bryk (1942) recorded it from Myanmar as *Psidopala ebba*. Zhuang *et al.* (2017) synonymized *Psidopala ebba* with *Psidopala undulans*.

Distribution: India: Meghalaya (Khasi Hills: TL), Arunachal Pradesh (Tale WLS). Elsewhere: China, Tibet, Myanmar (Hampson, [1893]; Bryk, 1942; Zhuang *et al.*, 2017). These are the first published records of this species from Arunachal Pradesh.

***Stenopsestis alternata* (Moore, 1881)^{SEP} (Image 88)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 20.ix.2011. India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Dihang-Dibang BR, Eaglenest WLS & Tale WLS) (Chandra *et al.*, 2019; Sondhi *et al.*, 2020a). Elsewhere: China, Tibet, Nepal, Myanmar, Thailand (Jiang *et al.*, 2015; Joshi *et al.*, 2020).

Family Notodontidae

Subfamily Notodontinae

Tribe Dicranurini

***Liparopsis postalbida* Hampson [1893] (Image 96)**

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM538).

Notes: Identified using Schintlmeister & Pinratana (2007).

Distribution: India: Nagaland (TL: Naga Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal, N. Myanmar, China, Taiwan, Vietnam, Laos, Thailand (Schintlmeister & Pinratana, 2007). The Indian Notodontidae catalogue (Chandra *et al.*, 2018) lists this species only from Nagaland; hence this is the first record of this species from Arunachal Pradesh.

Tribe Neodrymoniaini

***Disparia maculata* (Moore, 1879) (Image 98)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, 28.viii.2019 and 06.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Sikkim, NE India. Elsewhere: Afghanistan, China (Taiwan), Laos, Myanmar, Nepal, Pakistan, Thailand, Vietnam. The Indian Notodontidae catalogue (Chandra *et al.*, 2018) lists this species from NE India, without a specific record from Arunachal Pradesh.

***Mesopalera mediopallens* (Sugi, 1989) (Image 99)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM525).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019 and 07.ix.2019.

Notes: Identified using Schintlmeister & Pinratana (2007).

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: SE China, Vietnam, Laos and N. Thailand (Schintlmeister & Pinratana, 2007). This species is not listed in the Indian Notodontidae catalogue (Chandra et al., 2018); hence this is an addition to Indian moth fauna.

***Viridifentonia plagiviridis* (Moore, 1879) (Image 100)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 21.iv.2019, leg. SS, (NCBS-BF377, NCBS-BF380).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, 27.viii.2019 and 07.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Eaglenest WLS & Tale WLS). Elsewhere: Nepal, China, N. Thailand, N. Vietnam, Taiwan (Schintlmeister & Pinratana, 2007). Chandra et al. (2018) mention the distribution as “NE India” in the Indian Notodontidae catalogue, without specifically mentioning Arunachal Pradesh; hence this is the first published record from this state.

Tribe Stauropini***Syntypistis nigribasalis tropica* (Kiriakoff, 1974) (Image 109).**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Distribution: India: Arunachal Pradesh (Dihang-Dibang BR and Tale WLS) (Mazumder et al., 2020). Reported by Mazumder et al. (2020) from Anini, Dihang-Dibang Biosphere Reserve, Arunachal Pradesh, as an addition to Indian fauna. This represents the second published record of this species from India.

***Syntypistis cf. sporadochlorus* (Bryk, 1949) (Image 110)**

Material examined: ♀, India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019.

Notes: This species belongs to the *Syntypistis parcevirens* group. Provisionally identified as *Syntypistis sporadochlorus* (Bryk, 1949) by A. Schintlmeister (pers. comm. Sanjay Sondhi). *Syntypistis sporadochlorus* was previously considered a junior synonym of *S. parcevirens* (Schintlmeister 2008). The two species are best separated by examining male genitalia.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: N. Myanmar (Schintlmeister, 2008). Neither *S. parcevirens* nor *S. sporadochlorus* have been listed in the Indian Notodontidae catalogue (Chandra et al., 2018). While *S. sporadochlorus* is recorded from N. Myanmar, both species occur sympatrically in Vietnam as per by A. Schintlmeister (pers. comm. Sanjay Sondhi).

Family Erebidae**Subfamily Arctiinae****Tribe Lithosiini*****Agrisius excellens* Dubatolov & Kishida, 2013 (Image 134)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019, leg. SS, (NCBS-BM395).

Notes: The similar species, *A. fulginosus* Moore, 1872 (Image 135), was also recorded and collected at Tale.

Distribution: India: Arunachal Pradesh (Kirti & Singh, 2016). Elsewhere: Laos (Dubatolov & Kishida, 2013). Kirti & Singh (2016) reported this species from Bomdila in Arunachal Pradesh. This sighting at Tale represents the second published record of this species from India.

***Barsaurea phaeoxanthia* (Hampson, 1900) (Image 139)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamruk,

01.ix.2019.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Thailand (Černý & Pinratana, 2009), Malaysia (iNaturalist, 2020). There are no recent published records of this species from India and this is the first published record of this species from Arunachal Pradesh.

***Cyana cf. puer* Elwes (1890) or *Cyana cf. neopuer* Singh, Bhattacharyya & Volynkin, 2019 (Image 144)**

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM543). ♂, India, Arunachal Pradesh, Tale WLS, Pamruk, 02.ix.2019, leg. SS, (NCBS-BM499).

Notes: *Cyana puer* (Elwes, 1890) and *C. neopuer* Singh, Bhattacharyya & Volynkin, 2019 are similar externally and can be best separated by examining male genitalia (Singh et al., 2020). These individuals could be either of these two species, though, based on records (Singh et al., 2020), *C. neopuer* occurs at lower altitudes than *C. puer*.

Distribution: *Cyana puer* India: Arunachal Pradesh, Assam, Manipur, Meghalaya, Nagaland, Sikkim and West Bengal. Elsewhere: Nepal, Myanmar. *Cyana neopuer* India: Sikkim, Arunachal Pradesh, Meghalaya. Elsewhere: Nepal, Myanmar (Singh et al., 2020).

***Cyana divakara* (Moore, [1866]) (Image 145)**

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Tale Valley, 29.viii.2019.

Notes: A single individual came to the LepiLED at the moth screen fleetingly, only to fly away before it could be collected.

Distribution: India: Sikkim, West Bengal, Assam (Singh et al., 2020), Arunachal Pradesh (Tale WLS). This is the first published record of this species from Arunachal Pradesh.

***Ovipennis cf. anomala* (Elwes, 1890) (Image 152)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011, 20.ix.2011 and 22.ix.2011.

Notes: A similar extrazonal species from Vietnam, *Ovipennis fansipana* (Volynkin & Černý, 2017), is best separated from *O. anomala* by genitalia.

Distribution: India: Sikkim (TL), Nagaland (OD), West Bengal (Volynkin & Černý, 2017), Arunachal Pradesh (Tale WLS). Elsewhere: Bhutan (Volynkin & Černý, 2017). This is the first published record of this species from Arunachal Pradesh.

***Ovipennis dudgeoni* (Elwes, 1890) (Image 153)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011 and 07.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Kishida, 1998). This is the first published record of this species from Arunachal Pradesh.

***Ovipennis flavivenosa* (Moore, 1878) (Image 154)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 05.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). Elsewhere: Bhutan, Thailand, Vietnam, China (Černý & Pinratana, 2009). There are no recent published of this species from India. This is the first published record of this species from Arunachal Pradesh.

***Conilepia sikkima* (Strand, 1922) (Image 156)**

Photographic records: ♀, India, Arunachal Pradesh, Tale WLS, 20.xi.2011.

Notes: This species was mistakenly identified as *Lithosia quadra*, but corrected based on the notes in Dubatolov, Zolotuhin & Witt (2016) who transferred *Lithosia quadra sikkima* to *Conilepia sikkima*, the only known species of this genus from the Himalayas.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS), Mizoram (Singh & Joshi, 2014). Elsewhere: Nepal (Dubatolov, Zolotuhin & Witt, 2016). This is first published record of this species from Arunachal Pradesh.

Dubatoloviana pahanga Bucsek, 2012^[TL] (Image 157)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019, leg. SS, (NCBS-BM506).

Distribution: India: Arunachal Pradesh. Elsewhere: Malaysia (TL). Kirti & Singh (2016) reported this species from Deomali, Tirap district, Arunachal Pradesh. This record from Tale WLS represents the second published record of this species from India.

Macrobrochis tibetensis (Fang, 1990) (Image 159)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.ix.2019.

Distribution: India: Arunachal Pradesh. Elsewhere: China (TL). Kirti & Singh (2015) reported this species from Ziro, Lower Subansiri district, Arunachal Pradesh. This record from Tale WLS, also in Lower Subansiri district, represents the second published record of this species from India.

Subfamily Boletobiinae

Tribe Aventiini

Enispia* cf. *eosarialis Walker, [1866] (Image 164)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019.

Notes: Our photograph somewhat matches the description and wing shape in the original description and images in Ratnasingham & Hebert (2007) and Kononenko & Pinratana (2013). The main discrepancy is the absence of the whitish marginal fringe on both wings of *E. eosarialis*; however, this could be on account of this individual being worn. In the absence of a specimen, the species identity could not be confirmed.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Borneo (TL), Thailand, Malaysia (Kononenko & Pinratana, 2013). Kononenko & Pinratana (2013) do not list this species from India; hence this record from Arunachal Pradesh, if confirmed, would be an addition to Indian moth fauna.

Holocryptis erubescens (Hampson, 1893) (Image 165)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019.

Distribution: India: Arunachal Pradesh (Pakke TR, Namdapha TR, Tale WLS) (Sondhi et al., 2020a). Elsewhere: Sri Lanka, Thailand, Vietnam, Japan. (Kononenko & Pinratana, 2013). Kononenko & Pinratana (2013) lists this species from India without any other details. This is the first published record of this species from Arunachal Pradesh.

Subfamily Erebinae

Tribe Catocalini

Catocala hyperconnexa Sugi, 1965 (Image 180)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM527). India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM375).

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro, 17.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011 and 22.ix.2011, India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019. India, Arunachal Pradesh, Tale WLS, Pamluk, 29.viii.2019.

Notes: This species belongs to the *Catocala naganoi* Sugi, 1982 species group of which there are numerous species that are best separated by genitalia or molecular phylogeny. These individuals closely matched *C. hyperconnexa*, which is known from Bhutan and Nepal; all the other

members of the *Catocala naganoi* are extrazonal.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Haruta, 1993b), Bhutan, China (Ishizuka, et al., 2011), Japan (TL), (Kons et al., 2017). There are no published records of this species from India; hence, these records represent an addition to Indian moth fauna.

Catocala nivea kurosawai Owada, 1986 (Image 181)

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Distribution: Ssp. *kurosawai* India: Arunachal Pradesh (Eaglenest WLS & Tale WLS) (Sondhi et al., 2020a). Elsewhere: Pakistan (Thandiani, Punjab) (Hampson, 1894), Myanmar (Ratnasingham & Hebert, 2007), Nepal (Yoshimoto, 1994). Ssp. *nivea* Japan (TL). China (Ishizuka et al., 2011). Shubhalaxmi (2018) lists this species from Punjab, NW Himalaya and Arunachal Pradesh. However, the “Thandiani, Punjab” in Hampson (1894) refers to Pakistan and is extrazonal. There are no published records of this species from NW Himalaya.

Tropiditamba lepraota (Hampson, 1898) (Image 182)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Sri Lanka, Thailand, Indonesia, Malaysia, Australia, Singapore (Kononenko & Pinratana, 2005). There are no recent published records of this species from India. This is the first published record of this species from Arunachal Pradesh.

Tribe Sygnini

Hypersygnoides punctosa (Walker, 1865) (Image 199)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM158).

Distribution: India: Type locality mentioned only as “Hindostan” in the original description. Arunachal Pradesh (Eaglenest WLS and Tale WLS). Elsewhere: Thailand, Vietnam, China, Taiwan, Philippines (Kononenko & Pinratana, 2005). SS has recorded this species at Eaglenest WLS in Arunachal Pradesh in September 2016. This is the first published record of this species from Arunachal Pradesh.

Tribe unassigned

Delgamma flaviae Zilli, 2000 (Image 201)

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011.

Notes: Zilli (2000) described this uncommon species, and he confirmed the identity of this individual (pers. comm. Sanjay Sondhi).

Distribution: India: Meghalaya (Khasi Hills), Nagaland (Naga Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Malaysia (Genting Highlands, TL). Doherty collected specimens from Khasi Hills in 1895 and from Naga Hills in 1889 and these are deposited in the collection of NHM (Zilli, 2000). This record from Tale WLS is the first published record of this species since Doherty’s collection and its original description. This record extends its range to Arunachal Pradesh.

Platyjonia mediorufa (Hampson, 1894) (Image 203)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM-143).

Distribution: India: Nagaland (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Thailand, Malaysia, Borneo, Hong Kong (Kendrick, 2002; Kononenko & Pinratana, 2005). This is the first published record of this species from Arunachal Pradesh.

Subfamily Herminiiinae

Sinarella discisigna (Moore, 1883) (Image 205)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011.

Notes: *Sinarella lunifera* (Moore, [1885]) described from Sri Lanka,

is considered by Beccaloni *et al.* (2003) as a synonym of *S. discisigna*, but might be a valid species. Western Ghat populations might belong to *Sinarella lunifera*.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). Elsewhere: Malaysia (Ratnasingham & Hebert, 2007), Nepal, Thailand (Kononenko & Pinratana, 2005). This is the first published record of this species from Arunachal Pradesh.

Subfamily Hypeninae

Lophomilia albicosta Yoshimoto, 1995 (Image 206)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 30.viii.2019.

Notes: Identified using Kononenko & Behounek (2009).

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (TL), China (Kononenko & Behounek, 2009). There are no published records of this species from India; hence, this record represents an addition to Indian moth fauna.

Perciana marmorea Walker, 1865 (Image 207)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM530).

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Distribution: India: Punjab, Sikkim (Hampson, 1894), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yoshimoto, 1998), Taiwan, Malaysia (iNaturalist, 2020). These are the first published records of this species from Arunachal Pradesh.

Subfamily Lymantriinae

Tribe Nygmiini

Euproctis dispersa (Moore, 1879) (Image 215)

Photographic records: ♀, India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011.

Distribution: India: West Bengal (TL: Darjeeling), Sikkim (Hampson, 1897), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Kishida, 1993). This is the first published record of this species from Arunachal Pradesh.

Euproctis staudingeri (Leech, [1889]) (Image 219)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 29.viii.2019, leg. SS, (NCBS-BM159).

Notes: The specimen is a good match to the OD from Yokohama, Japan. This species is separated from the *Euproctis varia* Walker, 1855 by the presence of a purple-brown basal patch on the forewing, which *E. varia* lacks. The hindwing of *E. varia* is the same color as the ground color of the forewing, while the hindwing of *E. staudingeri* is a paler yellow. The central area of underside of the forewing of *E. staudingeri* is slightly darker (Kishida, 1993). Both species have been recorded from Nepal (Kishida, 1993).

Distribution: India. Elsewhere: Japan (TL), China, Thailand (iNaturalist, 2020), Nepal (Kishida, 1993). There are no published records of this species from India; hence, this record represents an addition to Indian moth fauna.

Tribe Orgyiini

Dasychira cinctata Moore, 1879 (Image 222)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019, leg. SS, (NCBS-BM399).

Distribution: India: West Bengal (TL: Darjeeling), Sikkim, Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Kishida, 1993). There are no recent published records of this species from India. This is the first published record of this species from Arunachal Pradesh.

Dasychira postfusca Swinhoe, 1895 (Image 223)

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 22.iv.2019.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Kishida 1993), China, Thailand, Taiwan (Ratnasingham & Hebert, 2007). There are no recent published records of this species from India. These are the first published records of this species from Arunachal Pradesh.

Pantana luteiceps Swinhoe, 1896 (Image 227)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 17.ix.2011.

Distribution: India: Meghalaya (TL: Khasi Hills), Sikkim, Assam, Arunachal Pradesh (Pakke TR, Tale WLS) (iNaturalist, 2020). There are only a few published records of this species from India.

Subfamily Pangraptinae

Taviodes fulvescens Hampson, 1926 (Image 231)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM144).

Distribution: India. Elsewhere: Bhutan (TL), Nepal (Yoshimoto, 1995), Thailand (Kononenko & Pinratana, 2005). Malaysia, Indonesia (Holloway, 2005), Hong Kong (iNaturalist, 2020). Though Holloway (2005) mentioned its distribution as "Himalaya", there are no specific published records from Arunachal Pradesh.

Subfamily Scoliopteryginae

Lycimna polymesata Walker, 1860 (Image 232)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019, leg. SS, (NCBS-BM401).

Distribution: India: Sikkim, Assam (Hampson, 1894), Arunachal Pradesh (Tale WLS). Elsewhere: Bangladesh (TL), Thailand, Laos, Myanmar, China, Nepal (Kononenko & Pinratana, 2005). This is the first published record of this species from Arunachal Pradesh, though Hampson (1894) lists its distribution as "Assam", which included Arunachal Pradesh.

Family Nolidae

Subfamily Chloephorinae

Tribe Sarrothripini

Giaura robusta (Moore, 1888) (Image 240)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). Elsewhere: Thailand, Vietnam, Malaysia, Philippines (Kononenko & Pinratana, 2013). No recent published records from India. This is the first published record of this species from Arunachal Pradesh.

Subfamily Chloephorinae

Tribe unassigned

Pardasena verna (Hampson, 1902) (Image 241)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). Elsewhere: NE Himalaya, Burma, Peninsular Malaysia, Borneo, Bali, Sulawesi, Seram (Holloway, 2003). No recent published records from India. This is the first published record of this species from Arunachal Pradesh.

Tortriciforma viridipuncta Hampson, 1894 (Image 243)

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro-Hapoli, Suchusi village, 4.ix.2019.

Notes: *Tortriciforma chloroplaga* Hampson 1905, a similar species, has a much larger green marking on the FW costa.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Thailand, Nepal, West China, Myanmar, Indonesia (Kononenko & Pinratana, 2013). This is the first published record of this species from Arunachal Pradesh.

Family Noctuidae

Subfamily Acronictinae

Acronicta major (Bremer, 1861) (Image 246)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM594).

Notes: *Craniophora* Snellen, 1867, is a very similar genus to *Acronicta* Ochsenheimer, 1816, best separated by genitalia. *Acronicta maxima* Moore, 1881 is considered a junior synonym of *A. major*.

Distribution: India: Punjab Hills, NW India (Moore, 1881), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yoshimoto, 1992). Widespread across Asia. This is the first published record of this species from Arunachal Pradesh.

Subfamily Agaristinae

Sarbanissa insocia Walker, 1865 (Image 247)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 21.v.2019, leg. TK, (NCBS-BK015). India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM601, NCBS-BM334).

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Dihang-Dibang BR, Eaglenest WLS and Tale WLS) (Chandra et al., 2019; Sondhi et al., 2020a). Elsewhere: Nepal (Sugi, 1994), Thailand, China (Kononenko & Pinratana, 2005).

Subfamily Eriopinae

Callopistria placodoides (Guenée, 1852) (Image 250)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamruk, 02.ix.2019.

Notes: The individual is a good match with the description in Yen & Wu (2009).

Distribution: India: Uttarakhand (Roonwal et al., 1963), Nilgiris (Hampson, 1894), Arunachal Pradesh (Tale WLS). Elsewhere: Widely distributed from Korea, Japan, Taiwan, China, Hong Kong, Indonesia, Vietnam, to Nepal (Yen & Wu, 2009). This is the first published record of this species from eastern Himalayas, though it has been recorded in the central Himalaya in Nepal and Uttarakhand in northwestern Himalaya.

Subfamily Pantheinae

Viridistria striatovirens (Moore, 1883) (Image 264)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011 and 22.ix.2011. India, Arunachal Pradesh, Tale WLS, Tale Valley, 20.ix.2011.

Distribution: India: Meghalaya (TL: Cherrapunji), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yoshimoto, 1998), Thailand, N. Vietnam, S. China (Kononenko & Pinratana, 2013). These are the first published records of this species from Arunachal Pradesh.

Family Epicopeiidae

Burmeia leesi Minet, 2002 (Image 266)

Material examined: India, Arunachal Pradesh, Tale Valley, 29.viii.2019, leg. SS (NCBS-BM203). India, Arunachal Pradesh, Eaglenest WLS, Bompu, 31.vii.2017, leg. TK, (NCBS- AT826).

Notes: This monotypic genus was erected by Minet (2002) based on two specimens collected by Tytler in 1927 from Htawgaw, Myanmar (earlier Burma) and are deposited in NHM. The specimens match the original description by Minet (2002). Members of the Epicopeiidae family are diurnal, but this individual was collected at night at the moth screen.

Distribution: India: Arunachal Pradesh (Dihang-Dibang WLS,

Eaglenest WLS and Tale WLS). Elsewhere: Myanmar (TL), China (Zhang et al., 2019). There are only a few published records of this genus from India.

Family Uraniidae

Subfamily Epipleminae

Oroplema plagifera (Butler, 1881) (Image 270)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 20.ix.2011 and 27.ix.2019.

Notes: The photographic records match the description in Sohn & Yen (2005). Sohn & Yen (2005) list *Epiplema sponsa* Swinhoe, 1895 from Cherrapunji, Meghalaya as a junior synonym of *O. plagiata* (Swinhoe, 1895).

Distribution: India: Meghalaya (Sohn & Yen, 2005), Arunachal Pradesh (Tale WLS). Elsewhere: Korea, Japan, China, Russia, Taiwan (Sohn & Yen, 2005), Hong Kong (iNaturalist, 2020). This is the only published record of this species from India since Swinhoe's record from Cherrapunji (Swinhoe, 1895).

Orudiza angulata Chu & Wang, 1994 (Image 271)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamruk, 31.viii.2019.

Distribution: India: Arunachal Pradesh (Eaglenest WLS and Tale WLS), Nagaland (Chizami). Elsewhere: China (TL). SS has also recorded this species from Khellong, Eaglenest WLS, Arunachal Pradesh and Chizami, Phek district, Nagaland. There are no published records of this species from India; hence, these records represent an addition to Indian moth fauna.

Acropteris ciniferaria (Walker, 1866) (Image 273)

Material examined: India, Arunachal Pradesh, Tale WLS, Pamruk, 03.ix.2019, leg. SS, (NCBS-BM514).

Notes: The specimen was collected during the day at 0915hrs, sitting on the upperside of a leaf.

Distribution: India: Goa, Maharashtra (Sondhi et al., 2020a), Kerala (Sudheendrakumar & Mathew, 1999), West Bengal, Assam, Andaman & Nicobar Is., Arunachal Pradesh (Dihang-Dibang BR, Tale WLS) (Chandra et al., 2019). Elsewhere: Sri Lanka, Thailand, Malaysia, Indonesia (Barlow, 1982). Widespread in SE Asia (iNaturalist, 2020).

Family Geometridae

Subfamily Ennominae

Tribe Baptini

Nothomiza costinotata (Warren, 1893) (Image 277)

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Distribution: India: Arunachal Pradesh (Tale WLS), Uttarakhand (Askot WLS) (Chandra et al., 2019). Elsewhere: Bhutan (TL), Nepal (Yazaki, 1998; Stünig, 2000). Chandra et al. (2019) reported this species from Askot WLS in Uttarakhand. This is the first record of this species from Arunachal Pradesh.

Tribe Boarmiini

Abaciscus tristis Butler, 1889 (Image 279)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 30.viii.2019.

Distribution: India: Himachal Pradesh (TL), Uttarakhand (Sondhi et al., 2020a), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1992), China, Taiwan, Borneo (Holloway, 1993). This is the first published record of this species from Arunachal Pradesh.

Alcis aristosa Prout, 1934 (Image 280)

Material examined: India, Arunachal Pradesh, Tale WLS, Tale Valley, 29.viii.2019, leg. SS, (NCBS-BM198).

Notes: Identified from the original description by Prout (1934), Sato

(1994) and Chandra & Sambath (2013).

Distribution: India: Arunachal Pradesh (Dihang-Dibang BR, Tawang and Tale WLS) (Chandra & Sambath, 2013; Chandra et al., 2019). Elsewhere: China, Myanmar (Prout, 1934; Kirti et al., 2019). This represents only the third published record of this species from India after sightings at Tawang, Arunachal Pradesh by Chandra & Sambath (2013) and Dihang-Dibang WLS (Chandra et al., 2019).

Amblychia nimia (Prout, 1925) (Image 282)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM140). ♀, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM175).

Notes: Both the male and the female specimens of *A. nimia* have more purplish-fuscous shading than the similar *A. pardicelata* (Walker, [1863]). The undersides of both wings of *A. nimia*, in both sexes, have more prominent maculation and a prominent, dark marginal band. Chandra et al. (2019) have incorrectly identified the specimen in Plate 84/21 as *A. pardicelata*; the specimen is actually *A. nimia*.

Distribution: India: Sikkim, Meghalaya (Prout, 1925), Arunachal Pradesh (Tale WLS and Eaglenest WLS) (Sondhi et al., 2020a). Elsewhere: Bhutan (TL). This is the first published record of this species from Arunachal Pradesh, though SS recorded the species from Lama Camp, Eaglenest WLS in August 2018.

Ascotis imparata (Walker, 1860) (Image 286)

Material examined: India, Arunachal Pradesh, Tale WLS, Pamluk, 02.ix.2019, leg. SS, (NCBS-BM504).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019.

Notes: *Ascotis imparata* was previously treated as a subspecies of *Ascotis selenaria* (Denis & Schiffermüller, 1775), but most authors now treat it as a separate species (Scoble & Hausmann, 2007; Bhandari & Singh, 2009; Kirti & Saxena, 2012; Kirti et al., 2019).

Distribution: India: NW Himalaya, Nagaland (Kirti & Saxena, 2012), Assam (iNaturalist, 2020), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (TL). These are the first published records of this species from Arunachal Pradesh.

Biston contextaria (Walker, [1863]) (Image 287)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019.

Distribution: India: Sikkim, West Bengal, Himachal Pradesh (Solan?) (Cotes & Swinhoe, 1887), Arunachal Pradesh (Tale WLS). The record from Solan, Himachal Pradesh is doubtful and needs confirmation, and is possibly *B. bengaliaria* (Guenée, 1858) misidentified. Elsewhere: Bangladesh (Cotes & Swinhoe, 1887), Nepal (Yazaki, 1992), China (Jiang et al., 2011a). These are the first published records of this species from Arunachal Pradesh.

Blepharoctenucha virescens (Butler, 1880) (Image 289)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 17.iv.2019, leg. SS, (NCBS-BF482).

Photographic records: India, Arunachal Pradesh, Tale WLS, 21.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Eaglenest WLS, Pakke TR and Tale WLS). Elsewhere: Nepal (Yazaki, 1992), Taiwan (iNaturalist, 2020), Thailand (Ratnasingham & Hebert, 2007). SS has recorded this species previously at Eaglenest WLS and Pakke TR, Arunachal Pradesh. These are the first published records of this species from Arunachal Pradesh.

Coremecis nigrovittata (Moore, [1868]) (Image 295)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019, leg. SS, (NCBS-BM445).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk,

02.ix.2019.

Distribution: India: West Bengal (TL), Sikkim (Ghosh 2003), Meghalaya, Nagaland (Hampson [1893]), Arunachal Pradesh (Tale WLS). Elsewhere: Hong Kong (Kendrick, 2002), Nepal (Sato, 1998), Indonesia, Vietnam (Ratnasingham & Hebert, 2007). These are the first published records of this species from Arunachal Pradesh.

Darisa fratercula (Moore, 1888) (Image 302)

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011. ♀, India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Distribution: West Bengal (TL: Darjeeling), Arunachal Pradesh (Eaglenest WLS and Tale WLS). Elsewhere: Nepal (Sato, 1998), Thailand, Laos (Ratnasingham & Hebert, 2007). These are the first published records of this species from Arunachal Pradesh.

Ectropis dentilineata (Moore, [1868]) (Image 303)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019.

Distribution: India: West Bengal (TL: Darjeeling), Sikkim, Himachal Pradesh, Meghalaya, Maharashtra (?) (Mandal & Ghosh, 1999), Uttarakhand (iNaturalist, 2020), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Sato, 1993), Myanmar. This is the first published record of this species from Arunachal Pradesh.

Gasterocome pannosaria (Moore, [1868]) (Image 304)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019.

Note: This species is one of two members of this genus from India. The second species, *Gasterocome polystyphes* Prout, 1934, is known from South India and Sri Lanka.

Distribution: India: West Bengal (TL), Himachal Pradesh, Meghalaya, Sikkim (Hampson, 1895), Uttarakhand (Sondhi & Sondhi, 2016), Arunachal Pradesh (Pakke TR, Tale WLS) (Chandra et al., 2019; Sondhi et al., 2020a). Elsewhere: Nepal (Yazaki, 1998), Borneo, Malaysia, Taiwan, Sundaland (Holloway, 1993).

Hyposidra aquilaria (Walker, 1862) (Image 309)

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Pamluk, 31.viii.2019. ♂, India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019.

Notes: This is an uncommon *Hyposidra* Guenée, 1857 that Holloway (1994) mentions is a lowland species. However, SS has recorded this species at Khellong, Eaglenest WLS (750 m altitude) and Pamluk, Tale WLS and Sessa Orchid WLS (1100 m) and Pange (1850 m) at Tale WLS.

Distribution: Sikkim, Meghalaya (Hampson, 1895), West Bengal, Arunachal Pradesh (Eaglenest WLS, Sessa WLS and Tale WLS) (Sondhi et al., 2020a). Elsewhere: Nepal (Yazaki, 1994), China (Hampson, 1895), Thailand (Koçak & Kemal, 2010), Indonesia, Malaysia, Borneo (Holloway, [1994]). There are no published records of this species from Arunachal Pradesh, though Holloway, (1994) mentions it is present in NE Himalaya and Kirti & Saxena (2012) recorded it from Sikkim.

Krananda falcata (Warren, 1894) (Image 310)

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro-Hapoli, Ziro IB, 17.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011 and 27.xiii.2019.

Notes: Original description as *Zanclopera falcata* Warren, 1894. Transferred to *Krananda* by Jiang et al. (2017). *Krananda fulva* (Yazaki, 1994) is a similar species described from Nepal, whose validity as a valid taxon needs investigation.

Distribution: India: Meghalaya (TL: Khasis), Arunachal Pradesh (Tale WLS), Assam (Tinsukhia) (Arandhara et al., 2017). Elsewhere: Nepal, Myanmar, Malaysia, China, Taiwan, Borneo, Hong Kong (Yazaki,

1992; Holloway, 1993; Kendrick, 2002). While Holloway (1993) listed its distribution as “NE Himalaya”, no specific records from Arunachal Pradesh have been located. Hence, this is the first published record of this species from Arunachal Pradesh.

***Krananda orthotmeta* Prout, 1926 (Image 311)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 21.v.2019, leg. TK, (NCBS-BK019). India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM522). India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM157).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011, 27.viii.2019, 28.viii.2019 and 05.ix.2019.

Notes: The specimens match the original description by Prout (1926).

Diagnosis: This species is similar to *K. nepalensis* Yazaki, 1992 and *K. oliveomarginata* Swinhoe, 1894. The strongly angled termen at vein M_3 , straight postmedian line of forewing and the pale colouration are diagnostic to this species.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Myanmar (TL). Kirti et al. (2019) lists three species of *Krananda* in their Geometridae checklist for India. However, Sondhi et al. (2020a) list seven species of *Krananda* including a record of *K. orthotmeta* from Tale WLS. Hence these records represent an addition to Indian moth fauna.

***Microcalicha melanosticta* (Hampson, 1895) (Image 317)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 17.ix.2011 and 27.viii.2019.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Sato, 2000), Taiwan, Vietnam (iNaturalist, 2020). These are the first published records of this species from Arunachal Pradesh.

***Myrioblephara marmorata* (Moore, [1868]) (Image 321)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011, 28.viii.2019, 5.ix.2019. India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Distribution: India: West Bengal (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Sato, 1995), China (Ratnasingham & Hebert, 2007). These are the first published records of this species from Arunachal Pradesh.

***Myrioblephara pingasoides* (Warren, 1893) (Image 322)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pamluk, 31.ix.2019.

Distribution: India (TL: Naga Hills), Meghalaya, Arunachal Pradesh (Tale WLS). There are no published records of this species since specimens were collected and housed in NHM from the Nagas Hills and Khasi Hills and this is the first record of this species from Arunachal Pradesh.

***Ophthalmitis xanthypochlora* (Wehrli, 1924) (Image 323)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019, leg. TK, (NCBS-BK067). India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM539, NCBS-BM547). India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM360).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011 & 21.ix.2011.

Notes: The specimens match the redescription in Jiang et al. (2011b).

Distribution: India: Arunachal Pradesh (Tale WLS and Pakke Tiger Reserve). Elsewhere: China, Tibet, Thailand (Jiang et al., 2011b). SS also has photographic records of this species from Pakke Kesang, Pakke Tiger Reserve in September 2013. Kirti et al. (2019) does not list this species in their checklist of Indian Geometridae. Hence these

records from Tale WLS and Pakke TR represent an addition to Indian moth fauna.

Tribe Caberini

***Astygisa orbapicalis* Herbuleot, 1993 (Image 328)**

Material examined: ♀, India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019, leg. SS, (NCBS-BM384).

Notes: Five species of *Astygisa* are known from India.

Distribution: India: Dist: Himachal Pradesh, West Bengal, Meghalaya, Assam, Arunachal Pradesh (Tale WLS). Elsewhere: Pakistan, Nepal (Stünning & Walia, 2009). This is the first published record of this species from Arunachal Pradesh.

Tribe Cassymini

***Micronidia unipuncta* Warren, 1893 (Image 330)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Distribution: India: West Bengal (TL: Darjeeling), Sikkim (iNaturalist, 2020), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1992), Vietnam (Ratnasingham & Hebert, 2007). There are no recent published records of this species from India and this is its first published record from Arunachal Pradesh.

Tribe Gnophini

***Menophra translineata* (Walker, 1869) (Image 315)**

Material examined: ♀, India, Arunachal Pradesh, Tale WLS, Pange, 26.iv.2019, leg. SS, (NCBS-BM542).

Notes: Listed in genus *Menophra* by Scoble and Hausmann (2007). Previously, various authors have listed this species under the genera *Selenis* and *Leptomiza*. Junior synonyms of this species are *Ceruncina translineata* Walker, 1863 and *Odontopera nemea* Swinhoe, 1891. Previously placed in the Boarmiini tribe (Pitkin, 2002) but currently its tribal placement is in Gnophini (Jiang et al., 2017; Murillo-Ramos et al., 2019).

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS, Tenga), Assam (iNaturalist, 2020; Sondhi et al., 2020a). This is the first published record of this species from Arunachal Pradesh.

Tribe Hypochrosini

***Fascellina inornata* Warren, 1893 (Image 343)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM177, NCBS-BM168).

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Notes: Identified using Cui et al. (2014). The species identified as *Fascellina inconspicua* in Kirti et al. (2019) is actually *F. inornata*.

Distribution: India: Sikkim (TL), Meghalaya (Cui et al., 2014), Arunachal Pradesh (Tale WLS). Elsewhere: China, Nepal, Thailand (Cui et al., 2014).

***Garaeus colorata* (Warren, 1893) (Image 346)**

Material examined: India, Arunachal Pradesh, Tale WLS, Tale Valley, 29.viii.2019, leg. SS, (NCBS-BM208).

Notes: *Garaeus colorata* seems very similar to *G. albipunctata* Warren, 1896, with Beccaloni et al. (2003) mentioning that *albipunctata* might be a form of *G. colorata*. Pending further investigation, we treat *G. albipunctata* Warren, 1896 as a junior synonym of *G. colorata*.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Dihang-Dibang WLS and Tale WLS) (Chandra et al., 2019). Elsewhere: Bhutan (Ratnasingham & Hebert, 2007).

***Heterolocha marialgeae* Stünning, 2000 (Image 350)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019.

Notes: The specimen matched the original description, Dieter Stüning, who described this species from Nepal (pers. com. Sanjay Sondhi), confirmed its identification.

Distribution: India: Sikkim, West Bengal (Stüning, 2000), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (TL). This is the first published record of this species from Arunachal Pradesh.

***Polyscia argentilinea eugraphes* (Prout, 1923) (Image 354)**

Photographic records: India, Arunachal Pradesh, Lower Subansiri district, Ziro-Hapoli, Ziro IB, 17.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011 and 06.ix.2019.

Notes: The identification of the specimen as this subspecies was confirmed by Dieter Stüning (pers. com. Sanjay Sondhi). This subspecies was described by Prout (1923) with Htawgaw, Myanmar as its type locality. The nominate species was described from Khasi Hills, Meghalaya with specimens from Sikkim and West Bengal in NHM.

Distribution: India: Ssp. *argentilinea* Meghalaya, Sikkim, West Bengal (Prout, 1923). Ssp. *eugraphes* (Tale WLS, Arunachal Pradesh). Elsewhere: Ssp. *argentilinea* Nepal (Stüning, 2000), Myanmar (Prout, 1923). This is the first published record of this subspecies from India and represents an addition to Indian moth fauna.

Tribe *Ourapterygini*

Five species of *Ourapteryx* were recorded at Tale WLS. These are being dealt with separately in another paper.

Tribe unassigned

***Mimochroa albifrons* (Moore, [1888]) (Image 364)**

Material examined: India, Arunachal Pradesh, Lower Subansiri district, Ziro-Hapoli, Ziro IB, 17.iv.2019, leg. SS, (NCBS-AP895).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 05.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Manipur, Arunachal Pradesh (Tale WLS). Elsewhere: Nepal, Thailand (Hampson, 1895; Yazaki, 1993). These are the first published records of this species from Arunachal Pradesh.

***Pseudomiza obliquaria* (Leech, 1897) (Image 367)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011, 28.viii.2019, 5.ix.2019, 7.ix.2019.

Notes: The photographed individual was identified based on the original description by Leech (1897) and Yazaki (1992).

Distribution: India: Uttarakhand (Govind WLS), Assam, West Bengal (Chandra et al., 2019), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Haruta, 1992), C. China (TL), Taiwan, Bhutan (Ratnasingham & Hebert, 2007). These are the first published records of this species from Arunachal Pradesh.

***Xenoplia foraria* (Guenée, [1858]) (Image 371)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019, leg. TK, (NCBS-BK068).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011.

Distribution: India: Himachal Pradesh, Sikkim (Hampson, 1895), Uttarakhand, West Bengal, Meghalaya, (Chandra et al., 2019), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1994), Thailand (Koçak & Kemal, 2010). These are the first published records of this species from Arunachal Pradesh.

Subfamily Geometrinae

Tribe *Aracimini*

***Dooabia viridata* (Moore, [1868]) (Image 377)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 22.iv.2019, leg. SS, (NCBS-BK927). India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM160).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Notes: A similar species known from India, *Dooabia lunifera* (Moore, 1888), is separated from *D. viridata* by the postmedial line of forewing being sinuous in the former. In addition, the medial line arising from the forewing postmedial to the costa, present in *D. viridata*, is absent in *D. lunifera*.

Distribution: India: West Bengal (TL), Assam, Manipur (Mandal & Ghosh, 2004), Arunachal Pradesh (Eaglenest WLS and Tale WLS). The first author has also recorded this species at Eaglenest WLS, Arunachal Pradesh. These are the first published records of this species from Arunachal Pradesh.

***Paramaxates taiwana* Yazaki, 1988 (Image 378)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019.

Distribution: India: Mizoram, Arunachal Pradesh (Kirti et al., 2014), Assam (iNaturalist, 2020). Elsewhere: Taiwan (TL), Nepal (Yazaki, 1993). There are only a few published records of this species from India.

Tribe *Archaeobalbini*

***Dindica cf. para* Swinhoe, 1891 (Image 379)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011 and 22.ix.2011. India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Notes: *Dindica polyphaenaria* (Guenée, [1858]) and *D. olivacea* Inoue, 1990 are species that are very similar to *D. para*, and are best separated by genitalia. *Dindica para* has underside of wings white, tinged with yellow with a submarginal black narrower border. *Dindica polyphaenaria* has underside of wings bright yellow with broad black marginal border on both wings.

Distribution: Ssp. *para* India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Ssp. *para* Nepal (Yazaki, 1998), China, Vietnam (Ratnasingham & Hebert, 2007). Ssp. *malayana* Malaysia (Ratnasingham & Hebert, 2007).

***Dindica subrosea* (Warren, 1893) (Image 380)**

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 19.iv.2019, leg. SS, (NCBS-BF361). ♀, India, Arunachal Pradesh, Tale WLS, Pange, 19.iv.2019, leg. SS, (NCBS-BF368).

Notes: This rare geometrid is known from its original description of a male by Warren and its synonym, *Perissolophia subsimilis* Warren, 1898, another male, both from Sikkim. Yazaki collected two more males of this species from Godhavari in eastern Nepal (Yazaki, 1993).

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). Elsewhere: E. Nepal (Yazaki, 1993). These two individuals are the first record of this species from India since Warren's records in 1894 and 1898, and extend its range eastwards to Arunachal Pradesh.

***Dindicodes apicalis* (Moore, 1888) (Image 381)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 06.ix.2019 and 07.ix.2019.

Notes: Transferred from *Pachyodes* to *Dindicodes* (Pitkin et al., 2007; Plotkin & Kawahara, 2020).

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). Elsewhere: China. These are the first published records of this species from Arunachal Pradesh.

***Dindicodes harutai* (Yazaki, 1992) (Image 382)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM552. NCBS-BM557).

Notes: *Dindicodes apicalis*, a similar species, is best separated by the presence of the white apical patch on the forewing of the male (the patch is olive-green in *D. harutai*). In addition, *D. apicalis* has a white

postmedial patch, adjacent to the black cell spot on the underside of the forewing (Yazaki, 1992; Pitkin *et al.*, 2007).

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2019.

Distribution: Ssp. *harutai* India: Arunachal Pradesh (Eaglenest WLS, Tale WLS). Elsewhere: Ssp. *harutai* Nepal (TL). Ssp. *infuscatus* Thailand (Yazaki, 1992). Kirti *et al.* (2019) did not list this species in their checklist of Indian Geometridae. Hence, these records from Tale WLS represent an addition to Indian moth fauna, though the first author has also recorded this species in August 2018 from Eaglenest WLS.

***Dindicodes moelleri* (Warren, 1893) (Image 383)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019, leg. SS (NCBS-BM403, NCBS-BM404).

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1998). These are the first published records of this species from Arunachal Pradesh.

***Herochroma baba* Swinhoe, 1893 (Image 384)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Haruta, 1992), China, Hong Kong, Malaysia, Vietnam, (Han *et al.*, 2003). This is the first published record of this species from Arunachal Pradesh.

***Lophophelma erionoma* (Swinhoe, 1893) (Image 387)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019 and 05.ix.2019.

Notes: Transferred from *Pachyodes* to *Lophophelma* (Pitkin *et al.*, 2007; Plotkin & Kawahara 2020).

Distribution: Ssp. *erionoma* India: Meghalaya (TL: Khasi Hills), West Bengal, Sikkim (Hampson, 1895; Chandra *et al.*, 2019), Arunachal Pradesh (Tale WLS), Uttarakhand (Sondhi & Sondhi, 2016). Elsewhere: Ssp. *erionoma* Nepal (Yazaki, 1994). Ssp. *albicomitata* Indonesia (Ratnasingham & Hebert, 2007). Ssp. *kiangsiensis* China. Ssp. *subnubigosa* W. China (Han & Xue, 2011).

***Lophophelma iterans* (Prout, 1926) (Image 388)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM545). India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM595, NCBS-BM603). India, Arunachal Pradesh, Tale WLS, Pamluk, 02.ix.2019, leg. SS, (NCBS-BM498).

Notes: Green and brown forms exist. Only the green form has been recorded at Tale WLS.

Distribution: Ssp. *iterans* India: Arunachal Pradesh (Tale WLS). Elsewhere: China (Han & Xue, 2011). Ssp. *onerosus* Taiwan. Kirti *et al.* (2019) does not list this species in their checklist of Indian Geometridae; hence, these records from Tale WLS represent an addition to Indian moth fauna.

***Lophophelma varicoloraria* (Moore, [1868]) (Image 389)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM328).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011.

Notes: Kirti *et al.*, 2019 lists this species as *Pachyodes varicoloraria*. However, this species was transferred from *Pachyodes* to *Lophophelma* (Pitkin *et al.*, 2007; Plotkin & Kawahara, 2020).

Distribution: India: West Bengal (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1992), Thailand (Koçak & Kemal, 2010), China, Indonesia, Malaysia (Han & Xue, 2011). These are the first published records of this species from Arunachal Pradesh.

***Metallolophia* species**

Two *Metallolophia* species have been recorded at Tale WLS. *Metallolophia taleensis* Sondhi, Basu, Sondhi & Kunte, 2020 (Image 391) is a new species recently described from Tale WLS while *Metallolophia opalina* (Warren, 1893) (Image 390) was re-discovered from Tale WLS (Sondhi *et al.*, 2020b). Males of both species are shown in the colour plates.

Tribe Comibaenini

***Comibaena albimarginata* (Warren, 1893) (Image 394)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Eaglenest WLS and Tale WLS, Nagaland) (Sondhi *et al.*, 2020a). Elsewhere: Borneo, Sumatra (Holloway, 1998). Holloway (1998) mentions “NE Himalaya” without any specific reference to locations or states. This is the first published record of this species from Arunachal Pradesh.

***Comibaena apicipicta* Prout, 1912 (Image 395)**

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Tale Valley, 29.viii.2019.

Notes: The individual matches the description in Han *et al.* (2012) and Yazaki (1995). This species is similar to *C. delineata* (Warren, 1893), which is recorded from Sikkim. However, *C. delineata* has white postmedial and antemedial lines on the forewing which *C. apicipicta* lacks (Yazaki, 1995; Ratnasingham & Hebert, 2007; Han *et al.*, 2012).

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1995), China (Han *et al.*, 2012). Kirti *et al.* (2019) did not list this species in their checklist of Indian Geometridae; hence this record from Tale WLS represents an addition to Indian moth fauna.

***Comibaena pictipennis* Butler, 1880 (Image 396)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM331).

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Notes: *Comibaena nepalensis* Yazaki, 2000 is a similar species, whose validity needs confirmation (Han *et al.*, 2012; Yazaki 2000).

Distribution: India: Sikkim (Sondhi *et al.*, 2020a), Kashmir, Himachal Pradesh, Uttarakhand, West Bengal, Assam, Meghalaya (Chandra *et al.*, 2019), Arunachal Pradesh (Eaglenest WLS and Tale WLS, Nagaland) (Sondhi *et al.*, 2020a). Elsewhere: Nepal (Yazaki, 1992), China, Taiwan, Vietnam, Bhutan, (Ratnasingham & Hebert, 2007). The first author has also recorded this species in numerous locations in Uttarakhand and at Eaglenest WLS in Arunachal Pradesh.

***Comibaena cf. biplaga* Walker, 1861 (Image 397)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 30.viii.2019.

Notes: This species group includes *C. integranota* Hampson, 1893 from S. India and Sri Lanka and *C. biplaga*, both of which are recorded in India (Han *et al.*, 2012). Examining male genitalia best separates this species group.

Distribution: India: *C. biplaga* NE Himalaya and *C. integranota* S. India and Sri Lanka.

***Linguisaccus subhyalina* (Warren, 1899) (Image 398)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 17.iv.2019, leg. SS, (NCBS-AP878).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019 and 28.viii.2019.

Notes: Kirti *et al.*, 2019 lists this as *Comibaena subhyalina* in their Indian Geometridae catalogue. Originally described as *Comostolodes subhyalina* Warren, 1899, transferred to *Comibaena* by Han *et al.* (2011) and then transferred to the new genus *Linguisaccus* by Han *et*

al. (2012) (Plotkin & Kawahara, 2020).

Distribution: India: Arunachal Pradesh, Nagaland, Himachal Pradesh (Sondhi et al., 2020a). Elsewhere: Nepal (Yazaki, 1992), Pakistan, China (Han & Xue, 2011).

Tribe Geometrini

***Maxates theydaria* (Guenée, [1858]) (Image 399)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019.

Distribution: India: Uttarakhand (Sondhi et al., 2020a), Himachal Pradesh, West Bengal (Chandra et al., 2019), Sikkim (Hampson, 1995), Arunachal Pradesh (Eaglenest WLS & Tale WLS). Elsewhere: Bangladesh (Hampson, 1995), Nepal (Yazaki, 1998), Thailand (Koçak & Kemal, 2010), China, Taiwan, Indonesia, Borneo, Malaysia, Philippines (Han & Xue, 2011).

***Maxates veninotata* (Warren, 1894) (Image 400)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pamruk, 01.ix.2019, leg. SS, (NCBS-BM472).

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Pakke TR, Tale WLS), Nagaland. Elsewhere: Borneo, Hong Kong (Kendrick, 2002). Also recorded by the first author from Pakke TR in Arunachal Pradesh and Zunheboto district in Nagaland. There are no previous published records of this species from Arunachal Pradesh or from Nagaland.

Tribe Hemitheini

Eighteen species of *Comostola* have been recorded in India (Kirti et al., 2019). Examining genitalia and/or molecular phylogeny best separates these species. Hence most of these identifications are provisional.

***Comostola caerulea* Warren, 1893 (Image 404)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM380).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011 and 22.ix.2011.

Notes: *Pyrrhorachis caerulea* Warren, 1893 is a junior synonym.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Tale WLS). These are the first published records of this species from Arunachal Pradesh.

***Comostola cf. leucosticta* Yazaki, 1993 (Image 405)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 22.iv.2019, leg. SS, (NCBS-BK926. NCBS-BM560).

Notes: Described by Yazaki (1993) and the specimens are a good match to the original description. Similar species from India are *C. maculata* (Moore, 1868) and *C. virago* Prout, 1926; best separated by male genitalia and molecular phylogeny.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (TL), Bhutan (Ratnasingham & Hebert, 2007). Kirti et al. (2019) did not list this species in their checklist of Indian Geometridae; hence this record from Tale WLS represents a provisional addition to Indian moth fauna.

***Comostola cf. inops* Prout, 1912 (Image 406)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM610).

Photographic records: 26.viii.2019, Pange, Tale WLS.

Notes: Provisionally identified as *C. inops*. Similar species are *C. maculata* (Moore, 1868) and *C. ovifera* (Warren, 1893), which are best separated by genitalia and molecular phylogeny.

Distribution: India: Kashmir (TL), Arunachal Pradesh (Tale WLS).

***Hemistola ornata* Yazaki, 1994 (Image 407)**

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 19.ix.2011 and 20.ix.2011.

Notes: An unmistakable *Hemistola* described by Yazaki (1994) from Nepal with two distinct creamy-white patches on the dorsum of both wings, with which the images match well.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (TL), China (Yunnan) (Han & Xue, 2009). Kirti et al. (2019) did not list this species in their checklist of Indian Geometridae. Hence this record from Tale WLS represents an addition to Indian moth fauna.

***Hemistola rubrimargo* Warren, 1893 (Image 408)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, 05.ix.2019 and 07.ix.2019.

Distribution: India: West Bengal (TL: Darjeeling), Meghalaya, Assam, Arunachal Pradesh (Tale WLS). Elsewhere: Nepal, China (Han & Xue, 2009). These are the first published records of this species from Arunachal Pradesh.

Thirteen species of *Jodis* have been recorded in India (Kirti et al., 2019). Examining genitalia and/or molecular phylogeny best separates these species. Hence these identifications are provisional. The following species have been identified using Prout (1934) and the key for *Jodis* spp. in Han & Xue (2011).

***Jodis argentilineata* Wileman, 1916 (Image 409)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 20.ix.2011.

Notes: The identity of the species was confirmed on account of the following: forewing discal spot, ring-like with white spot. Terminal line with white dot-like markings on vein ends of both wings (Prout, 1934; Han & Xue, 2011).

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: China, Taiwan (Han et al., 2011). Shubhalaxmi (2018) reported an unconfirmed record from Arunachal Pradesh. This record confirms its presence in Arunachal Pradesh.

***Jodis argutaria* (Walker, 1866) (Image 410)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, 28.viii.2019 and 05.ix.2019.

Notes: Very similar to *J. argentilineata* (Wileman, 1916). The species identity was confirmed on account of the following: forewing discal spot, ring-like with white spot. Terminal line without white dot-like markings on vein ends of both wings. Lunules of the forewing postmedial lines are more strongly developed than *J. argentilineata* and more sharply white externally near the dorsum of both wings. (Prout, 1934; Han et al., 2011).

Distribution: India: “N. India” (TL), Sikkim, Meghalaya (Hampson, 1895), Arunachal Pradesh (Tale WLS). Elsewhere: China, Japan (Han & Xue, 2011).

***Jodis delicatula* (Warren, 1896) (Image 411)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 20.ix.2019 and 29.viii.2019.

Notes: The only bluish-green *Jodis* species in India with a prominent black discal spot on forewing. Similar species: *Jodis inumbrata* (Warren, 1896) has olive-brown cell spots and much greater olive-yellow on outside of the postdiscal bands on both wings (Prout, 1934; Han et al., 2011).

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). Elsewhere: China, Nepal (Han & Xue, 2011). These are the first published records of this species from Arunachal Pradesh.

***Orothalassodes aptifimbria* (Prout, 1916) (Image 412)**

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM156). ♂, India, Arunachal Pradesh, Tale WLS, Tale Valley, 29.viii.2019, leg. SS, (NCBS-BM211).

Photographic records: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019.

Notes: *Orothalassodes aptifimbria* is best separated from *O. hypocrites* (Prout, 1912) from the Khasi Hills, Meghalaya as the former is more blue-green, lacks the white spots at vein ends present in *O. hypocrites* and has the fringe, green, unspotted, with whitish line at base (Prout, 1916). The first author has records of *O. hypocrites* from the Garo Hills, Meghalaya, where the white spots at vein ends are very prominent and distinct.

Distribution: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). There are no recent published records of this species from India, and these records from Tale WLS are its first published records from Arunachal Pradesh.

Tribe *Pseudoterpnini****Pingasa rufofasciata* Moore, 1888 (Image 415)**

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 19.iv.2019, leg. SS, (NCBS-AP879).

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 17.iv.2019.

Notes: The specimen was identified based on the OD and the key provided by Han & Xue (2011). The wings have the underside white, diffused with a little grey or black-brown on the forewing apex. The postmedial line on the forewing upperside is not arched, but is serrate and weakly marked. The outer postmedial line on the forewing upperside has diffused pinkish-brown scales. This species shows significant individual variation with the diffused scales beyond the postmedial on the forewing upperside varying from pinkish-brown, red-brown or yellowish-brown scales.

Distribution: India (West Bengal: TL), Arunachal Pradesh. Elsewhere: Bhutan, China, Hong Kong (iNaturalist, 2020). There are no recent published records of this species from India and these are the first records of this species from Arunachal Pradesh.

Tribe *Timandromorphini****Timandromorpha cf. discolor* (Warren, 1896) (Image 416)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019, leg. TK, (NCBS-BK057). ♂, India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019, leg. SS, (NCBS-BM613). ♀, India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM382).

Photographic records: ♂, India, Arunachal Pradesh, Lower Subansiri district, Ziro IB, 17.ix.2011. ♂, India, Arunachal Pradesh, Tale WLS, Pange, 20.ix.2011. India, Arunachal Pradesh, Tale WLS, Pange, 22.ix.2011, 31.viii.2019 and 05.ix.2019.

Notes: All individuals were examined using the key developed by Han & Xue (2004) in order to check for any individuals of *T. emerges* (Prout, 1932). In these individuals, the yellowish-white spots on the forewing just extended to Cu₁, seldom beyond Cu₁, and never beyond the middle of Cu₁ and M₃. Furthermore, the hindwing was never narrow and the ratio of longitudinal distance from apex to hind margin to length of the hind margin was never 0.6. Stünning & Yazaki (2008) also described three new extrazonal species of *Timandromorpha* from Myanmar, Vietnam, Thailand and China for which the specimens were also examined. However, genitalia dissection is necessary to confirm species identity; hence all the individuals were provisionally identified as *T. discolor*, the only hitherto known species from India.

Distribution: India: Meghalaya (Khasi Hills: TL), Arunachal Pradesh (Eaglenest WLS and Tale WLS). Elsewhere: China, Taiwan, Myanmar (Han & Xue, 2004).

Tribe unassigned***Eucyclodes pastor* (Butler, 1880) (Image 419)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 07.ix.2019.

Notes: This species is uncommon compared to the similar *Eucyclodes sanguineata* (Moore, [1868]), which is widespread across E. Himalayas.

Distribution: India: West Bengal (TL: Darjeeling), Sikkim, Arunachal Pradesh (Tale WLS, Dirang). Elsewhere: China (Han & Xue, 2004). Though reported from Sikkim and Arunachal Pradesh by Kirti & Saxena (2012), there are only a few published records of this species from India.

***Eucyclodes aureofulva* (Warren, 1897) (Image 417)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 27.viii.2019 and 28.viii.2019.

Notes: Described by Warren (1897) and still listed as *Chloromachia aureofulva* by some authors (Beccaloni *et al.*, 2003). Here, we follow Scoble & Hausmann (2007) and list this in the genus *Eucyclodes*. Prout (1933) mentions there is only a single type specimen of the male and it differs from the more common *E. divipala* (Walker, 1861) in having a very large brown, yellow mixed anterior patch on the forewing from the cell to the apex.

Distribution: India: Meghalaya (TL: Khasi Hills), Arunachal Pradesh (Tale WLS). There are no recent published records of this species from India, and this represents its first record from Arunachal Pradesh, extending its known range.

Subfamily *Larentiinae***Tribe *Chesiadini******Docirava affinis* Warren, 1894 (Image 425)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange-Tale Valley trail, 29.viii.2019.

Notes: A single individual spotted during the day, sitting on the upper surface of a leaf.

Distribution: India: NW Himalayas, Sikkim (Prout, 1926; Chandra *et al.*, 2019), Arunachal Pradesh (Dihang-Dibang BR, Tale WLS) (Chandra *et al.*, 2019). Elsewhere: Nepal (Yazaki, 1994), Myanmar, China (Prout, 1926).

Tribe *Cidariini****Dysstroma cinereata* (Moore, [1868]) (Image 426)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 30.viii.2019.

Distribution: India: West Bengal (TL), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Yazaki, 1994), Japan (Anonymous, 2020), South Korea (iNaturalist, 2020). This is the first published record of this species from Arunachal Pradesh.

Subfamily *Orthostixinae****Centronaxa orthostrigalis* (Warren, 1893) (Image 434)**

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Distribution: India: West Bengal (TL: Darjeeling), Nagaland (Hampson, 1895), Arunachal Pradesh (Eaglenest WLS and Tale WLS). Elsewhere: Bhutan (Hampson, 1895). Also recorded by the first author from Eaglenest WLS, Arunachal Pradesh. This is the first published record of this species from Arunachal Pradesh.

***Naxa obliterateata* (Warren, 1893) (Image 435)**

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM154, NCBS-BM376).

Distribution: India: West Bengal (Darjeeling), Manipur (Warren, 1893), Arunachal Pradesh (Dihang-Dibang BR, Tale WLS) (Chandra *et al.*, 2019). Elsewhere: Bhutan (TL), Nepal (Yazaki, 1992).

Subfamily *Sterrhinae*

Tribe *Rhodostrophiini*

Discoglypha punctimargo (Hampson, 1895) (Image 436)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019 and 03.ix.2019.

Distribution: India: Sikkim (TL), Arunachal Pradesh (Eaglenest WLS, Tale WLS) (Sondhi et al., 2020a). These records from Eaglenest WLS and Tale WLS are the first published records of this species since its original description.

Metallaxis miniata Yazaki & Wang, 2004 (Image 437)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019, leg. TK, (NCBS-BK071). Exp: 25 mm, FWL: 15 mm.

Notes: This species was described in 2004 from S. China (Yazaki et al., 2004). This specimen matches the original description perfectly with the only difference being that the distance between the medial and postmedial lines on the hindwing is reduced in this individual, when compared with the holotype. This could be on account of individual variation.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: S. China (TL), N. Thailand, W. Myanmar (Yazaki et al., 2004). The nearest known location for this species is Chin State, Myanmar, which is over 500 km due south of Tale WLS. Kirti et al. (2019) do not list this species in their checklist of Indian Geometridae nor do Yazaki et al. (2004) mention any records from India; hence this record from Tale WLS represents an addition to Indian moth fauna.

Tribe *Sterrhini*

Idaea protensa (Butler, 1889) (Image 440)

Photographic records: India, Arunachal Pradesh, Tale WLS, Pange, 05.ix.2019.

Distribution: India: Himachal Pradesh (TL: Dharamsala), Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (Ratnasingham & Hebert, 2007). This is the first published record of this species from Arunachal Pradesh.

Family *Lasiocampidae*

Subfamily *Lasiocampinae*

Tribe *Odonestini*

Radhica flavovittata flavovittata Moore, 1879 (Image 445)

Material examined: 2 ♂, India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM165, NCBS-BM332).

Distribution: Ssp. *flavovittata* India: Uttarakhand (TL), Himachal Pradesh (Hampson, [1893]), Arunachal Pradesh (Sondhi et al., 2020a). Elsewhere: Nepal (Kishida, 1992b), Bhutan (Hampson, [1893]). Ssp. *taiwanensis* Taiwan (Anonymous, 2020).

Tribe unassigned

Baoderia khasiana (Moore, 1879) (Image 449)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 28.viii.2019, leg. SS, (NCBS-BM162).

Distribution: India: Meghalaya (TL: Khasi Hills), Sikkim (Hampson, [1893]), Manipur (iNaturalist, 2020), Arunachal Pradesh (Dihang-Dibang BR, Tale WLS) (Chandra et al., 2019). Elsewhere: Bhutan, Nepal, southern China, Myanmar (Hauenstein et al., 2011).

Family *Bombycidae*

Subfamily *Bombyciniae*

Triuncina cf. cervina (Walker, 1865) (Image 457)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 26.viii.2019, leg. SS, (NCBS-BM558).

Notes: Seven species of *Triuncina* Dierl, 1978 are known globally (Beccaloni et al., 2003; Wang et al., 2015). Of these, only two species are known from the Indian subcontinent, *Triuncina cervina* (Walker, 1865), which is known only from Nepal, and *Triuncina religiosae*

(Helfer, 1837), which is distributed throughout northeast India. This specimen most closely matched and is provisionally identified as *Triuncina cf. cervina* (Kishida, 1992a), though genitalia dissection for species confirmation is needed.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Nepal (TL).

Family *Saturniidae*

Subfamily *Salassinae*

Salassa cf. lola (Westwood, 1847) (Image 458)

Material examined: ♂, India, Arunachal Pradesh, Tale WLS, Pange, 18.iv.2019, leg. SS, (NCBS-BF354).

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Notes: The genus *Salassa* Moore, 1859 has numerous members from the Himalayan region. *Salassa aeos* Witt & Pugayev, 2007 (W. Nepal); *S. belinda* Witt & Pugayev, 2007 (E. Nepal, Bhutan); *S. bhutanensis* Brechlin, 2009 (Bhutan); *S. lola* (Westwood, 1847) (Nepal, Sikkim, West Bengal); *S. mizoram* Naumann & Lalhmingliani 2019; *S. meisteri* Brechlin, 2010 (Bhutan). The species identities of specimens from Arunachal Pradesh have not been confirmed. These could be *S. belinda*, *S. lola* or *S. meisteri* or a new species. Dissection of male genitalia and/or molecular phylogeny are needed to confirm species identity.

Distribution: The different species of *Salassa* are distributed across various parts of the Himalayas.

Subfamily *Saturniinae*

Tribe *Saturniini*

Lemaireia cf. luteopeplus luteopeplus Nässig & Holloway, 1988 (Image 463)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019, leg. TK, (NCBS-BK065, NCBS-BK063).

Notes: The genus *Lemaireia* has six species with the innermost ring reddish and the outermost ring black on HW upperside (Nässig & Holloway, 1988; Nässig, 1996; Brechlin, 2001; Beck & Nässig, 2008; Naumann et al., 2017). Of these, only one species, *L. luteopeplus luteopeplus* Nässig & Holloway, 1988 is known from India. All the other species are extrazonal and are known from Myanmar, Thailand, Malaysia, Vietnam, Philippines and China. Dissection of male genitalia and/or molecular phylogeny are needed to confirm species identity, though this is provisionally identified as *Lemaireia cf. luteopeplus luteopeplus*.

Distribution: Ssp. *luteopeplus* India: Meghalaya (Khasi Hills: TL). There are no recent published records of this species from India (Sambath & Chandra, 2013; Gogoi et al., 2014; Kumar et al., 2016).

Saturnia cf. pelelaensis Brechlin, 2009 (Image 466)

Photographic records: India, Arunachal Pradesh, Tale WLS, Tale Valley, 21.ix.2011.

Notes: Only a single individual recorded at the Tale Valley watchtower in September 2011. The individual was not collected but was provisionally identified as close to *Saturnia cf. pelelaensis* or potentially a new species by Ron Brechlin (pers. comm. Sanjay Sondhi), but until a specimen is collected for examination of the genitalia or inclusion in a molecular phylogeny, its identity cannot be confirmed.

Distribution: India: Arunachal Pradesh (Tale WLS). Elsewhere: Bhutan (TL) (Brechlin, 2009).

Sinobirma bouyeri Naumann, Nässig & Rougerie, 2012 (Image 468)

Material examined: ♀, India, Arunachal Pradesh, Tale WLS, Pange, 23.v.2019, leg. TK, (NCBS-BK037).

Notes: Two species of *Sinobirma* are known from India, *S. myanmarensis* Naumann, Nässig & Rougerie, 2012 and *S. bouyeri*.

The description of *S. bouyeri* by Rougerie *et al.* (2012) included six males, listed as paratypes, collected from Rapum, Arunachal Pradesh, now in Shi Yomi district. We report the sighting of a single female from Pange.

Distribution: India: Arunachal Pradesh (Dihang-Dibang BR, Tale WLS and Shi Yomi district). Elsewhere: Tibet, Thailand (Chandra *et al.*, 2019). The second species of this genus, *S. myanmarensis* was reported from India for the first time from Nagaland in June 2019 (Sondhi *et al.*, 2020a).

Family Sphingidae

Subfamily Smerinthinae

Tribe Ambulycini

Ambulyx bhutana Brechlin, 2014 (Image 487)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 22.iv.2019, leg. SS, (NCBS-BK924).

Notes: Described by Brechlin (2014) from Trongsa Dzong in Bhutan at an altitude of 1925 m. Identification confirmed by Ian Kitching (pers. comm. Sanjay Sondhi).

Distribution: India: Sikkim, West Bengal, Arunachal Pradesh (Tale WLS). Elsewhere: Bhutan, Myanmar (?). This is the first record of this species from Arunachal Pradesh, and it extends its range eastwards by over 300 km, from Bhutan.

Tribe Smerinthini

Rhodoprasina floralis (Butler, 1876) (Image 492)

Material examined: India, Arunachal Pradesh, Tale WLS, Pange, 22.iv.2019, leg. SS, (NCBS-BK928).

Notes: Identification confirmed by Ian Kitching (pers. com. Sanjay Sondhi; Kitching & Brechlin, 1996).

Distribution: India: West Bengal (TL: Darjeeling), Arunachal Pradesh (Tale WLS). Elsewhere: Bhutan, Nepal (Kitching & Brechlin, 1996; Irungbam & Irungbam, 2019; Kitching, 2020). This is the first record of this species from Arunachal Pradesh, and it extends its range eastwards by over 300 km, from Bhutan.

CONCLUSION

Moth biodiversity assessments at Tale WLS in Arunachal Pradesh, India, over 29 days of survey during the months of April, May, August and September in 2011 and 2019, resulted in a checklist of 497 moth species of which 460 species are identified to species level, while 37 are identified to genus level. There are 17 species for which no published records exist from India which are additions to Indian moth fauna (Table 3). An additional four species are provisionally new to India, *Saturnia cf. pelelaensis*, *Comostola cf. leucosticta*, *Enispa cf. eosarialis*, and *Goniorhynchus cf. butyrosa*, but their identities could not be confirmed on account of lack of specimens. More than a hundred species were recorded for which no published records exist from Arunachal Pradesh. An additional 24 species of moths that were identified from Tale Valley after the submission of this manuscript are included in Plate 19. Plate 20 includes some additional species that have not yet been identified. Over 200 species still remain to be identified, highlighting the need for additional biodiversity assessments through systematic, year-round collecting efforts in Arunachal Pradesh supported by taxonomic studies through genitalia dissection and molecular phylogenetics.

Plate 1

1. *Nemophora* sp.2. *Melittia hampsoni* UP/UN3. *Chalcoscelides castaneipars*4. *Caissa* cf. *fasciatum*5. *Melinaria* cf. *repanda*6. *Thronia* sp.7. *Campylotes histrionicus*8. *Corma maculata*9. *Elcysma ziroensis*10. *Eterusia raja* wing UP/UN11. *Herpa primulina*12. *Milleria hamiltoni*13. *Pidorus circe*14. *Pseudarbudas ochrea*15. *Zeuzera multistrigata*16. *Pyrinioides sinuosus* UP/UN17. *Herdonia osacesalis*18. *Agassiziella* cf. *albidivisa*19. *Pitama lativitta*20. *Neadeloides cinerealis*21. *Patania semivialis*22. *Patania scinisalis*23. *Patania verecunda*24. *Eurrhyparodes bracteolalis*25. *Botyodes asialis*26. *Cirrochrista brizoalis*27. *Cirrochrista pulchellalis*28. *Diaphania indica* male

Plate 2

29. *Filodes fulvidorsalis*30. *Glyphodes caesalis*31. *Glyphodes lacustralis*32. *Glyphodes orbiferalis*33. *Glyphodes prothymalis*34. *Glyphodes pyloalis complex*35. *Heterocnephes lymphatalis*36. *Omphisa anastomosalis*37. *Palpita* sp.38. *Parotis* cf. *marginata*39. *Rhagoba octomaculalis*40. *Talanga sexpunctalis*41. *Tyspanodes fascialis* UP/UN42. *Tyspanodes hypsalis*43. *Tyspanodes nigrolinealis*44. *Uncobotyodes patulalis*45. *Bocchoris inspersalis*46. *Bradina diagonalis*47. *Chabula telphusalis*48. *Dichocrocis definita*49. *Goniorhynchus* cf. *butyrosa*50. *Neobotyodes crocopteralis* male50. *Neobotyodes crocopteralis* female51. *Nevrina procopia*52. *Syllepte gastralis*53. *Syllepte* cf. *lactiguttalis*54. *Orybina kobesi*55. *Orybina plangonalis*

Plate 3

56. *Toccolosida rubriceps*57. *Ditrigona quinaria*58. *Ditrigona regularis*59. *Ditrigona triangularia*60. *Agnidra discispilaria*61. *Agnidra specularia*62. *Agnidra vinacea*63. *Auzatelloides hyalinata*64. *Callidrepana gemina*65. *Callidrepana patrana* UP/UN66. *Canucha miranda* UP/UN67. *Leucoblepsis fenestraria* UP/UN68. *Macrauzata fenestraria*69. *Macrocilix mysticata*70. *Nordstromia* cf. *argenticeps*71. *Paralbara muscularia*72. *Paralbara perhamata*73. *Thymistida tripunctata*74. *Tridrepana sadana*75. *Oreta ancora* UP/UN76. *Oreta fuscopurpurea*77. *Oreta insignis*78. *Oreta obtusa* UP/UN79. *Oreta vatama* UP/UN80. *Oreta sanguinea*81. *Gaurena aurofasciata*82. *Gaurena florens*83. *Gaurena florescens* UP/UN

Plate 4

84. *Habrosyne violacea* UP/UN85. *Nothoploca nigripunctata*86. *Parapsestis lichenea* UP/UN87. *Psidopala undulans* UP/UN88. *Stenopsestis alternata*89. *Tethea consimilis* UP/UN90. *Tethea oberthueri* UP/UN91. *Horithyatira decorata*92. *Thyatira batis* UP/UN93. *Cyclidia rectificata*94. *Cyclidia substigmaria*95. *Neopheosia fasciata* UP/UN96. *Liparopsis postalbida* male97. *Harpyia* cf. *yunnanensis*98. *Mesophalera mediopallens* UP/UN99. *Viridifentonia plagiviridis*100. *Acmeshachia albifascia*101. *Acmeshachia gigantea*102. *Hexafrenum* sp.103. *Peridea sikkima* UP/UN104. *Pheosiopsis* sp.105. *Ptilodon* sp.106. *Semidonta basalis*107. *Syntypistis comatus* male107. *Syntypistis comatus* female108. *Syntypistis nigribasalis*109. *Syntypistis* cf. *sporadochlorus* female110. *Polystictina maculata*

Plate 5

111. *Gangarides vittipalpis*112. *Periergos* sp.113. *Phalera* cf. *goniophora*114. *Phalera* sp.115. *Cyphanta xanthochlora*116. *Clostera pallida*117. *Pterostoma* cf. *sinica*118. *Baradesa lithosioides*119. *Ginshachia* cf. *gemmifera*120. *Metaschalis disrupta*121. *Gazalina apsara*122. *Gazalina chrysolopha*123. *Mecodina odontophora*124. *Psimada quadripennis* female125. *Aglaomorpha plagiata*126. *Alphaea florescens*127. *Alphaea impleta*128. *Lemyra* cf. *stigmata*129. *Lemyra obliquivitta*130. *Lemyra rhodophila*131. *Nyctemera arctata* male132. *Spilarctia* cf. *sagittifera*133. *Aemene* sp.134. *Agrisius excellens*135. *Agrisius fuliginosus*136. *Chrysorabdia viridata* male137. *Ammatho callida*138. *Ammatho multistriata*

Plate 6

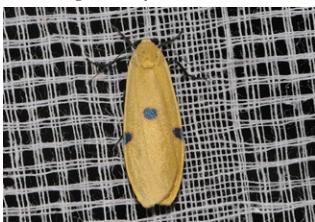
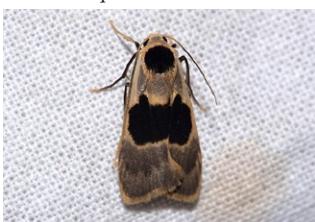
139. *Barsaurea phaeoxanthia*140. *Barsine* sp.141. *Cyana arama*142. *Cyana bellissima*143. *Cyana* cf. *khasiana*144. *Cyana* cf. *puer*145. *Cyana divakara*146. *Cyana dudgeoni* UP/UN147. *Cyana perornata*148. *Cyana signa*149. *Nudaria* sp. 1150. *Nudaria* sp. 2151. *Nudaria* sp. 3152. *Ovipennis* cf. *anomala*153. *Ovipennis dudgeoni*154. *Ovipennis flavivenosa*155. *Ovipennis incompletostriga*156. *Conilepia sikkima*157. *Dubatoloviana pahanga*158. *Ghoria albocinerea*159. *Macrobrochis tibetensis*160. *Teulisna* cf. *karena*161. *Vamuna bipars*162. *Vamuna maculata*163. *Vamuna remelana* female163. *Vamuna remelana* male164. *Enispa* cf. *eosarialis*165. *Holocryptis erubescens*

Plate 7

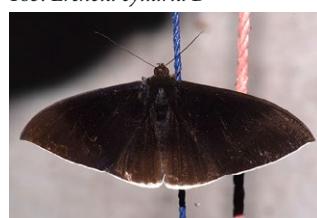
166. *Cruxoruza reticulata*167. *Zurobata cf. vacillans*168. *Carsina* sp.169. *Singara diversalis*170. *Tamba cf. cinnamomea*171. *Calyptra ophideroides*172. *Calyptra orthograpta* UP/UN173. *Calyptra pseudobicolor*174. *Dierna strigata*175. *Eudocima hypermnestra*176. *Eudocima sikhimensis*177. *Oporophylla ustulata*178. *Blasticorhinus varius*179. *Hamodes propitia*180. *Catocala hyperconnexa* UP/UN181. *Catocala nivea*182. *Tropidtamba lepraota*183. *Ercheia cyllaria* A183. *Ercheia cyllaria* B183. *Ercheia cyllaria* C184. *Erebis gemmans*185. *Erebis hieroglyphica*186. *Lygniodes hypoleuca*187. *Sympis rufibasis*188. *Ericeia eriophora*189. *Ericeia pertendens*190. *Hulodes drylla*191. *Hypopyra* sp.

Plate 8

192. *Thyas juno* UP/UN193. *Bastilla maturescens*194. *Chaliope mygdon*195. *Dysgonia torrida*196. *Rectipalpula billeti*197. *Daddala lucilla complex*198. *Hypersynoides constellata* UP/UN199. *Hypersynoides punctosa*200. *Sypna omicronigera*201. *Delgamma flaviae*202. *Ischyja hemiphaea*203. *Platyjonia mediorufa*204. *Orthozona quadrilineata*205. *Sinarella discisigna*206. *Lophomilia albicosta*207. *Perciana marmorea* UP/UN208. *Aruta flavipes* female209. *Arctornis* sp. 1210. *Arctornis* sp. 2211. *Arctornis* sp. 3212. *Lymantria concolor* male213. *Lymantria grisea*214. *Lymantria serva*215. *Euproctis dispersa*216. *Euproctis marginata*217. *Euproctis* sp. 1218. *Euproctis* sp. 2219. *Euproctis staudingeri* male UP/UN

Plate 9

220. *Euproctis* sp. 3221. *Cifuna locuples*222. *Dasychira cinctata*223. *Dasychira postfusca*224. *Dasychira* sp.225. *Ilema chloroptera*226. *Numenes patrana* female UP/UN227. *Pantana luteiceps*228. *Himala argentea*229. *Pida apicalis* female229. *Pida apicalis* male230. *Ramadra calligrama*231. *Taviodes fulvescens*232. *Lycimna polymesata*233. *Anuga lunulata*234. *Targalla palliatrix*235. *Targalla subocellata*236. *Siglophora sanguinolenta*237. *Tyana callichlora* female238. *Tyana chloroleuca* female UP/UN239. *Tyana falcata*240. *Giaura robusta*241. *Pardasena verna*242. *Ptisciana seminivea*243. *Tortriciforma viridipuncta*244. *Earias roseifera*245. *Pterogonia* cf. *chinensis*246. *Acronicta major* UP/UN

Plate 10

247. *Sarbanissa insocia* UP/UN248. *Cyclodes omma*249. *Callopistria* cf. *phaeogona*250. *Callopistria* cf. *placodoides*251. *Callopistria repleta*252. *Athetis lineosa*253. *Callyna semivitta*254. *Mythimna sinuosa*255. *Xestia c-nigrum*256. *Chandata* sp.257. *Conservula indica*258. *Karana gemmifera*259. *Phlogophora albovittata*260. *Phlogophora distorta*261. *Apsarasa radians*262. *Tiracola* cf. *aureata*263. *Tambana albiplaga*264. *Viridistrina striatovirens*265. *Erythroplusia pyropia*266. *Burmeia leesi* UP/UN267. *Paradecetia* sp.268. *Dysaethria* cf. *moza*269. *Epiplema himala*270. *Oroplema plagifera*271. *Orudiza angulata*272. *Phazaca* sp.273. *Acropteris ciniferaria*274. *Acropteris iphiata*

Plate 11

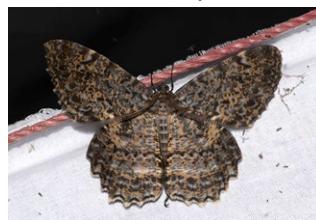
275. *Lyssa zampa*276. *Nothomiza costalis*277. *Nothomiza costinotata*278. *Orthobrachia latifasciata*279. *Abaciscus tristis*280. *Alcis arisesma* UP/UN281. *Alcis maculata*282. *Amblychia nimia* male283. *Arichanna interplagata*284. *Arichanna jaguarinaria*285. *Arichanna transectata*286. *Ascotis imparata*287. *Biston contektaria*288. *Biston regalis*289. *Blepharoctenucha virescens*290. *Callocasta persimilis*291. *Chorodna moorei*292. *Chorodna similis*293. *Chorodna vulpinaria* male294. *Cleora fraterna* male295. *Coremecis nigrovittata* male296. *Dalima intricata*297. *Dalima lucens*298. *Dalima patularia*299. *Dalima schistacea*300. *Dalima truncataria*301. *Dalima vulpinaria*302. *Darisa fratercula* female

Plate 12

303. *Ectropis dentilineata*304. *Gasterocome pannosaria*305. *Harutalcis atrostipata* male306. *Harutalcis vialis*307. *Hypomecis pardaria*308. *Hypomecis transscissa*309. *Hyposidra aquilaria* male310. *Krananda falcata*311. *Krananda orthotmeta* UP/UN312. *Krananda semihyalina*313. *Lassaba albidaria*314. *Menophra cf. bicornuta*315. *Menophra translineata* female316. *Mesastrape fulgoraria*317. *Microcalicha melanosticta*318. *Monocerotesa connexa*319. *Monocerotesa radiata*320. *Monocerotesa strigata*321. *Myrioblephara marmorata*322. *Myrioblephara pingasoides*323. *Ophthalmitis xanthypochlora* UP/UN324. *Xandrames albofasciata*325. *Xandrames dholaria*326. *Xandrames latiferaria*327. *Xerodes ypsaria*328. *Astygyisa orbapicalis* female329. *Petelia immaculata* male330. *Micronidia unipuncta*

Plate 13

331. *Orthocabera sericea*332. *Peraostega deletaria*333. *Opisthograptis moelleri* UP/UN334. *Luxiaria mitorrhaphes*335. *Luxiaria tephrosaria*336. *Hirasa scripturaria*337. *Psyra cuneata*338. *Odontopera* sp.339. *Achrosis* cf. *incitata*340. *Achrosis rufescens*341. *Celenna festivaria*342. *Corymica* sp. UP/UN343. *Fascellina inornata* UP/UN344. *Fascellina plagiata*345. *Garaeus apicata*346. *Garaeus colorata* UP/UN347. *Garaeus cruentatus*348. *Garaeus specularis*349. *Heterolocha falconaria* male350. *Heterolocha marialgeae*351. *Hypochrosis hyadaria* UP/UN352. *Mimomiza cruentaria*353. *Plagodis inustaria* UP/UN354. *Polyscia argentilinea eugraphes*355. *Entomopteryx obliquilinea*356. *Oxymacaria penumbrata*357. *Obeidia lucifera*358. *Leptomiza calcearia*

Plate 14

359. *Archiplutodes prasina*360. *Plutodes costatus*361. *Plutodes sp.*362. *Antiperchia belluaria*363. *Hyalinetta circumflexa*364. *Mimochroa albifrons* UP/UN365. *Percnia felinaria* female366. *Prionodonta amethystina*367. *Pseudomiza obliquaria*368. *Sirinopteryx rufivinctata*369. *Tanaoctenia haliaria* male370. *Tanaoctenia* sp.371. *Xenopia foraria* UP/UN372. *Xenopia maculata* UP/UN373. *Agathia codina*374. *Agathia gemma*375. *Agathia hemithearia*376. *Agathia* sp.377. *Dooabia viridata* UP/UN378. *Paramaxates taiwana*379. *Dindica para*380. *Dindica subrosea* male UP/UN381. *Dindicodes apicalis*382. *Dindicodes harutai* UP/UN383. *Dindicodes moelleri* UP/UN384. *Herochroma baba*385. *Herochroma ochreipicta* UP/UN386. *Herochroma viridaria* UP/UN

Plate 15

387. *Lophophelma erionoma*388. *Lophophelma iterans* UP/UN389. *Lophophelma varicoloraria* UP/UN390. *Metollophia opalina* male391. *Metollophia taleensis* male392. *Pachyodes ornataria*393. *Chlorodontopera discospilata*394. *Comibaena albimarginata*395. *Comibaena apicipicta*396. *Comibaena pictipennis*397. *Comibaena* cf. *biplaga*398. *Linguisaccus subhyalina* UP/UN399. *Maxates thetydaria*400. *Maxates veninotata*401. *Tanaorhinus kina* UP/UN402. *Tanaorhinus reciprocata*403. *Berta* cf. *chrysolineata* male404. *Comostola caerulea*405. *Comostola leucosticta* UP/UN406. *Comostola* cf. *inops*407. *Hemistola ornata* male408. *Hemistola rubrimargo*409. *Jodis argentilineata*410. *Jodis argutaria*411. *Jodis delicatula*412. *Orothalassodes aptifimbria* male UP/UN413. *Chlororithra fea*414. *Chloroglyphica variegata*

Plate 16

415. *Pingasa rufofasciata* male416. *Timandromorpha discolor* male UP/UN417. *Eucyclodes aureofulva*418. *Eucyclodes gavissima*419. *Eucyclodes pastor*420. *Acolutha pictaria*421. *Hastina pluristrigata*422. *Laciniodes plurilinearia*423. *Macrohastina gemmifera*424. *Palpoctenidia phoenicosoma*425. *Docirava affinis*426. *Dysstroma cinereata*427. *Ecliptopera umbrosaria*428. *Electrophaes* cf. *aliena*429. *Electrophaes niveopicta*430. *Photoscotosia* sp.431. *Trichopterigia* cf. *decorata*432. *Sarcinodes aequilinearia*433. *Sarcinodes carnearia*434. *Centronaxa orthostrigialis*435. *Naxa oblitterata* UP/UN436. *Discoglypha punctimargo*437. *Metallaxis miniata* UP/UN438. *Prolepsis crassnotinata*439. *Scopula ferrilineata*440. *Idaea protensa*441. *Synegiodes obliquifascia*442. *Timandra correspondens*

Plate 17

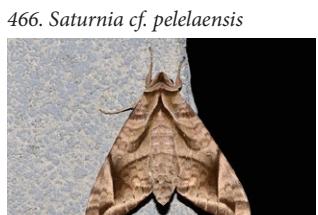
443. *Gastropacha* sp.444. *Odonestis* cf. *pruni*445. *Radhica* *flavovittata* male446. *Dendrolimus* cf. *himalayanus* UP/UN447. *Metanastria* sp.448. *Trabala* *vishnou* female449. *Baedera* *khasiana* male450. *Kosala* *sanguinea*451. *Argonestis* *flammans*452. *Bhareta* *cinnamomea* UP/UN453. *Eupterote* sp.454. *Palirisa* *cervina*455. *Mustilia* *falcipennis* UP/UN456. *Mustilizans* *hepatica*457. *Triuncina* cf. *cervina* UP/UN458. *Salassa* cf. *lola* male459. *Archaeoattacus* *edwardsii*460. *Actias* *selene*461. *Antheraea* *roylei* female462. *Cricula* *andrei* female463. *Lemaireia* cf. *luteopeplus* UP/UN464. *Loepa* sp. 1 male465. *Loepa* sp. 2 female466. *Saturnia* cf. *pelelaensis*467. *Solus* *drepanoides*468. *Sinobirma* *bouyeri* female
UP/UN469. *Acosmerycoides* *harterti*470. *Acosmeryx* *naga*

Plate 18

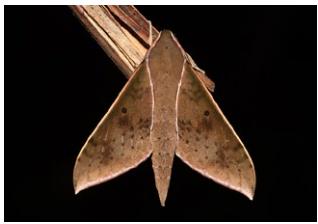
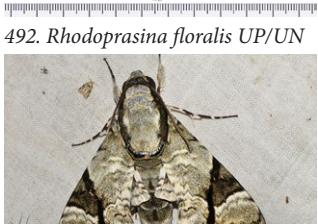
471. *Acosmyyx pseudonaga*472. *Ampelophaga khasiana* UP/UN473. *Ampelophaga rubiginosa*474. *Angonyx testacea*475. *Cechetra* cf. *lineosa*476. *Cechetra* cf. *scotti*477. *Cechetra minor*478. *Dahira obliquifascia*479. *Daphnis hypothous*480. *Eupanacra metallica* UP/UN481. *Eupanacra sinuata*482. *Pergesa acteus*483. *Rhagastis albomarginatus*484. *Rhagastis confusa*485. *Rhagastis olivacea*486. *Theretra nessus*487. *Ambulyx bhutana* UP/UN488. *Ambulyx liturata*489. *Ambulyx ochracea*490. *Ambulyx sericeipennis* UP/UN491. *Marumba cristata*492. *Rhodoprasina floralis* UP/UN493. *Dolbina inexacta*494. *Apocalypsis velox*495. *Cerberonoton rubescens*496. *Megacorma obliqua*497. *Psilogramma discistriga*

Plate 19

498. *Nagiella quadrimaculalis*499. *Patania obfuscalis*500. *Syllepte nigriflava*501. *Pyrausta bambucivora*502. *Mecodina albodenata*503. *Mecodina diastriga*504. *Arasada albicosta*505. *Arasada ornata*506. *Corgatha costinotalis*507. *Corgatha semipardata*508. *Zurobata intractata*509. *Dasychira moerens* male510. *Calliteara complicata* male511. *Calliteara himalayana* male512. *Calliteara horsfieldi* male513. *Hermonassa* cf. *chryserythra*514. *Xestia pseudoaccipiter* male515. *Arichanna conspersa* male516. *Arichanna schnitzleri* male UP517. *Chorodna mauraria*518. *Chorodna obliterate* male519. *Psilalcis albibasis*520. *Hirasa aereus*521. *Orthonama obstipata*

Plate 20



522. Crambidae



523. Crambidae



524. Crambidae

525. Lymantrinae, *Pantana* sp.

526. Thyatirinae



527. Notodontidae



528. Erebidae



529. Erebidae

530. Arctiini, *Spilarctia* sp.

531. Lithosiini

532. Lithosiini, *Miltochrista* sp. 533. Lithosiini, *Miltochrista* sp.

534. Ennominae, Boarmiini



535. Ennominae, Boarmiini



536. Geometridae



537. Geometridae



538. Larentiinae

539. Larentiinae, *Eupithecia* sp.

540. Larentiinae



541. Ennominae, Macariini

542. *Tonica* sp.

543. Nolidae

544. *Nola* sp.

545. Thyrididae

Plate 21



Pain River landscape, Pamluk



Tasi Biidang Pass, Tale WLS



Tale Valley campsite, Tale WLS



Research team with local staff at Pange, Tale WLS



Pange campsite, Tale WLS



Lebya Penggo Pass, Tale WLS



Track to Bomte village



Tale Valley landscape, Tale WLS

Table 2. Checklist of moths of Tale WLS. The locations in which the moths were recorded are mentioned as per nomenclature in Table 1, and months during the survey during which the individuals were sighted are noted. Moths may also be active outside these months, but these data provide an indicator of seasonal occurrence and flight periods.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
1	Adelidae			<i>Nemophora</i> sp.		PM	viii
2	Sesiidae	Sesiinae	Melittiini	<i>Melittia hampsoni</i>	Beutenmüller, 1894	PM, PN	viii, ix
3	Limacodidae	Limacodinae	Unassigned	<i>Chalcoscelides castaneipars</i>	(Moore, 1865)	PM	viii, ix
4	Limacodidae	Limacodinae	Unassigned	<i>Caissa cf. fasciatum</i>	(Hampson, 1893)	PN	viii
5	Limacodidae	Limacodinae	Unassigned	<i>Melinaria cf. repanda</i>	(Walker, 1865)	PM	viii
6	Limacodidae	Limacodinae	Unassigned	<i>Thronia</i> sp.		PN	ix
7	Zygaenidae	Chalcosiinae	Unassigned	<i>Campyloletes histrionicus</i>	Westwood, 1839	PN	ix
8	Zygaenidae	Chalcosiinae	Unassigned	<i>Corma maculata</i>	Hampson, 1892	PN	ix
9	Zygaenidae	Chalcosiinae	Unassigned	<i>Elcysma ziroensis</i>	Chadha, Gogoi & Young, 2017	PN	ix
10	Zygaenidae	Chalcosiinae	Unassigned	<i>Eterusia raja</i>	Moore, [1858]	PN	viii
11	Zygaenidae	Chalcosiinae	Unassigned	<i>Herpa primulina</i>	Elwes, 1890	PN	ix
12	Zygaenidae	Chalcosiinae	Unassigned	<i>Milleria hamiltoni</i>	Swinhoe, 1891	PN	ix
13	Zygaenidae	Chalcosiinae	Unassigned	<i>Pidorus circe</i>	(Herrich-Schäffer, [1853])	PN	ix
14	Zygaenidae	Chalcosiinae	Unassigned	<i>Pseudarbudas ochrea</i>	(Elwes, 1890)	TV	ix
15	Cossidae	Zeuzerinae	Unassigned	<i>Zeuzera multistrigata</i>	Moore, 1881	PN, ZI	ix
16	Thyrididae	Siculodinae		<i>Pyriniodes sinuosus</i>	(Walker, 1896)	PN	v
17	Thyrididae	Siculodinae	Siculodini	<i>Herdonia osacesalis</i>	Walker, 1859	PM	viii
18	Crambidae	Acentropinae	Unassigned	<i>Agassizella cf. albidivisa</i>	Warren, [1896]	PM	ix
19	Crambidae	Odontiinae	Unassigned	<i>Pitama lativitta</i>	Moore, [1888]	PM, PN	viii, ix
20	Crambidae	Pyraustinae	Pyraustini	<i>Neadeloides cinerealis</i>	(Moore, 1867)	PN	ix
21	Crambidae	Spilomelinae	Agroterini	<i>Patania semivialis</i>	Moore, 1888	TV	ix
22	Crambidae	Spilomelinae	Agroterini	<i>Patania scintialis</i>	(Walker, 1859)	PN	ix
23	Crambidae	Spilomelinae	Agroterini	<i>Patania verecunda</i>	(Warren, 1896)	PM	viii
24	Crambidae	Spilomelinae	Herpetogrammatini	<i>Eurrhyparodes bracteolalis</i>	(Zeller, 1852)	PN	viii
25	Crambidae	Spilomelinae	Margaroniini	<i>Botyodes asialis</i>	Guenée, 1854	PM	ix
26	Crambidae	Spilomelinae	Margaroniini	<i>Cirrhochrista brizoalis</i>	(Walker, 1859)	PM	viii
27	Crambidae	Spilomelinae	Margaroniini	<i>Cirrhochrista pulchellalis</i>	Lederer, 1863	PN	ix
28	Crambidae	Spilomelinae	Margaroniini	<i>Diaphania indica</i>	(Saunders, 1851)	ZI	ix
29	Crambidae	Spilomelinae	Margaroniini	<i>Filodes fulvidorsalis</i>	(Hübner, 1832)	PN	viii, ix
30	Crambidae	Spilomelinae	Margaroniini	<i>Glyphodes caesalis</i>	(Walker, 1859)	PN	viii
31	Crambidae	Spilomelinae	Margaroniini	<i>Glyphodes lacustralis</i>	Moore, 1867	PN	v
32	Crambidae	Spilomelinae	Margaroniini	<i>Glyphodes orbiferalis</i>	Hampson, 1896	PM	viii
33	Crambidae	Spilomelinae	Margaroniini	<i>Glyphodes prothymalis</i>	Swinhoe, 1892	PN	ix
34	Crambidae	Spilomelinae	Margaroniini	<i>Glyphodes pyloalis complex</i>	Walker, 1859	PM	viii
35	Crambidae	Spilomelinae	Margaroniini	<i>Heterocnephes lymphatalis</i>	(Swinhoe, 1889)	PN	viii
36	Crambidae	Spilomelinae	Margaroniini	<i>Omphisa anastomosalis</i>	(Guenée, 1854)	PM	viii
37	Crambidae	Spilomelinae	Margaroniini	<i>Palpita</i> sp.		PN	viii
38	Crambidae	Spilomelinae	Margaroniini	<i>Parotis cf. marginata</i>	(Hampson, 1893)	PN	ix
39	Crambidae	Spilomelinae	Margaroniini	<i>Rhagoba octomaculalis</i>	(Moore, 1867)	PN	viii, ix
40	Crambidae	Spilomelinae	Margaroniini	<i>Talanga sexpunctalis</i>	(Moore, 1877)	PM	ix
41	Crambidae	Spilomelinae	Margaroniini	<i>Tyspanodes fascialis</i>	(Moore, [1868])	PM	ix
42	Crambidae	Spilomelinae	Margaroniini	<i>Tyspanodes hypsalis</i>	Warren, 1891	PM	viii, ix
43	Crambidae	Spilomelinae	Margaroniini	<i>Tyspanodes nigrolinealis</i>	(Moore, 1867)	PN	ix
44	Crambidae	Spilomelinae	Margaroniini	<i>Uncobotyodes patulalis</i>	(Walker, 1866)	PM, ZI	viii, ix
45	Crambidae	Spilomelinae	Nomophilini	<i>Bocchoris inspersalis</i>	(Zeller, 1852)	ZI	ix
46	Crambidae	Spilomelinae	Steniini	<i>Bradina diagonalis</i>	Guenée, 1854	PN	ix
47	Crambidae	Spilomelinae	Unassigned	<i>Chabula telphusalis</i>	(Walker, 1859)	PM, PN	viii, ix
48	Crambidae	Spilomelinae	Unassigned	<i>Dichocrocis definita</i>	(Butler, 1889)	PM	viii, ix
49	Crambidae	Spilomelinae	Unassigned	<i>Goniorhynchus cf. butyrosa</i>	(Butler, 1879)	PN	ix
50	Crambidae	Spilomelinae	Unassigned	<i>Neobotyodes crocopteralis</i>	(Hampson, 1898)	PN, SU	ix
51	Crambidae	Spilomelinae	Unassigned	<i>Nevrina procopia</i>	(Stoll, [1781])	PN	viii
52	Crambidae	Spilomelinae	Unassigned	<i>Syllepte gastralis</i>	(Walker, [1866])	PM	viii, ix
53	Crambidae	Spilomelinae	Unassigned	<i>Syllepte cf. lactiguttalis</i>	(Warren, 1896)	PN	ix
54	Pyralidae	Pyralinae	Pyralini	<i>Orybina kobesi</i>	Roesler, 1984	PM	viii
55	Pyralidae	Pyralinae	Pyralini	<i>Orybina plangonalis</i>	(Walker, 1859)	PN	ix
56	Pyralidae	Pyralinae	Pyralini	<i>Toccolosida rubriceps</i>	Walker, 1863	PN	viii
57	Drepanidae	Drepaninae	Unassigned	<i>Ditrigona quinaria quinaria</i>	(Moore, 1867)	PN	ix
58	Drepanidae	Drepaninae	Unassigned	<i>Ditrigona regularis</i>	Warren, 1922	PN	viii
59	Drepanidae	Drepaninae	Unassigned	<i>Ditrigona triangularia</i>	(Moore, [1868])	PN, TV	iv
60	Drepanidae	Drepaninae	Drepanini	<i>Agnidra discispilaria</i>	Moore, [1868]	PN, TV	ix

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
61	Drepanidae	Drepaninae	Drepanini	<i>Agnidra specularia</i>	(Walker, 1866)	PN	iv, viii, ix
62	Drepanidae	Drepaninae	Drepanini	<i>Agnidra vinacea</i>	(Moore, 1879)	PN	iv, ix
63	Drepanidae	Drepaninae	Drepanini	<i>Auzatelloides hyalinata</i>	(Moore, [1868])	TV	ix
64	Drepanidae	Drepaninae	Drepanini	<i>Callidrepana gemina</i>	Watson, 1968	PM	ix
65	Drepanidae	Drepaninae	Drepanini	<i>Callidrepana patrana</i>	(Moore, [1866])	PN, TV, ZI	v, xiii, ix
66	Drepanidae	Drepaninae	Drepanini	<i>Canucha miranda</i>	Warren, 1922	PN	xiii, ix
67	Drepanidae	Drepaninae	Drepanini	<i>Leucoblepsis fenestraria</i>	(Moore, [1868])	PN	viii
68	Drepanidae	Drepaninae	Drepanini	<i>Macrauzata fenestraria</i>	(Moore, [1868])	TV	ix
69	Drepanidae	Drepaninae	Drepanini	<i>Macroclix mysticata</i>	(Walker, [1863])	PN	xiii, ix
70	Drepanidae	Drepaninae	Drepanini	<i>Nordstromia cf. argenticeps</i>	(Warren, 1922)	PN, TV	ix
71	Drepanidae	Drepaninae	Drepanini	<i>Paralbara muscularia</i>	(Walker, 1866)	PN	viii
72	Drepanidae	Drepaninae	Drepanini	<i>Paralbara perhamata</i>	(Hampson, [1893])	PN	viii
73	Drepanidae	Drepaninae	Drepanini	<i>Thymistida tripunctata</i>	Walker, 1865	PN	iv
74	Drepanidae	Drepaninae	Drepanini	<i>Tridrepana sadana</i>	(Moore, 1865)	PN	viii
75	Drepanidae	Drepaninae	Oretini	<i>Oreta ancora</i>	Wilkinson, 1972	PN	viii
76	Drepanidae	Drepaninae	Oretini	<i>Oreta fuscopurpurea</i>	Inoue, 1956	PN, TV	viii, ix
77	Drepanidae	Drepaninae	Oretini	<i>Oreta insignis</i>	(Butler, 1877)	SU	ix
78	Drepanidae	Drepaninae	Oretini	<i>Oreta obtusa</i>	Walker, 1855	PN, ZI	iv, ix
79	Drepanidae	Drepaninae	Oretini	<i>Oreta vatama</i>	Moore, [1866]	PN	v, viii
80	Drepanidae	Drepaninae	Oretini	<i>Oreta sanguinea</i>	Moore, 1879	PN, TV	xiii, ix
81	Drepanidae	Thyatirinae	Unassigned	<i>Gaurena aurofasciata</i>	Hampson, [1893]	TV	viii
82	Drepanidae	Thyatirinae	Unassigned	<i>Gaurena florens</i>	Walker, 1865	PN, TV	iv, viii, ix
83	Drepanidae	Thyatirinae	Unassigned	<i>Gaurena florescens</i>	Walker, 1865	PN	iv, v
84	Drepanidae	Thyatirinae	Unassigned	<i>Habrosyne violacea</i>	(Hampson, [1893])	PN	viii
84	Drepanidae	Thyatirinae	Unassigned	<i>argenteipuncta</i>			
85	Drepanidae	Thyatirinae	Unassigned	<i>Nothoploca nigripunctata</i>	(Warren, 1915)	PN	ix
85	Drepanidae	Thyatirinae	Unassigned	<i>nigripunctata</i>			
86	Drepanidae	Thyatirinae	Unassigned	<i>Parapsestis lichenea lichenea</i>	(Hampson, [1893])	PN, TV	viii, ix
87	Drepanidae	Thyatirinae	Unassigned	<i>Psidopala undulans</i>	(Hampson, [1893])	PN, ZI	viii, ix
88	Drepanidae	Thyatirinae	Unassigned	<i>Stenopsestis alternata</i>	(Moore, 1881)	PN, TV	ix
89	Drepanidae	Thyatirinae	Unassigned	<i>Tethea consimilis commifera</i>	(Warren, 1912)	PN	v
90	Drepanidae	Thyatirinae	Unassigned	<i>Tethea oberthueri oberthueri</i>	(Houlbert, 1921)	PN	iv, v, viii
91	Drepanidae	Thyatirinae	Unassigned	<i>Horithyatira decorata</i>	(Moore, 1881)	PN	iv
91	Drepanidae	Thyatirinae	Unassigned	<i>decorata</i>			
92	Drepanidae	Thyatirinae	Unassigned	<i>Thyatira batis rubrescens</i>	Werny, 1966	PN	v, viii
93	Drepanidae	Cyclidiinae	Unassigned	<i>Cyclidia rectifascata</i>	(Walker, 1862)	PN	viii
94	Drepanidae	Cyclidiinae	Unassigned	<i>Cyclidia substigmaria</i>	(Hübner, [1831])	PM, PN	ix
95	Notodontidae	Heterocampinae	Unassigned	<i>Neopheosia fasciata fasciata</i>	(Moore, 1888)	PN	v
96	Notodontidae	Notodontinae	Dicranurini	<i>Liparopsis postalbida</i>	Hampson [1893]	PN	viii
97	Notodontidae	Notodontinae	Dicranurini	<i>Harpyia cf. yunnanensis</i>	Schtl. & Fang, 2001	PN	ix
98	Notodontidae	Notodontinae	Neodrymoniaini	<i>Mesopalera mediopallens</i>	(Sugi, 1989)	PN	v, viii, ix
99	Notodontidae	Notodontinae	Neodrymoniaini	<i>Viridisfentonia plagiviridis</i>	(Moore, 1879)	PN	iv, viii, ix
100	Notodontidae	Notodontinae	Notodontini	<i>Acmeshachia albifascia</i>	(Moore, 1879)	PN	iv
101	Notodontidae	Notodontinae	Notodontini	<i>Acmeshachia gigantea</i>	(Elwes, 1890)	PN, TV	ix
102	Notodontidae	Notodontinae	Notodontini	<i>Hexafrenum</i> sp.	Sugi, 1992	PN	ix
103	Notodontidae	Notodontinae	Notodontini	<i>Peridea sikkima</i>	(Moore, 1879)	PN	v, ix
104	Notodontidae	Notodontinae	Notodontini	<i>Pheosiopsis</i> sp.		PN	ix
105	Notodontidae	Notodontinae	Notodontini	<i>Ptilodon</i> sp.	Moore, 1879	PN	iv
106	Notodontidae	Notodontinae	Notodontini	<i>Semidonta basalis</i>	(Moore, 1866)	PN	v
107	Notodontidae	Notodontinae	Stauropini	<i>Syntypistis comatus</i>	(Leech, 1898)	PN	ix
108	Notodontidae	Notodontinae	Stauropini	<i>Syntypistis nigribasalis tropica</i>	(Kirakoff, 1974)	PN	viii
109	Notodontidae	Notodontinae	Stauropini	<i>Syntypistis cf. sporadochlorus</i>	(Bryk, 1949)	PN	viii
110	Notodontidae	Notodontinae	Unassigned	<i>Polystictina maculata</i>	(Moore, 1879)	PN	viii, ix
111	Notodontidae	Periergosinae	Unassigned	<i>Gangarides vittipalpis</i>	(Walker, 1869)	PN	ix
112	Notodontidae	Periergosinae	Unassigned	<i>Periergos</i> sp.		PN, TV	ix
113	Notodontidae	Phalerinae	Unassigned	<i>Phalera cf. goniophora</i>	Hampson, 1910	PN	v
114	Notodontidae	Phalerinae	Unassigned	<i>Phalera</i> sp.		PM	ix
115	Notodontidae	Platychasmatinae	Unassigned	<i>Cyphanta xanthochlora</i>	Walker, 1865	TV	ix
116	Notodontidae	Pygaerinae	Unassigned	<i>Closteria pallida</i>	(Walker, 1855)	PN, ZI	v, viii
117	Notodontidae	Spataliinae	Ceirini	<i>Pterostoma cf. sinica</i>	Moore, 1877	PN	iv
118	Notodontidae	Spataliinae	Ceirini	<i>Baradesa lithosioides</i>	Moore, 1883	TV	ix

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
119	Notodontidae	Spataliinae	Spataliini	<i>Ginshachia cf. gemmifera</i>	Moore, 1879	PN	ix
120	Notodontidae	Spataliinae	Unassigned	<i>Metaschalis disrupta</i>	(Moore, 1879)	PM	viii
121	Notodontidae	Thaumetopoeinae	Unassigned	<i>Gazalinaapsara</i>	(Moore, 1859)	PN	viii
122	Notodontidae	Thaumetopoeinae	Unassigned	<i>Gazalina chrysolopha</i>	(Kollar, 1844)	PN	viii
123	Erebidae	Aganainae	Unassigned	<i>Mecodina odontophora</i>	(Swinhoe, 1895)	PM	viii, ix
124	Erebidae	Aganainae	Unassigned	<i>Psimada quadripennis</i>	Walker, 1858	PM	viii
125	Erebidae	Arctiinae	Arctiini	<i>Aglaomorpha plagiata</i>	(Walker, 1855)	PM	viii
126	Erebidae	Arctiinae	Arctiini	<i>Alphaea florescens</i>	(Moore, 1879)	PM, PN	viii, ix
127	Erebidae	Arctiinae	Arctiini	<i>Alphaea impleta</i>	(Walker, [1865])	PN	v
128	Erebidae	Arctiinae	Arctiini	<i>Lemyra cf. stigmata</i>	(Moore, 1865)	PN	ix
129	Erebidae	Arctiinae	Arctiini	<i>Lemyra obliquivitta</i>	(Moore, 1879)	PN	iv
130	Erebidae	Arctiinae	Arctiini	<i>Lemyra rhodophila</i>	(Walker, 1864)	PN	iv
131	Erebidae	Arctiinae	Arctiini	<i>Nyctemera arctata</i>	Walker, 1856	PN, TV	iv, ix
132	Erebidae	Arctiinae	Arctiini	<i>Spilarctia cf. sagittifera</i>	Moore, 1888	PN	ix
133	Erebidae	Arctiinae	Lithosiini	<i>Aemene sp.</i>		PN	ix
134	Erebidae	Arctiinae	Lithosiini	<i>Agrisius excellens</i>	Dubatolov & Kishida, 2013	PN	ix
135	Erebidae	Arctiinae	Lithosiini	<i>Agrisius fuliginosus</i>	Moore, 1872	PM, PN	viii
136	Erebidae	Arctiinae	Lithosiini	<i>Chrysorabdia viridata</i>	(Walker, [1865])	PN, TV	v, ix
137	Erebidae	Arctiinae	Lithosiini	<i>Ammathocallida</i>	(Fang, 1991)	ZI	ix
138	Erebidae	Arctiinae	Lithosiini	<i>Ammathocallida multistriata</i>	(Hampson, 1894)	PN, ZI	ix
139	Erebidae	Arctiinae	Lithosiini	<i>Barsaurea phaeoxanthia</i>	(Hampson, 1900)	PM	ix
140	Erebidae	Arctiinae	Lithosiini	<i>Barsine sp.</i>		PN	ix
141	Erebidae	Arctiinae	Lithosiini	<i>Cyana arama</i>	(Moore, 1859)	PN	ix
142	Erebidae	Arctiinae	Lithosiini	<i>Cyana bellissima</i>	(Moore, 1878)	PM	ix
143	Erebidae	Arctiinae	Lithosiini	<i>Cyana cf. khasiana</i>	Hampson, 1897	ZI	ix
144	Erebidae	Arctiinae	Lithosiini	<i>Cyana cf. puer</i>		PN	viii
145	Erebidae	Arctiinae	Lithosiini	<i>Cyana divakara</i>	(Moore, [1866])	TV	viii
146	Erebidae	Arctiinae	Lithosiini	<i>Cyana dudgeoni</i>	Hampson, 1895	PM	ix
147	Erebidae	Arctiinae	Lithosiini	<i>Cyana perornata</i>	(Walker, 1854)	PM	viii, ix
148	Erebidae	Arctiinae	Lithosiini	<i>Cyana signa</i>	(Walker, 1854)	PN	viii, ix
149	Erebidae	Arctiinae	Lithosiini	<i>Nudaria sp. 1</i>		PN	ix
150	Erebidae	Arctiinae	Lithosiini	<i>Nudaria sp. 2</i>		PN	ix
151	Erebidae	Arctiinae	Lithosiini	<i>Nudaria sp. 3</i>		TV	ix
152	Erebidae	Arctiinae	Lithosiini	<i>Ovipennis cf. anomala</i>	(Elwes, 1890)	PN	ix
153	Erebidae	Arctiinae	Lithosiini	<i>Ovipennis dudgeoni</i>	(Elwes, 1890)	PN	ix
154	Erebidae	Arctiinae	Lithosiini	<i>Ovipennis flavivenosa</i>	(Moore, 1878)	PN	ix
155	Erebidae	Arctiinae	Lithosiini	<i>Ovipennis incompletostrigosa</i>	(Volyn. & C. 2017)	PM	ix
156	Erebidae	Arctiinae	Lithosiini	<i>Conilepia sikkima</i>	(Strand, 1922)	PN	ix
157	Erebidae	Arctiinae	Lithosiini	<i>Dubatoloviana pahanga</i>	Bucsek, 2012	PM	viii
158	Erebidae	Arctiinae	Lithosiini	<i>Ghoria albocinerea</i>	Moore, 1878	PN	ix
159	Erebidae	Arctiinae	Lithosiini	<i>Macrobrochis tibetensis</i>	(Fang, 1990)	PN	viii
160	Erebidae	Arctiinae	Lithosiini	<i>Teulisna cf. karena</i>	Černý, 2009	PM	ix
161	Erebidae	Arctiinae	Lithosiini	<i>Vamuna bipars</i>	Moore, 1878	PN	viii, ix
162	Erebidae	Arctiinae	Lithosiini	<i>Vamuna maculata</i>	(Moore, 1878)	PN	viii
163	Erebidae	Arctiinae	Lithosiini	<i>Vamuna remelana</i>	(Moore, [1866])	PN	viii, ix
164	Erebidae	Boletobiinae	Aventiini	<i>Enispa cf. eosarialis</i>	Walker, [1866]	PN	viii
165	Erebidae	Boletobiinae	Aventiini	<i>Holocryptis erubescens</i>	(Hampson, 1893)	PM	viii
166	Erebidae	Boletobiinae	Aventiini	<i>Cruxoruza reticulata</i>	(Moore, 1882)	TV	ix
167	Erebidae	Boletobiinae	Aventiini	<i>Zurobata cf. vacillans</i>	(Walker, 1864)	PM	viii
168	Erebidae	Boletobiinae	Unassigned	<i>Carsina sp.</i>		PN	viii
169	Erebidae	Boletobiinae	Unassigned	<i>Singara diversalis</i>	Walker, 1865	PM, PN	viii, ix
170	Erebidae	Boletobiinae	Unassigned	<i>Tamba cf. cinnamomea</i>	(Leech, 1900)	PN	ix
171	Erebidae	Calpinae	Calpini	<i>Calyptro ophideroides</i>	Guenée, 1852	PN	viii
172	Erebidae	Calpinae	Calpini	<i>Calyptro orthograpta</i>	(Butler, 1886)	PN	viii
173	Erebidae	Calpinae	Calpini	<i>Calyptro pseudobicolor</i>	Bänziger, 1979	PN	ix
174	Erebidae	Calpinae	Calpini	<i>Dierna strigata</i>	(Moore, 1867)	PN	ix
175	Erebidae	Calpinae	Ophiderini	<i>Eudocima hypermnestra</i>	(Cramer, 1780)	PN	ix
176	Erebidae	Calpinae	Ophiderini	<i>Eudocima sikhimensis</i>	(Butler, 1895)	PN	ix
177	Erebidae	Calpinae	Phyllodini	<i>Oporophylla ustulata</i>	(Westwood, 1848)	TV	ix
178	Erebidae	Calpinae	Unassigned	<i>Blasticorhinus varius</i>	Yoshimoto, 1993	PN	v, ix
179	Erebidae	Erebinae	Acantholipini	<i>Hamodes propitia</i>	(Guérin-Méneville, 1831)	TV	ix

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
180	Erebidae	Erebinae	Catocalini	<i>Catocala hyperconnexa</i>	Sugi, 1965	PM, PN, ZI	viii, ix
181	Erebidae	Erebinae	Catocalini	<i>Catocala nivea</i>	Butler, 1877	TV	ix
182	Erebidae	Erebinae	Catocalini	<i>Tropidtamba lepraota</i>	(Hampson, 1898)	PN	ix
183	Erebidae	Erebinae	Ercheiini	<i>Ercheia cylaria</i>	(Cramer, 1782)	PN, TV	viii, ix
184	Erebidae	Erebinae	Erebini	<i>Erebus gemmans</i>	(Guenée, 1852)	PN	viii
185	Erebidae	Erebinae	Erebini	<i>Erebus hieroglyphica</i>	(Drury, 1773)	PM	ix
186	Erebidae	Erebinae	Erebini	<i>Lygniodes hypoleuca</i>	Guenée, 1852	PN	viii
187	Erebidae	Erebinae	Erebini	<i>Sympis rufibasis</i>	Guenée, 1852	PM, PN	viii, ix
188	Erebidae	Erebinae	Hulodini	<i>Ericeia eriophora</i>	(Guenée, 1852)	PN	ix
189	Erebidae	Erebinae	Hulodini	<i>Ericeia pertendens</i>	(Walker, 1858)	PN	ix
190	Erebidae	Erebinae	Hulodini	<i>Hulodes drylla</i>	Guenée, 1852	PN, TV	viii, ix
191	Erebidae	Erebinae	Hypopyrini	<i>Hypopyra</i> sp.		PN	ix
192	Erebidae	Erebinae	Ophiusini	<i>Thyas juno</i>	(Dalman, 1823)	PN	v
193	Erebidae	Erebinae	Poaphilini	<i>Bastilla murescens</i>	(Walker, 1858)	TV	ix
194	Erebidae	Erebinae	Poaphilini	<i>Chalciope mygdon</i>	(Cramer, [1777])	PN	ix
195	Erebidae	Erebinae	Poaphilini	<i>Dysgonia torrida</i>	(Guenée, 1852)	PM	ix
196	Erebidae	Erebinae	Poaphilini	<i>Rectipalpula billeti</i>	de Joannis, 1900	PN	ix
197	Erebidae	Erebinae	Synpini	<i>Daddala lucilla</i> complex	(Butler, 1881)	PN, TV	viii, ix
198	Erebidae	Erebinae	Synpini	<i>Hypersypnoides constellata</i>	(Moore, 1883)	PN	viii, ix
199	Erebidae	Erebinae	Synpini	<i>Hypersypnoides punctosa</i>	(Walker, 1865)	PN	viii
200	Erebidae	Erebinae	Synpini	<i>Sypna omicronigera</i>	Guenée, 1852	TV	viii
201	Erebidae	Erebinae	Unassigned	<i>Delgamma flaviae</i>	Zilli, 2000	PN	ix
202	Erebidae	Erebinae	Unassigned	<i>Ischyja hemiphaea</i>	(Hampson, 1926)	PN, TV	ix
203	Erebidae	Erebinae	Unassigned	<i>Platyjonia mediorufa</i>	(Hampson, 1894)	PN	viii
204	Erebidae	Herminiinae	Unassigned	<i>Orthozona quadrilineata</i>	(Moore, 1882)	PN, TV	ix
205	Erebidae	Herminiinae	Unassigned	<i>Sinarella discisigna</i>	(Moore, 1883)	PN	ix
206	Erebidae	Hypeninae	Unassigned	<i>Lophomilia albicosta</i>	Yoshimoto, 1995	PN	viii
207	Erebidae	Hypeninae	Unassigned	<i>Perciana marmorea</i>	Walker, 1865	PN, TV	viii, ix
208	Erebidae	Lymantriinae	Arctornithini	<i>Aruta flavipes</i>	(Hampson, [1893])	PN	ix
209	Erebidae	Lymantriinae	Arctornithini	<i>Arctornis</i> sp.1		PN	ix
210	Erebidae	Lymantriinae	Arctornithini	<i>Arctornis</i> sp.2		PN	ix
211	Erebidae	Lymantriinae	Arctornithini	<i>Arctornis</i> sp.3		ZI	ix
212	Erebidae	Lymantriinae	Lymantriini	<i>Lymantria concolor</i>	Walker, 1855	PN	ix
213	Erebidae	Lymantriinae	Lymantriini	<i>Lymantria grisea</i>	Moore, 1879	PN	ix
214	Erebidae	Lymantriinae	Lymantriini	<i>Lymantria serva</i>	(Fabricius, 1793)	PM	viii
215	Erebidae	Lymantriinae	Nygmiini	<i>Euproctis dispersa</i>	(Moore, 1879)	PN	ix
216	Erebidae	Lymantriinae	Nygmiini	<i>Euproctis marginata</i>	(Moore, 1879)	PN, TV	iv, viii, ix
217	Erebidae	Lymantriinae	Nygmiini	<i>Euproctis</i> sp. 1		PN	viii
218	Erebidae	Lymantriinae	Nygmiini	<i>Euproctis</i> sp. 2		PN	viii
219	Erebidae	Lymantriinae	Nygmiini	<i>Euproctis staudingeri</i>	(Leech, 1888)	PN	viii
220	Erebidae	Lymantriinae	Nygmiini	<i>Euproctis</i> sp. 3 (white)		TV	ix
221	Erebidae	Lymantriinae	Orgyiini	<i>Cifuna locuples</i>	Walker, 1855	PM, SU	viii, ix
222	Erebidae	Lymantriinae	Orgyiini	<i>Dasychira cinctata</i>	Moore, 1879	PN	ix
223	Erebidae	Lymantriinae	Orgyiini	<i>Dasychira postfusca</i>	Swinhoe, 1895	PN	iv
224	Erebidae	Lymantriinae	Orgyiini	<i>Dasychira</i> sp.		PN	iv
225	Erebidae	Lymantriinae	Orgyiini	<i>Ilema chloroptera</i>	(Hampson, [1893])	PN	ix
226	Erebidae	Lymantriinae	Orgyiini	<i>Numenes patrana</i>	Moore, 1859	PN	v, ix
227	Erebidae	Lymantriinae	Orgyiini	<i>Pantana luteiceps</i>	Swinhoe, 1896	ZI	ix
228	Erebidae	Lymantriinae	Unassigned	<i>Himala argentea</i>	(Walker, 1855)	PN	ix
229	Erebidae	Lymantriinae	Unassigned	<i>Pida apicalis</i>	Walker, 1865	PN	ix
230	Erebidae	Lymantriinae	Unassigned	<i>Ramadra calligramma</i>	(Walker, 1865)	PN	viii, ix
231	Erebidae	Pangraptinae	Unassigned	<i>Taviodes fulvescens</i>	Hampson, 1926	PN	viii
232	Erebidae	Scoliopteryginae	Unassigned	<i>Lycimna polymesata</i>	Walker, 1860	PN	ix
233	Euteliidae	Euteliinae	Unassigned	<i>Anuga lunulata</i>	Moore, [1868]	TV	ix
234	Euteliidae	Euteliinae	Unassigned	<i>Targalla palliatrix</i>	(Guenée, 1852)	PN	ix
235	Euteliidae	Euteliinae	Unassigned	<i>Targalla subocellata</i>	(Walker, [1864])	TV	ix
236	Nolidae	Chloephorinae	Ariolicini	<i>Siglophora sanguinolenta</i>	(Moore, 1888)	TV	ix
237	Nolidae	Chloephorinae	Chloephorini	<i>Tyana callichlora</i>	Walker, 1866	PN	ix
238	Nolidae	Chloephorinae	Chloephorini	<i>Tyana chloroleuca</i>	Walker, 1866	PN, ZI	v, ix
239	Nolidae	Chloephorinae	Chloephorini	<i>Tyana falcata</i>	(Walker, 1866)	PN	ix
240	Nolidae	Chloephorinae	Sarrothripini	<i>Giaura robusta</i>	(Moore, 1888)	PM	viii
241	Nolidae	Chloephorinae	Unassigned	<i>Pardasena verna</i>	(Hampson, 1902)	PM	viii

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
242	Nolidae	Chloephorinae	Unassigned	<i>Ptisciana seminivea</i>	Walker, 1865	PM	ix
243	Nolidae	Chloephorinae	Unassigned	<i>Tortriciforma viridipuncta</i>	Hampson, 1894	SU	ix
244	Nolidae	Eariadinae	Unassigned	<i>Earias roseifera</i>	Butler, 1881	PN	viii
245	Nolidae	Westermanniinae	Unassigned	<i>Pterogonia cf. chinensis</i>	(Berio, 1964)	PN	iv
246	Noctuidae	Acronictinae	Unassigned	<i>Acronicta major</i>	(Bremer, 1861)	PN	viii
247	Noctuidae	Agaristinae	Unassigned	<i>Sarbanissa insocia</i>	Walker, 1865	PN	v, viii
248	Noctuidae	Dyopsinae	Unassigned	<i>Cyclodes omma</i>	(van der Hoeven, 1840)	PN	ix
249	Noctuidae	Eriopinae	Unassigned	<i>Callopistria sp.</i>	(Hampson, 1908)	PM	ix
250	Noctuidae	Eriopinae	Unassigned	<i>Callopistria cf. placodoides</i>	(Guenée, 1852)	PM	ix
251	Noctuidae	Eriopinae	Unassigned	<i>Callopistria repleta</i>	Walker, [1858]	TV	ix
252	Noctuidae	Noctuinae	Caradrinini	<i>Athetis lineosa</i>	(Moore, 1881)	PN	iv
253	Noctuidae	Noctuinae	Dypterygiini	<i>Callyna semivitta</i>	Moore, 1882	PM, PN	ix
254	Noctuidae	Noctuinae	Leucaniini	<i>Mythimna sinuosa</i>	(Moore, 1882)	PN	iv, viii
255	Noctuidae	Noctuinae	Noctuini	<i>Xestia c-nigrum</i>	(Linnaeus, 1758)	PN	iv
256	Noctuidae	Noctuinae	Phlogophorini	<i>Chandata sp.</i>		TV	ix
257	Noctuidae	Noctuinae	Phlogophorini	<i>Conservula indica</i>	(Moore, 1867)	PN	iv
258	Noctuidae	Noctuinae	Phlogophorini	<i>Karana gemmifera</i>	(Walker, [1858])	PN	viii, ix
259	Noctuidae	Noctuinae	Phlogophorini	<i>Phlogophora albovittata</i>	(Moore, 1867)	PN	ix
260	Noctuidae	Noctuinae	Phlogophorini	<i>Phlogophora distorta</i>	(Moore, 1881)	PN	ix
261	Noctuidae	Noctuinae	Unassigned	<i>Apsarasa radians</i>	(Westwood, 1848)	PM	ix
262	Noctuidae	Noctuinae	Leucaniini	<i>Tiracola cf. aureata</i>	Holloway, 1989	PN	iv, ix
263	Noctuidae	Pantheinae	Unassigned	<i>Tambana albiplaga</i>	(Warren, 1912)	PN	iv, ix
264	Noctuidae	Pantheinae	Unassigned	<i>Viridistrria striatovirens</i>	(Moore, 1883)	PN, TV	ix
265	Noctuidae	Plusiinae	Plusiini	<i>Erythroplusia pyropia</i>	(Butler, 1879)	PN	iv
266	Epicopeiidae			<i>Burmeia leesi</i>	Minet, 2002	TV	viii
267	Uraniidae	Auzeinae	Unassigned	<i>Paradecetia sp.</i>		PN	ix
268	Uraniidae	Epipleminae	Unassigned	<i>Dysaethria cf. moza</i>	(Butler, 1878)	PN	iv
269	Uraniidae	Epipleminae	Unassigned	<i>Epiplema himala</i>	(Butler, 1880)	PN	ix
270	Uraniidae	Epipleminae	Unassigned	<i>Oroplema plagisera</i>	(Butler, 1881)	PN	viii, ix
271	Uraniidae	Epipleminae	Unassigned	<i>Orudiza angulata</i>	Chu & Wang, 1994	PM	viii
272	Uraniidae	Epipleminae	Unassigned	<i>Phazaca sp.</i>		PM	viii
273	Uraniidae	Microniinae	Unassigned	<i>Acropteris ciniferaria</i>	(Walker, 1866)	PM	ix
274	Uraniidae	Microniinae	Unassigned	<i>Acropteris iphiata</i>	(Guenée, 1857)	PM	ix
275	Uraniidae	Uraniinae	Unassigned	<i>Lyssa zampa</i>	(Butler, 1869)	PN, TV	ix
276	Geometridae	Ennominae	Baptini	<i>Nothomiza costalis</i>	(Moore, [1868])	PN, TV	viii, ix
277	Geometridae	Ennominae	Baptini	<i>Nothomiza costinotata</i>	(Warren, 1893)	TV	ix
278	Geometridae	Ennominae	Baptini	<i>Orthobrachia latifasciata</i>	(Moore, 1888)	TV	viii
279	Geometridae	Ennominae	Boarmiini	<i>Abaciscus tristis</i>	Butler, 1889	PN	viii
280	Geometridae	Ennominae	Boarmiini	<i>Alcis aristema</i>	Prout, 1934	TV	viii
281	Geometridae	Ennominae	Boarmiini	<i>Alcis maculata</i>	(Moore, [1868])	PN, TV	viii, ix
282	Geometridae	Ennominae	Boarmiini	<i>Amblychia nimia</i>	(Prout, 1925)	PN	viii, ix
283	Geometridae	Ennominae	Boarmiini	<i>Arichanna interplagata</i>	(Guenée, [1858])	PN	ix
284	Geometridae	Ennominae	Boarmiini	<i>Arichanna jaguarinaria</i>	(Oberthür, 1881)	PN	viii, ix
285	Geometridae	Ennominae	Boarmiini	<i>Arichanna transectata</i>	Walker, 1862	PN	viii
286	Geometridae	Ennominae	Boarmiini	<i>Ascotis imparata</i>	(Walker, 1860)	PM	viii, ix
287	Geometridae	Ennominae	Boarmiini	<i>Biston contextaria</i>	(Walker, [1863])	PM	viii
288	Geometridae	Ennominae	Boarmiini	<i>Biston regalis</i>	(Moore, 1888)	PN	ix
289	Geometridae	Ennominae	Boarmiini	<i>Blepharoctenucha virescens</i>	(Butler, 1880)	PN, TV	iv, ix
290	Geometridae	Ennominae	Boarmiini	<i>Callocasta persimilis</i>	(Moore, 1888)	PN, TV	ix
291	Geometridae	Ennominae	Boarmiini	<i>Chorodna moorei</i>	(Thierry-Mieg, 1899)	PM	viii, ix
292	Geometridae	Ennominae	Boarmiini	<i>Chorodna similis</i>	(Moore, 1888)	PM	viii
293	Geometridae	Ennominae	Boarmiini	<i>Chorodna vulpinaria</i>	Moore, [1868]	PN	ix
294	Geometridae	Ennominae	Boarmiini	<i>Cleora fraterna</i>	(Moore, 1888)	PN	viii
295	Geometridae	Ennominae	Boarmiini	<i>Coremcis nigrovittata</i>	(Moore, [1868])	PM	viii, ix
296	Geometridae	Ennominae	Boarmiini	<i>Dalima intricata</i>	Warren, 1893	PN	viii, ix
297	Geometridae	Ennominae	Boarmiini	<i>Dalima lucens</i>	(Warren, 1893)	PN	viii, ix
298	Geometridae	Ennominae	Boarmiini	<i>Dalima patularia</i>	(Walker, 1860)	PN	ix
299	Geometridae	Ennominae	Boarmiini	<i>Dalima schistacearia</i>	Moore, [1868]	PM	viii
300	Geometridae	Ennominae	Boarmiini	<i>Dalima truncataria</i>	(Moore, [1868])	PM, PN	viii, ix
301	Geometridae	Ennominae	Boarmiini	<i>Dalima vulpinaria</i>	(Moore, [1888])	PN	ix
302	Geometridae	Ennominae	Boarmiini	<i>Darisa fratercula</i>	(Moore, 1888)	PN	ix
303	Geometridae	Ennominae	Boarmiini	<i>Ectropis dentilineata</i>	(Moore, [1868])	PN	viii, ix

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
304	Geometridae	Ennominae	Boarmiini	<i>Gasterocome pannosaria</i>	(Moore, [1868])	PN	viii
305	Geometridae	Ennominae	Boarmiini	<i>Harutalcis atrostipata</i>	(Walker, 1862)	TV	viii
306	Geometridae	Ennominae	Boarmiini	<i>Harutalcis vialis</i>	(Moore, 1888)	PN	ix
307	Geometridae	Ennominae	Boarmiini	<i>Hypomecis pardaria</i>	(Moore, [1868])	PN, TV	viii, ix
308	Geometridae	Ennominae	Boarmiini	<i>Hypomecis transissa</i>	(Walker, 1860)	PM	ix
309	Geometridae	Ennominae	Boarmiini	<i>Hyposidra aquilaria</i>	(Walker, 1862)	PM	viii, ix
310	Geometridae	Ennominae	Boarmiini	<i>Krananda falcata</i>	(Warren, 1894)	PN, ZI	viii, ix
311	Geometridae	Ennominae	Boarmiini	<i>Krananda orthotmeta</i>	Prout, 1926	PN	v, viii, ix
312	Geometridae	Ennominae	Boarmiini	<i>Krananda semiyalina</i>	(Moore, [1868])	PN, TV	iv, ix
313	Geometridae	Ennominae	Boarmiini	<i>Lassaba albida</i>	(Walker, 1866)	TV	ix
314	Geometridae	Ennominae	Boarmiini	<i>Menophra cf. bicornuta</i>	Inoue, 1990	ZI	ix
315	Geometridae	Ennominae	Boarmiini	<i>Menophra translineata</i>	(Walker, 1869)	PN	viii
316	Geometridae	Ennominae	Boarmiini	<i>Mesastrape fulgoraria</i>	(Walker, 1860)	PN	ix
317	Geometridae	Ennominae	Boarmiini	<i>Microcalicha melanosticta</i>	(Hampson, 1895)	PN, ZI	viii, ix
318	Geometridae	Ennominae	Boarmiini	<i>Monocerotesa connexa</i>	Warren, 1901	PN	ix
319	Geometridae	Ennominae	Boarmiini	<i>Monocerotesa radiata</i>	(Warren, 1897)	PN	ix
320	Geometridae	Ennominae	Boarmiini	<i>Monocerotesa strigata</i>	(Warren, 1893)	PN	ix
321	Geometridae	Ennominae	Boarmiini	<i>Myrioblephara marmorata</i>	(Moore, [1868])	PN, TV	viii, ix
322	Geometridae	Ennominae	Boarmiini	<i>Myrioblephara pingasoides</i>	(Warren, 1893)	PM	viii
323	Geometridae	Ennominae	Boarmiini	<i>Ophthalmitis xanthypochlora</i>	(Wehrli, 1924)	PN	v, viii, ix
324	Geometridae	Ennominae	Boarmiini	<i>Xandrames albofasciata</i>	Moore, [1868]	PN, SU	v, ix
325	Geometridae	Ennominae	Boarmiini	<i>Xandrames dholaria</i>	Moore, [1868]	ZI	ix
326	Geometridae	Ennominae	Boarmiini	<i>Xandrames latiferaria</i>	(Walker, 1860)	PM	viii
327	Geometridae	Ennominae	Boarmiini	<i>Xerodes ypsaria</i>	Guenée, [1858]	PN	viii, ix
328	Geometridae	Ennominae	Caberini	<i>Astygisa orbapicalis</i>	Herbulot, 1993	PN	ix
329	Geometridae	Ennominae	Caberini	<i>Petelia immaculata</i>	Hampson, 1893	PN	ix
330	Geometridae	Ennominae	Cassymini	<i>Micronidia unipuncta</i>	Warren, 1893	PN	ix
331	Geometridae	Ennominae	Cassymini	<i>Orthocabera sericea</i>	Butler, 1879	PN	iv, viii
332	Geometridae	Ennominae	Cassymini	<i>Peratostega deletaria</i>	(Moore, 1888)	ZI	ix
333	Geometridae	Ennominae	Epionini	<i>Opisthograptis moelleri</i>	Warren, 1893	PN, TV	v, ix
334	Geometridae	Ennominae	Eutoeini	<i>Luxiaria mitorrhaphes</i>	(Prout, 1925)	PN	iv, viii
335	Geometridae	Ennominae	Eutoeini	<i>Luxiaria tephrosaria</i>	(Moore, [1868])	PN, TV	viii, ix
336	Geometridae	Ennominae	Gnophini	<i>Hirasa scripturaria</i>	(Walker, 1866)	PN, TV	ix
337	Geometridae	Ennominae	Gnophini	<i>Psyra cuneata</i>	Walker, 1860	PN, TV	iv, ix
338	Geometridae	Ennominae	Gonodontini	<i>Odontopera sp.</i>		PN	iv
339	Geometridae	Ennominae	Hypochrosini	<i>Achrosis cf. incitata</i>		PM	ix
340	Geometridae	Ennominae	Hypochrosini	<i>Achrosis rufescens</i>	(Butler, 1880)	PN	iv, ix
341	Geometridae	Ennominae	Hypochrosini	<i>Celenna festivaria</i>	(Fabricius, 1794)	PM	ix
342	Geometridae	Ennominae	Hypochrosini	<i>Corymica sp.</i>		PM, PN	v, ix
343	Geometridae	Ennominae	Hypochrosini	<i>Fascellina inornata</i>	Warren, 1893	PN, TV	v, viii, ix
344	Geometridae	Ennominae	Hypochrosini	<i>Fascellina plagiata</i>	(Walker, 1866)	PN	ix
345	Geometridae	Ennominae	Hypochrosini	<i>Garaeus apicata</i>	(Moore, [1868])	TV	ix
346	Geometridae	Ennominae	Hypochrosini	<i>Garaeus colorata</i>	(Warren, 1893)	PN, TV	viii, ix
347	Geometridae	Ennominae	Hypochrosini	<i>Garaeus cruentatus</i>	Butler, 1886	PN	viii
348	Geometridae	Ennominae	Hypochrosini	<i>Garaeus specularis</i>	(Moore, [1868])	PN	ix
349	Geometridae	Ennominae	Hypochrosini	<i>Heterolocha falconaria</i>	(Walker 1866)	PM, PN	iv, viii, ix
350	Geometridae	Ennominae	Hypochrosini	<i>Heterolocha marialgeae</i>	Stünning, 2000	PN	viii
351	Geometridae	Ennominae	Hypochrosini	<i>Hypochrosis hyadaria</i> complex	Guenée, [1858]	PN	v
352	Geometridae	Ennominae	Hypochrosini	<i>Mimomiza cruentaria</i>	(Moore, [1868])	PN	iv, viii
353	Geometridae	Ennominae	Hypochrosini	<i>Plagodis inustaria</i>	(Moore, [1868])	PN	iv, v, viii, ix
354	Geometridae	Ennominae	Hypochrosini	<i>Polyscia argentilinea</i> <i>eugraphes</i>	(Prout, 1923)	PN, ZI	ix
355	Geometridae	Ennominae	Lithinini	<i>Entomopteryx obliquilinea</i>	(Moore, 1888)	PM	viii, ix
356	Geometridae	Ennominae	Macariini	<i>Oxymacaria penumbrata</i>	(Warren, 1896)	PN	viii
357	Geometridae	Ennominae	Obeidiini	<i>Obeidia lucifera</i>	Swinhoe, 1893	PN	viii, ix
358	Geometridae	Ennominae	Ourapterygini	<i>Leptomiza calcearia</i>	(Walker, 1860)	PM	ix
359	Geometridae	Ennominae	Plutodini	<i>Archiplutodes prasina</i>	(Swinhoe, 1892)	PM	viii
360	Geometridae	Ennominae	Plutodini	<i>Plutodes costatus</i>	(Butler, 1886)	PN	ix
361	Geometridae	Ennominae	Plutodini	<i>Plutodes sp.</i>		PN	ix
362	Geometridae	Ennominae	Unassigned	<i>Antiperchia belluaria</i>	(Guenée, [1858])	PN, ZI	ix
363	Geometridae	Ennominae	Unassigned	<i>Hyalinetta circumflexa</i>	(Kollar, [1844])	PN	viii

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
364	Geometridae	Ennominae	Unassigned	<i>Mimochroa albifrons</i>	(Moore, 1888)	PN, ZI	iv, ix
365	Geometridae	Ennominae	Unassigned	<i>Percnia felinaria</i>	Guenée, [1858]	PN, TV	viii, ix
366	Geometridae	Ennominae	Unassigned	<i>Prionodonta amethystina</i>	Warren, 1893	PN	iv, ix
367	Geometridae	Ennominae	Unassigned	<i>Pseudomiza obliquaria</i>	(Leech, 1897)	PN	viii, ix
368	Geometridae	Ennominae	Unassigned	<i>Sirinopteryx rufivinctata</i>	(Walker, [1863])	PN	ix
369	Geometridae	Ennominae	Unassigned	<i>Tanaoctenia hiliaria</i>	(Walker, 1861)	PN	viii, ix
370	Geometridae	Ennominae	Unassigned	<i>Tanaoctenia</i> sp.		PN	ix
371	Geometridae	Ennominae	Unassigned	<i>Xenoplia foraria</i>	(Guenée, [1858])	PN, TV	v, ix
372	Geometridae	Ennominae	Unassigned	<i>Xenoplia maculata</i>	(Moore, [1868])	PN, TV	v, ix
373	Geometridae	Geometrinae	Agathini	<i>Agathia codina</i>	Swinhoe, 1892	PN	ix
374	Geometridae	Geometrinae	Agathini	<i>Agathia gemma</i>	Swinhoe, 1892	PN	ix
375	Geometridae	Geometrinae	Agathini	<i>Agathia hemitearia</i>	Guenée, [1858]	PN	ix
376	Geometridae	Geometrinae	Agathini	<i>Agathia</i> sp.	(Kollar, 1848)		
377	Geometridae	Geometrinae	Aracimini	<i>Dooabia viridata</i>	(Moore, [1868])	PN	iv, viii, ix
378	Geometridae	Geometrinae	Aracimini	<i>Paramaxates taiwana</i>	Yazaki, 1988	PN	v
379	Geometridae	Geometrinae	Archaeobalbini	<i>Dindica para</i>	Swinhoe, 1891	PN, TV	ix
380	Geometridae	Geometrinae	Archaeobalbini	<i>Dindica subrosea</i>	(Warren, 1893)	PN	iv
381	Geometridae	Geometrinae	Archaeobalbini	<i>Dindicodes apicalis</i>	(Moore, 1888)	PN	ix
382	Geometridae	Geometrinae	Archaeobalbini	<i>Dindicodes harutai</i>	(Yazaki, 1992)	PN, TV	viii, ix
383	Geometridae	Geometrinae	Archaeobalbini	<i>Dindicodes moelleri</i>	(Warren, 1893)	PN	ix
384	Geometridae	Geometrinae	Archaeobalbini	<i>Herochroma baba</i>	Swinhoe, 1893	TV	ix
385	Geometridae	Geometrinae	Archaeobalbini	<i>Herochroma ochreipicta</i>	(Swinhoe, 1905)	PN	v
386	Geometridae	Geometrinae	Archaeobalbini	<i>Herochroma viridaria</i>	(Moore, [1868])	PN	v
				<i>viridaria</i>			
387	Geometridae	Geometrinae	Archaeobalbini	<i>Lophophelma erionoma</i>	(Swinhoe, 1893)	PN	viii, ix
388	Geometridae	Geometrinae	Archaeobalbini	<i>Lophophelma iterans</i>	(Prout, 1926)	PM, PN	viii, ix
389	Geometridae	Geometrinae	Archaeobalbini	<i>Lophophelma varicoloraria</i>	(Moore, [1868])	PN	viii, ix
390	Geometridae	Geometrinae	Archaeobalbini	<i>Metallolophia opalina</i>	(Warren, 1893)	PN	viii
391	Geometridae	Geometrinae	Archaeobalbini	<i>Metallolophia taleensis</i>	Sondhi, Basu, 2020	PN	viii
392	Geometridae	Geometrinae	Archaeobalbini	<i>Pachyodes ornataria</i>	(Moore, 1888)	PN	ix
393	Geometridae	Geometrinae	Chlorodontoperini	<i>Chlorodontopera discospilata</i>	(Moore, [1868])	PN	viii
394	Geometridae	Geometrinae	Comibaenini	<i>Comibaena albimarginata</i>	(Warren, 1893)	PN	ix
395	Geometridae	Geometrinae	Comibaenini	<i>Comibaena apicipicta</i>	Prout, 1912	TV	viii
396	Geometridae	Geometrinae	Comibaenini	<i>Comibaena pictipennis</i>	Butler, 1880	PN, TV	viii, ix
397	Geometridae	Geometrinae	Comibaenini	<i>Comibaena cf. biplaga</i>	Walker, 1861	PN	viii
398	Geometridae	Geometrinae	Comibaenini	<i>Linguiscacus subhyalina</i>	(Warren, 1899)	PN	iv, viii
399	Geometridae	Geometrinae	Geometrini	<i>Maxates thetydaria</i>	(Guenée, 1857)	PN, TV	ix
400	Geometridae	Geometrinae	Geometrini	<i>Maxates veninotata</i>	(Warren, 1894)	PM	ix
401	Geometridae	Geometrinae	Geometrini	<i>Tanaorhinus kina</i>	(Swinhoe, 1893)	PN, TV	v, viii, ix
402	Geometridae	Geometrinae	Geometrini	<i>Tanaorhinus reciprocata</i>	(Walker, 1861)	PN, TV	ix
403	Geometridae	Geometrinae	Hemitheini	<i>Berta cf. chrysolineata</i>	Walker, [1863]	PM	viii
404	Geometridae	Geometrinae	Hemitheini	<i>Comostola caerulea</i>	Warren, 1893	PN	viii, ix
405	Geometridae	Geometrinae	Hemitheini	<i>Comostola cf. leucosticta</i>	Yazaki, 1993	PN	viii
406	Geometridae	Geometrinae	Hemitheini	<i>Comostola inops</i>	Prout, 1912	PN	viii
407	Geometridae	Geometrinae	Hemitheini	<i>Hemistola ornata</i>	Yazaki, 1994	PN	ix
408	Geometridae	Geometrinae	Hemitheini	<i>Hemistola rubrimargo</i>	Warren, 1893	PN, TV	viii, ix
409	Geometridae	Geometrinae	Hemitheini	<i>Jodis argentineata</i>	Wileman, 1916	PN	ix
410	Geometridae	Geometrinae	Hemitheini	<i>Jodis argutaria</i>	(Walker, 1866)	PN	viii, ix
411	Geometridae	Geometrinae	Hemitheini	<i>Jodis delicatula</i>	Warren, 1896)	PN, TV	viii, ix
412	Geometridae	Geometrinae	Hemitheini	<i>Orothalassodes aptifimbria</i>	(Prout, 1916)	PN, TV	viii, ix
413	Geometridae	Geometrinae	Neohipparchini	<i>Chlororithra fea</i>	Butler, 1889	PN	v
414	Geometridae	Geometrinae	Neohipparchini	<i>Chloroglyphica variegata</i>	(Butler, 1889)	PN, TV	iv, ix
415	Geometridae	Geometrinae	Pseudoterpnini	<i>Pingasa rufosasciata</i>	Moore, 1888	PN	iv
416	Geometridae	Geometrinae	Timandromorphini	<i>Timandromorpha cf. discolor</i>	(Warren, 1896)	PN, ZI	v, viii, ix
417	Geometridae	Geometrinae	Unassigned	<i>Eucyclodes aureofulva</i>	(Warren, 1897)	PN	viii
418	Geometridae	Geometrinae	Unassigned	<i>Eucyclodes gavissima</i>	(Walker, 1861)	PN	viii
419	Geometridae	Geometrinae	Unassigned	<i>Eucyclodes pastor</i>	(Butler, 1880)	PN	ix
420	Geometridae	Larentiinae	Asthenini	<i>Acolutha pictaria</i>	(Moore, 1888)	PM, PN	ix
421	Geometridae	Larentiinae	Asthenini	<i>Hastina pluristrigata</i>	(Moore, [1868])	PN	ix
422	Geometridae	Larentiinae	Asthenini	<i>Laciniodes plurilinearia</i>	(Moore, [1868])	PN	ix
423	Geometridae	Larentiinae	Asthenini	<i>Macrohastina gemmifera</i>	(Moore, [1868])	PN	ix
424	Geometridae	Larentiinae	Asthenini	<i>Palpoctenidia phoenicosoma</i>	(Swinhoe, 1895)	PM	ix

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
425	Geometridae	Larentiinae	Chesiadini	<i>Docirava affinis</i>	Warren, 1894	PN	viii
426	Geometridae	Larentiinae	Cidariini	<i>Dysstroma cinereata</i>	(Moore, [1868])	PN	viii
427	Geometridae	Larentiinae	Cidariini	<i>Ecliptopera umbrosaria</i>	(Motschulsky, [1861])	PN, TV	iv, viii
428	Geometridae	Larentiinae	Cidariini	<i>Electrophaes cf. aliena</i>	Butler, 1880	PN	iv
429	Geometridae	Larentiinae	Cidariini	<i>Electrophaes niveopicta</i>	(Warren, 1893)	PN	iv
430	Geometridae	Larentiinae	Larentiini	<i>Photoscotosia sp.</i>		PN	iv
431	Geometridae	Larentiinae	Trichopterygini	<i>Trichopterigia cf. decorata</i>	Moore, 1888	PN	iv
432	Geometridae	Oenochrominae	Unassigned	<i>Sarcinodes aequilinearia</i>	(Walker, 1860)	PM, PN, TV	viii, ix
433	Geometridae	Oenochrominae	Unassigned	<i>Sarcinodes carnearia</i>	Guenée, 1857	PN	viii
434	Geometridae	Orthostixinae	Unassigned	<i>Centronaxa orthostrigialis</i>	(Warren, 1893)	TV	ix
435	Geometridae	Orthostixinae	Unassigned	<i>Naxa oblitterata</i>	(Warren, 1893)	PN	viii
436	Geometridae	Sterrhinae	Rhodostrophiini	<i>Discoglypha punctimargo</i>	(Hampson, 1895)	PN	viii, ix
437	Geometridae	Sterrhinae	Rhodostrophiini	<i>Metallaxis miniata</i>	Yazaki & Wang, 2004	PN	v
438	Geometridae	Sterrhinae	Scopulini	<i>Problepsis crassinotata</i>	Prout, 1917	ZI	ix
439	Geometridae	Sterrhinae	Scopulini	<i>Scopula ferrilineata</i>	(Moore, 1888)	ZI	viii
440	Geometridae	Sterrhinae	Sterrhini	<i>Idaea protensa</i>	(Butler, 1889)	PN	ix
441	Geometridae	Sterrhinae	Timandrinii	<i>Synechiodes obliquifascia</i>	Prout, 1918	PN	viii
442	Geometridae	Sterrhinae	Timandrinii	<i>Timandra correspondens</i>	Hampson, 1895	PM, PN	viii
443	Lasiocampidae	Lasiocampinae	Gastropachini	<i>Gastropacha sp.</i>		PN	ix
444	Lasiocampidae	Lasiocampinae	Odonestini	<i>Odonestis cf. pruni oberthueri</i>	Tams, 1935	PN	viii, ix
445	Lasiocampidae	Lasiocampinae	Odonestini	<i>Radhica flavovittata</i>	Moore, 1879	PN	viii
446	Lasiocampidae	Lasiocampinae	Pinarini	<i>Dendrolimus cf. himalayanus</i>	Tsai & Liu, 1964	PN	viii, ix
447	Lasiocampidae	Lasiocampinae	Pinarini	<i>Metanastria sp.</i>		PN	ix
448	Lasiocampidae	Lasiocampinae	Trabaliini	<i>Trabala vishnou</i>	(Lefèvre, 1827)	PN	ix
449	Lasiocampidae	Lasiocampinae	Unassigned	<i>Baodera khasiana</i>	(Moore, 1879)	PN	viii
450	Lasiocampidae	Lasiocampinae	Unassigned	<i>Kosala sanguinea</i>	Moore, 1879	ZI	ix
451	Lasiocampidae	Lasiocampinae	Unassigned	<i>Argonestis flammans</i>	(Hampson, 1892)	PN, ZI	iv, viii, ix
452	Lasiocampidae	Lasiocampinae	Unassigned	<i>Bhareta cinnamomea</i>	Moore, [1866]	PN	v, viii, ix
453	Eupterotidae	Eupterotinae	Eupterotini	<i>Eupterote sp.</i>		PM, PN	viii, ix
454	Eupterotidae	Eupterotinae	Eupterotini	<i>Palirisa cervina</i>	(Walker, 1855)	TV	iv
455	Endromidae			<i>Mustilia falcipennis</i>	Walker, 1865	PN	iv, v, ix
456	Endromidae			<i>Mustilizans hepatica</i>	(Moore, 1879)	PN	ix
457	Bombycidae			<i>Triuncina cf. cervina</i>	(Walker, 1865)	PN	viii
458	Saturniidae	Salassinae	Unassigned	<i>Salassa cf. lola</i>	(Westwood, 1847)	PN, TV	iv, ix
459	Saturniidae	Saturniinae	Attacini	<i>Archaeoattacus edwardsii</i>	(White, 1859)	PN	viii
460	Saturniidae	Saturniinae	Saturniini	<i>Actias selene</i>	(Hübner, [1807])	PN	v
461	Saturniidae	Saturniinae	Saturniini	<i>Antheraea roylei</i>	Moore, 1859	PN	v
462	Saturniidae	Saturniinae	Saturniini	<i>Cricula andrei</i>	Jordan, 1909	PN	viii
463	Saturniidae	Saturniinae	Saturniini	<i>Lemaireia cf. luteopeplus</i>	Nässig & Holloway, 1988	PN	v
464	Saturniidae	Saturniinae	Saturniini	<i>Loepa sp. 1</i>		PN	viii, ix
465	Saturniidae	Saturniinae	Saturniini	<i>Loepa sp. 2</i>		PN	viii, ix
466	Saturniidae	Saturniinae	Saturniini	<i>Saturnia cf. pelelaensis</i>	Brechlin, 2009	TV	ix
467	Saturniidae	Saturniinae	Saturniini	<i>Solus drepanoides</i>	(Moore, [1866])	PN	ix
468	Saturniidae	Saturniinae	Urotini	<i>Sinobirma bouyeri</i>	Naumann, Nässig & Rougerie, 2012	PN	v
469	Sphingidae	Macroglossinae	Macroglossini	<i>Acosmerycoides harterti</i>	(Rothschild, 1895)	PM	ix
470	Sphingidae	Macroglossinae	Macroglossini	<i>Acosmeryx naga</i>	(Moore, [1858])	PN	iv
471	Sphingidae	Macroglossinae	Macroglossini	<i>Acosmeryx pseudonaga</i>	Butler, 1881	PM	viii
472	Sphingidae	Macroglossinae	Macroglossini	<i>Ampelophaga khasiana</i>	Rothschild, 1895	PN, TV	v, viii, ix
473	Sphingidae	Macroglossinae	Macroglossini	<i>Ampelophaga rubiginosa</i>	Bremer & Grey, 1853	PN	v
474	Sphingidae	Macroglossinae	Macroglossini	<i>Angonyx testacea</i>	(Walker, 1856)	PN	iv
475	Sphingidae	Macroglossinae	Macroglossini	<i>Cechetra cf. lineosa</i>	(Walker, 1856)	PM, PN	ix
476	Sphingidae	Macroglossinae	Macroglossini	<i>Cechetra cf. scotti</i>	(Rothschild, 1920)	PN	viii
477	Sphingidae	Macroglossinae	Macroglossini	<i>Cechetra minor</i>	(Butler, 1875)	PN	ix
478	Sphingidae	Macroglossinae	Macroglossini	<i>Dahira obliquifascia</i>	(Hampson, 1910)	PN	iv
479	Sphingidae	Macroglossinae	Macroglossini	<i>Daphnis hypothous crameri</i>	Eitschberger & Melichar, 2010	PN	viii
480	Sphingidae	Macroglossinae	Macroglossini	<i>Eupanacra metallica</i>	(Butler, 1875)	PN	v, viii, ix

Table 2, continued. Checklist of moths of Tale WLS.

No.	Family	Sub-family	Tribe	Scientific name	Author, year	Locations	Months
481	Sphingidae	Macroglossinae	Macroglossini	<i>Eupanacra sinuata</i>	(Rothschild & Jordan, 1903)	PM	viii
482	Sphingidae	Macroglossinae	Macroglossini	<i>Pergesa acteus</i>	(Cramer, 1779)	PN	ix
483	Sphingidae	Macroglossinae	Macroglossini	<i>Rhagastis albomarginatus</i>	(Rothschild, 1894)	PN	ix
484	Sphingidae	Macroglossinae	Macroglossini	<i>Rhagastis confusa</i>	Rothschild & Jordan, 1903	PN, TV	ix
485	Sphingidae	Macroglossinae	Macroglossini	<i>Rhagastis olivacea</i>	(Moore, 1872)	PM, PN	viii, ix
486	Sphingidae	Macroglossinae	Macroglossini	<i>Theretra nessus</i>	(Drury, 1773)	PN	viii
487	Sphingidae	Smerinthinae	Ambulycini	<i>Ambulyx bhutana</i>	Brechlin, 2014	PN, TV	iv
488	Sphingidae	Smerinthinae	Ambulycini	<i>Ambulyx cf. liturata</i>	Butler, 1875	PN	viii
489	Sphingidae	Smerinthinae	Ambulycini	<i>Ambulyx ochracea</i>	Butler, 1885	PM	ix
490	Sphingidae	Smerinthinae	Ambulycini	<i>Ambulyx sericeipennis</i>	Butler, 1875	PN	v
491	Sphingidae	Smerinthinae	Sichiini	<i>Marumba cristata</i>	(Butler, 1875)	PM	ix
492	Sphingidae	Smerinthinae	Smerinthini	<i>Rhodoprasina floralis</i>	(Butler, 1876)	PN	iv
493	Sphingidae	Sphinginae	Sphingulini	<i>Dolbina inexacta</i>	(Walker, 1856)	PN	viii, ix
494	Sphingidae	Sphinginae	Sphingini	<i>Apocalypsis velox</i>	Butler, 1876	PM, PN	viii, ix
495	Sphingidae	Sphinginae	Sphingini	<i>Cerberonoton rubescens</i>	(Butler, [1876])	PN	v
496	Sphingidae	Sphinginae	Sphingini	<i>Megacorma obliqua</i>	(Walker, 1856)	PN	ix
497	Sphingidae	Sphinginae	Sphingini	<i>Psilogramma discistriga</i>	(Walker, 1856)	PM	viii

Table 3. A list of moth species and subspecies: additions to Indian moth fauna.

Sr. No. in Checklist	Scientific name	Author, year
13	<i>Glyphodes orbiferalis</i>	Hampson, 1896
75	<i>Oreta ancora</i>	Wilkinson, 1972
76	<i>Oreta fuscopurpurea</i>	Inoue, 1956
77	<i>Oreta insignis</i>	(Butler, 1877)
98	<i>Mesopalera mediopallens</i>	(Sugi, 1989)
180	<i>Catocala hyperconnexa</i>	Sugi, 1965
206	<i>Lophomilia albicosta</i>	Yoshimoto, 1995
219	<i>Euproctis staudingeri</i>	(Leech, 1888)
271	<i>Orudiza angulata</i>	Chu & Wang, 1994
311	<i>Krananda orthotmeta</i>	Prout, 1926
323	<i>Ophthalmitis xanthypochlora</i>	(Wehrli, 1924)
354	<i>Polyscia argentininea eugraphes</i>	(Prout, 1923)
382	<i>Dindicodes harutai</i>	(Yazaki, 1992)
388	<i>Lophophelma iterans</i>	(Prout, 1926)
395	<i>Comibaena apicipicta</i>	Prout, 1912
407	<i>Hemistola ornata</i>	Yazaki, 1994
437	<i>Metallaxis miniata</i>	Yazaki & Wang, 2004

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LITERATURE CITED

- Anonymous.** 2020. *An Identification Guide of Japanese Moths*. <http://www.jpmoth.org>. Last accessed 10 June 2020.
- Arandhara, S.** 2016. A Preliminary Checklist on Hawkmoths of Digboi, Assam (Lepidoptera: Bombycoidea: Sphingidae). *Global Journal for Analysis* 5(10): 348-349.
- Arandhara, S., Barman, S., Tanti, R., Boruah, A.** 2017. Macro moths of Tinsukia district, Assam: A provisional inventory. *Journal of Entomology and Zoology Studies* 5(6): 1612-1621.
- Arora, G.S., Chaudhury, M.** 1982. On the Lepidopterous fauna of Arunachal Pradesh & adjoining areas of Assam in North-east India, family Arctiidae. *Records of the Zoological Survey of India*. Technical Monograph No. 6, 1-63 pp.
- Barlow, H. S.** 1982. *An introduction to the Moths of South East Asia*. Kuala Lumpur, Malayan Nature Society. 305 pp., 50 pls.
- Beccaloni, G., Scoble, M., Kitching, I., Simonsen, T., Robinson, G., Pitkin, B., Hine, A., Lyal, C.** (Eds). 2003. *The Global Lepidoptera Names Index (LepIndex)*. <https://www.nhm.ac.uk/our-science/data/lepinde/index/>. Last accessed 15 June 2020.
- Beck, J., Nässig, W.A.** 2008. Diversity and abundance patterns, and revised checklist, of saturniid moths from Borneo (Lepidoptera: Saturniidae). *Nachrichten des Entomologischen Vereins Apollo* 28: 155-164.
- Bell, T. R. D., Scott, F. B.** 1937. *Fauna of British India, including Ceylon and Burma. Moths-Volume 5, Sphingidae*. London, Taylor and Francis. 537 pp., 15 pls.
- Brechlin, R.** 2001. *Lemaireia naessigi* n. sp., a new saturniid from South East Asia (Lepidoptera: Saturniidae). *Nachrichten des Entomologischen Vereins Apollo* 21 (4): 207-212.

- Brechlin, R.** 2009. Two new species of the genus *Saturnia* Schrank, 1802 (Subgenus *Rinaca* Walker 1855) (Lepidoptera: Saturniidae). *Entomo-Satsphingia* 2(2): 30-36.
- Brechlin, R.** 2014. Eine neue Art der Gattung *Ambulyx* Westwood, 1847 aus Bhutan und NO-Indien (Lepidoptera: Sphingidae). *Entomo-Satsphingia* 2(7): 50-55.
- Bryk, F.** 1942. Entomological Results from the Swedish Expedition 1934 to Burma and British India. Lepidoptera: Thyatiridae. *Arkiv för Zoologi* 34A(11): 1-16.
- Cerný, K., Pinratana, A.** 2009. *Moths of Thailand. Volume 6, Arctiidae*. Bangkok, Brothers of St Gabriel in Thailand. 283 pp., 56 pls.
- Chandra, K., Sambath, S.** 2013. Moth diversity of Tawang district, Arunachal Pradesh, India. *Journal of Threatened Taxa* 5(1): 3565-3570.
- Chandra, K., Mazumder, A., Sanyal, A. K., Ash, A., Bandyopadhyay, U., Mallick, K., Raha, A.** 2018. Catalogue of Indian Notodontidae Stephens, 1829 (Lepidoptera: Noctuoidea). *Zootaxa* 4505(1): 1-84.
- Chandra, K., Kumar, V., Singh, N., Raha, A., Sanyal, A. K.** 2019. *Assemblages of Lepidoptera in Indian Himalaya through long term monitoring plots*. Kolkata, Zoological Survey of India. 1-457 pp.
- Chu, H. F., Wang, L. Y.** 1987. Studies on the taxonomy and zoogeography of the Chinese Oretinae (Lepidoptera: Drepanidae). *Acta Entomologica Sinica* 30(3): 291-303.
- Cui, L., Zhang, C., Lin, S., Han, H.** 2014. Review of *Fascellina* Walker (Lepidoptera: Geometridae: Ennominae) from China, with three newly recorded species. *Entomotaxonomia* 36(2): 105-118.
- Cotes, E. C., Swinhoe, C.** 1887. *A catalogue of moths of India. Part 1. Sphinges*. Kolkata, Trustees of Indian Museum.
- Dey, P., Joshi, K., Uniyal, V. P.** 2018. *Common Moths of WII*. Dehradun, Wildlife Institute of India. 1-79 pp.
- Dubatolov, V. V., Kishida, Y.** 2013. Remarks on the species composition of the genus *Agrisius*, with a description of a new species from Laos (Lepidoptera, Arctiidae: Lithosiinae). *Tinea* 22 (3): 156-160.
- Editor-Director.** 2006. *State Fauna Series 13. Fauna of Arunachal Pradesh, Part-2*. Kolkata, Zoological Survey of India. 1-518 pp.
- Elwes, H. J.** 1890. On some new moths of India. *Proceedings of the Zoological Society of London* 1890: 378-401.
- Forest Survey of India.** 2019. *India State of Forest Report 2019*. Dehradun, Forest Survey of India. 183 pp.
- Ghosh, S. K., Chaudhury, M.** 1990. New records of Lepidoptera from Arunachal Pradesh. *Records of the Zoological Survey of India* 86(2): 399-403.
- Ghosh, S. K.** 2003. *Insecta: Lepidoptera: Heterocera: Geometridae in State Fauna Series 9. Fauna of Sikkim, Part-4 (Insects)*. Kolkata, Zoological Survey of India. 217-342 pp.
- Gogoi, H., Borah, G., Habung, T., Wangsa, K.** 2014. A field survey of the silk moths (Lepidoptera: Saturniidae) in West Siang district, Arunachal Pradesh and threats to their population. *Journal of Bioresources* 1(1): 16-24.
- Grehan, J. R., Ismavel, V. A.** 2017. Forest ghost moth fauna of northeastern India (Lepidoptera: Hepialidae: *Endoclyta*, *Palpifer*, and *Hepialiscus*). *Journal of Threatened Taxa* 9(3): 9940-9955.
- Gupta, I. J., Shukla, J. P. N.** 1977a. On a collection of moths (Lepidoptera: Heterocera) from Siang district, Arunachal Pradesh, India. *Newsletter: Zoological Survey of India* 3: 354-358.
- Gupta, I. J., Shukla, J. P. N.** 1977b. On little known moths (Lepidoptera: Heterocera) from Arunachal Pradesh, India. *Newsletter: Zoological Survey of India* 3(6), 395-398.
- Hampson, G. F. [1893].** *The Fauna of British India including Ceylon and Burma. Moths, Vol. 1, Saturniidae to Hypsidae*. London, Taylor & Francis. 627 pp., 333 figs.
- Hampson, G. F.** 1894. *The Fauna of British India including Ceylon and Burma. Moths, Vol. 2, Arctiidae, Agrastidae, Noctuidae*. London, Taylor & Francis. 609 pp., 325 figs.
- Hampson, G. F.** 1895. *The Fauna of British India including Ceylon and Burma. Moths, Vol. 3, Noctuidae (cont. to Geometridae)*. London, Taylor & Francis. 546 pp., 226 figs.
- Hampson, G. F.** 1896. *The Fauna of British India including Ceylon and Burma. Moths, Vol. 4, Pyralidae*. London, Taylor & Francis. 594 pp., 287 figs.
- Hampson, G. F.** 1897. Moths of India, supplementary paper to the volumes "Fauna of British India" Part 1. *Journal of the Bombay Natural History Society* 11(2): 277-295.
- Han, H. X., Xue, D. Y.** 2004. A Taxonomic Study on *Timandromorpha* Inoue (Lepidoptera: Geometridae). *Oriental Insects* 38(1): 179-188.
- Han, H., Xue, D., Li, H.** 2003. A study on the genus *Herochroma* Swinhoe in China, with descriptions of four new species (Lepidoptera: Geometridae, Geometrinae). *Acta Entomologica Sinica* 46(5): 629-639.
- Han, H., Xue, D.** 2009. Taxonomic review of *Hemistola* Warren, 1893 from China, with descriptions of seven new species (Lepidoptera: Geometridae, Geometrinae). *Entomological Science* 12: 382-410.
- Han, H., Xue, D.** 2011. *Fauna Sinica (Insecta Vol. 54. Lepidoptera, Geometridae, Geometrinae)*. Beijing, Science Press. 1-787 pp.
- Han, H., Galsworthy, A. C., Xue, D.** 2012. The Comibaenini of China (Geometridae: Geometrinae), with a review of the tribe. *Zoological Journal of the Linnean Society* 165(4): 723-772.
- Haruta, T. (Ed.).** 1992. *Moths of Nepal, Part 1. Tinea* 13(Supplement 2). Tokyo, The Japan Heterocerists' Society. 122 pp., 32 pls.
- Haruta, T. (Ed.).** 1993a. *Moths of Nepal, Part 2. Tinea* 13(Supplement 3). Tokyo, The Japan Heterocerists' Society. 160 pp., 32 pls.
- Haruta, T. (Ed.).** 1993b. *Noctuidae: Catocalinae & Ophideliinae*, pp. 157-73. In: *Moths of Nepal, Part 2. Tinea* 13(Supplement 3). Tokyo, The Japan Heterocerists' Society.
- Haruta, T. (Ed.).** 1994. *Moths of Nepal, Part 3. Tinea* 14(Supplement 1). Tokyo, The Japan Heterocerists' Society. 171 pp., 32 pls.
- Haruta, T. (Ed.).** 1995. *Moths of Nepal, Part 4. Tinea* 14(Supplement 2). Tokyo, The Japan Heterocerists' Society. 206 pp., 32 pls.
- Haruta, T. (Ed.).** 1998. *Moths of Nepal, Part 5. Tinea* 15(Supplement 1). Tokyo, The Japan Heterocerists' Society. 330 pp., 32 pls.
- Haruta, T. (Ed.).** 2000. *Moths of Nepal, Part 6. Tinea* 16(Supplement 1). Tokyo, The Japan Heterocerists' Society. 164 pp., 16 pls.
- Holloway, J. D.** 1983. The moths of Borneo (part 4); Family Notodontidae. *Malayan Nature Journal* 37: 1-107.
- Holloway, J. D.** 1985. The moths of Borneo (part 14); Family Noctuidae: subfamilies Euteliinae, Stictopterinae, Plusiinae, Pantheinae. *Malayan Nature Journal* 38: 157-317.
- Holloway, J. D.** 1986. The moths of Borneo (part 1); Key to families; Families Cossidae, Metarbelidae, Ratardidae, Dudgeoneidae, Epipyropidae, and Limacodidae. *Malayan Nature Journal* 40: 1-165.
- Holloway, J. D.** 1987. *The Moths of Borneo (part 3); Families Lasiocampidae, Eupterotidae, Bombycidae, Brahmaeidae, Saturniidae, Sphingidae*. Kuala Lumpur, Southdene Sdn. Bhd. 199 pp., 163 figs., 20 pls.
- Holloway, J. D.** 1988. *The Moths of Borneo (part 6); Family Arctiidae: Subfamilies Arctiinae, Syntominae, Aganainae (to Noctuidae)*. Kuala Lumpur, Southdene Sdn. Bhd. 101 pp., 168 figs., 6 pls.
- Holloway, J. D.** 1989. The moths of Borneo (part 12); Family Noctuidae: Subfamilies Noctuinae, Heliothinae, Hadeninae, Acronictinae, Amphipyrainae, Agaristinae. *Malayan Nature Journal* 43: 57-226.
- Holloway, J. D.** 1993. The moths of Borneo (part 11); Family Geometridae: Subfamilies Ennominae. *Malayan Nature Journal* 47: 1-309.
- Holloway, J. D.** 1996. The moths of Borneo (part 9); Family Geometridae: Subfamilies Oenochrominae, Desmobathrinae, Geometrinae. *Malayan Nature Journal* 49: 147-326.
- Holloway, J. D.** 1997. The moths of Borneo (part 10); Family Geometridae: Subfamilies Sterrhinae, Larentiinae, Addenda to other subfamilies. *Malayan Nature Journal* 51: 1-242.
- Holloway, J. D.** 1998. The moths of Borneo (part 8); Castniidae, Callidulidae,

- Drepanidae, Uraniidae. *Malayan Nature Journal* 52: 1-155.
- Holloway, J. D.** 1999. The moths of Borneo (part 5); Family Lymantriidae. *Malayan Nature Journal* 53: 1-188.
- Holloway, J. D.** 2003. *The Moths of Borneo (part 18; Family Nolidae)*. Kuala Lumpur, Southdene Sdn Bhd. 279 pp., 611 figs., 10 pls.
- Holloway, J. D.** 2011. The moths of Borneo (part 2); Families Phaudidae, Himantopteridae and Zygaenidae; revised and annotated checklist. *Malayan Nature Journal* 63: 1-548.
- iNaturalist. <https://www.inaturalist.org>. Last accessed 10 June 2020.
- Inoue, H., Sugi, S., Kuroko, H., Moriuti, S., Kawabe, A.** 1982. *Moths of Japan, Vol. 2. Plates and synonymic catalogue*. Japan, Kodansha Co. Ltd. 111 pp.
- Inoue, H.** 1993. A revision of the genus *Herdonia* Walker (Lepidoptera: Thyrididae, Siculodinae). *Lepidoptera Science* 44(3): 127-151.
- Inoue, H., Kennett, R. D., Kitching, I. J.** 1997. *Moths of Thailand, Volume 2: Sphingidae*. Bangkok, Brothers of St. Gabriel in Thailand. 149 pp., 44 pls.
- Irungbam, J. S., Chib, M. S., Wangdi, K.** 2016. Taxonomic review of the superfamily Pyraloidea in Bhutan (Lepidoptera). *Journal of Asia-Pacific Biodiversity* 9(3): 355-382.
- Irungbam, J. S., M. S. Chib, Solovyev, A. V.** 2017. Moths of the family Limacodidae Duponchel, 1845 (Lepidoptera: Zygaenoidea) from Bhutan with six new generic and 12 new species records. *Journal of Threatened Taxa* 9(2): 9795-9813.
- Irungbam, J. S., Irungbam, M. J.** 2019. Contributions to the knowledge of moths of Bombycoidea Latreille, 1802 (Lepidoptera: Heterocera) of Bhutan with new records. *Journal of Threatened Taxa* 11(8): 14022-14050.
- Ishizuka, K., Shinkawa, T., Endo, H., Nonaka, M.** 2011. Molecular phylogeny of Japanese *Catocala* moths based on nucleotide sequences of the mitochondrial ND5 gene. *Zoological Science* 28(12): 910-915.
- Jiang, N., Xue, D., Han, H.** 2011a. A review of *Biston* Leach, 1815 (Lepidoptera, Geometridae, Ennominae) from China, with description of one new species. *ZooKeys* 139: 45-96.
- Jiang, N., Xue, D., Han, H.** 2011b. A review of *Ophthalmitis* Fletcher, 1979 in China, with descriptions of four new species (Lepidoptera: Geometridae, Ennominae). *Zootaxa* 2735: 1-22.
- Jiang, N., Yang, C., Xue, D., Han, H.** 2015. An updated checklist of Thyatirinae (Lepidoptera, Drepanidae) from China, with descriptions of one new species. *Zootaxa* 3941(1): 1-48.
- Jiang, N., Li, X., Hausmann, A., Cheng, R., Xue, D., Han, H.** 2017. A molecular phylogeny of the Palaearctic and Oriental members of the tribe Boarmiini (Lepidoptera: Geometridae: Ennominae). *Invertebrate Systematics* 31(4): 427-441.
- Joshi, R., Singh, N., László, G. M., Ahmad, J.** 2020. An updated checklist of superfamily Drepanoidea (Lepidoptera) from India. *Records of the Zoological Survey of India* 120(1): 1-24.
- Kawahara, A. Y., Plotkin, D., Espeland, M., Meusemann, K., Toussaint, E. F., Donath, A., Gimnick, F., Frandsen, P. B., Zwick, A., dos Reis, M., Barber, J. R.** 2019. Phylogenomics reveals the evolutionary timing and pattern of butterflies and moths. *Proceedings of the National Academy of Sciences* 116(45): 22657-22663.
- Kendrick, R. C.** 2002. *Moths (Insecta: Lepidoptera) of Hong Kong*. PhD Thesis. Hong Kong, University of Hong Kong.
- Kitching, I., Brechlin, R.** 1996. New species of the genera *Rhodoprasina* Rothschild & Jordan and *Acosmyryx* Boisduval from Thailand and Vietnam, with a redescription of *R. corolla* Cadiou & Kitching (Lepidoptera: Sphingidae). *Nachrichten des Entomologischen Vereins Apollo* 17(1): 51-66.
- Kitching, I. J.** 2020. *Sphingidae Taxonomic Inventory*. <http://sphingidae.myspecies.info/> Last accessed on 4 June 2020.
- Kirti, J. S., Sodhi, J. S., Gill, N. S.** 2005. Inventory of Arctiidae of North-Eastern India (Arctiidae: Lepidoptera). *Journal of Entomological Research* 29(3): 243-249.
- Kirti, J. S., Saxena, A.** 2012. An inventory of family Geometridae (Lepidoptera) from North-East India. *Journal of Applied Bioscience* 38(1): 28-43.
- Kirti, J. S., Singh, N., Saxena, A.** 2014. Seven new records of Geometrid moths (Lepidoptera: Geometridae) from India. *Journal of Applied Biosciences* 40(2): 113-116.
- Kirti, J. S., Singh, N.** 2015. *Arctiid Moths of India Vol. 1*. New Delhi, Nature Books of India. 205 pp.
- Kirti, J. S., Singh, N.** 2016. *Arctiid Moths of India Vol. 2*. New Delhi, Nature Books of India. 214 pp.
- Kirti, J. S., Chandra, K., Saxena, A., Singh, N.** 2019. *Geometrid Moths of India*. New Delhi, Nature Books of India. 296 pp.
- Kishida, Y.** 1992a. *Bombycidae*, pp. 80-81. In: *Moths of Nepal, Part 1. Tinea 13*(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Kishida, Y.** 1992b. *Lasiocampidae*, pp. 76-79. In: *Moths of Nepal, Part 1. Tinea 13*(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Kishida, Y.** 1993. *Lymantrinae*, pp. 80-95. In: *Moths of Nepal, Part 2. Tinea 13*(Supplement 3). Tokyo, The Japan Heterocerists' Society.
- Kishida, Y.** 1998. *Arctiidae*, pp. 32-35. In: *Moths of Nepal, Part 5. Tinea 15*(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Koçak, A. Ö., Kemal, M.** 2010. Lepidoptera of Thailand. *Cesa News* 60: 1-184.
- Kononenko, V. S., Pinratana, A.** 2005. *Moths of Thailand, Volume 3: Noctuidae. An Illustrated Catalogue of the Noctuidae (Lepidoptera) in Thailand: Part 1*. Bangkok, Brothers of St. Gabriel in Thailand. 261 pp., 45 pls.
- Kononenko, V. S., Behounek, G.** 2009. A revision of the genus *Lophomilia* Warren, 1913 with description of four new species from East Asia (Lepidoptera: Noctuidae: Hypeninae). *Zootaxa* 1989(1): 1-22.
- Kononenko, V. S., Pinratana, A.** 2013. *Moths of Thailand, Volume 3: Noctuoidea Part 2: Addendum to Vol. 3, Part 1, Families Erebidae, Nolidae, Euteliidae, Noctuidae and Checklist*. Bangkok, Brothers of St. Gabriel in Thailand. 625 pp., 55 pls.
- Kons, H. L. J., Borth, R. J., Saldaña, A., Didenko, S.** 2017. The *Catocala naganoi* species group (Lepidoptera: Noctuidae), with a new species from Vietnam. *Zootaxa* 435(1): 79-106.
- Kumar, R., Chutia, P., Ahmed, M., Rajkhowa, G., Singh, N. I.** 2016. Checklist of wild silk moths of north east India (Lepidoptera: Saturniidae, Bombycidae). *Munis Entomology Zoology* 11(2): 508-514.
- László, G. M., Ronkay, G., Ronkay, L., Witt, T.** 2007. The Thyatiridae of Eurasia: including the Sundaland and New Guinea (Lepidoptera). *Esperiana* 13: 2-683.
- Mandal, D. K., Ghosh, S. K.** 1999. *Insecta: Diptera and Lepidoptera: Sphingidae, Noctuidae and Geometridae*, pp. 405-466. In: *State Fauna Series 10: Fauna of Meghalaya, Part-6 (Insects)*. Kolkata, Zoological Survey of India.
- Mandal, D. K., Ghosh, S. K.** 2004. *Insecta: Lepidoptera: Moths*, pp. 531-540. In: *State Fauna Series 10: Fauna of Manipur, Part-2 (Insects)*. Kolkata, Zoological Survey of India.
- Mathew, G.** 2006. An Inventory of Indian pyralids (Lepidoptera: Pyralidae). *Zoo's Print Journal* 21(5): 2245-2258.
- Mazumder, A., Raha, A., Sanyal, A. K., Gayen, S., Mallick, K., Bandyopadhyay, U., Chandra, K., Schintlmeister, A.** 2020. A new species of *Nerice* Walker, 1855 and further additions to the catalogue of Indian Notodontidae Stephens, 1829 (Lepidoptera: Noctuoidea) from Himalaya with report of range extensions. *Zootaxa* 4748(1): 119-140.
- Minet, J.** 2002. The Epicopeiidae: phylogeny and a redefinition, with the description of new taxa (Lepidoptera: Drepanoidea). *Annales de la Société Entomologique de France* 38(4): 463-487.
- Nässig, W.A., Holloway, J. D.** 1988. On the systematic position of "Syntherata" loepoides Butler and its allies (Lep., Saturniidae). *Heterocera Sumatrana* 2(6): 115-127.
- Nässig, W.A.** 1996. A new, unexpected species of *Lemaireia* Nässig & Holloway, 1987 from the South of Vietnam (Lepidoptera: Saturniidae). *Nachrichten des Entomologischen Vereins Apollo* 17(3): 275-282.

- Naumann, S., Nässig, W. A., Löffler, S.** 2017. Some new Asian Saturniidae (Lepidoptera). *Nachrichten des Entomologischen Vereins Apollo* 38(4): 169-180.
- Qi, M., Sun, Y., Li, H.** 2017. Taxonomic review of the genus *Orybina* Snellen, 1895 (Lepidoptera, Pyralidae, Pyralinae), with description of two new species. *Zootaxa* 4303(4): 545-558.
- Pinratana, A., Lampe, R. E.** 1990. *Moths of Thailand, Volume 1: Saturniidae*. Bangkok, Brothers of St. Gabriel in Thailand. 47 pp., 42 pls.
- Pitkin, L. M.** 2002. Neotropical ennomine moths: a review of the genera (Lepidoptera: Geometridae). *Zoological Journal of the Linnean Society* 135(2-3): 121-401.
- Pitkin, L. M., Han, H., James, S.** 2007. Moths of the tribe Pseudoterpnini (Geometridae: Geometrinae): a review of the genera. *Zoological Journal of the Linnean Society* 150(2): 343-412.
- Plotkin, D., Kawahara, A. Y.** 2020. Review of recent taxonomic changes to the emerald moths (Lepidoptera: Geometridae: Geometrinae). *Biodiversity Data Journal* 8: 1-30.
- Prout, L. B.** 1923. On new species and forms of Geometridae. *The Annals and Magazine of Natural History* 11: 303-322.
- Prout, L. B.** 1925. Geometrid descriptions and notes. *Novitates Zoologicae* 32: 31-69.
- Prout, L. B.** 1926. On a collection of moths of the family Geometridae from Upper Burma made by Captain A. E. Swann. *Journal of Bombay Natural History Society* 31(3): 780-799.
- Prout, L. B.** 1920-1939. *The Indoaustralian Geometridae*, pp. 1-292. In: Seitz, A. (Ed.), *The Macrolepidoptera of the World. Volume 12*.
- Prout, L. B.** 1933. *The Indoaustralian Geometridae*, pp. 77-116. In: Seitz, A. (Ed.), *The Macrolepidoptera of the World. Volume 12*.
- Prout, L. B.** 1934. *The Indoaustralian Geometridae*, pp. 117-132. In: Seitz, A. (Ed.), *The Macrolepidoptera of the World. Volume 12*.
- Pühringer, F., Kallies, A.** 2004. Provisional checklist of the Sesiidae of the world (Lepidoptera: Ditrysia). *Mitteilungen der Entomologischen Arbeitsgemeinschaft Salzkammergut* 4: 1-85.
- Murillo-Ramos, L., Brehm, G., Sihvonen, P., Hausmann, A., Holm, S., Ghanavi, H. R., Öunap, E., Truuverk, A., Staude, H., Friedrich, E., Tammaru, T.** 2019. A comprehensive molecular phylogeny of Geometridae (Lepidoptera) with a focus on enigmatic small subfamilies. *PeerJ* 7, p.e7386: 1-39.
- Ratnasingham, S., Hebert, P. D. N.** 2007. BOLD: the barcode of life data system (www.barcodinglife.org). *Molecular Ecology Notes* 7: 355-364.
- Robinson, G. S., Tuck, K. R., Shaffer, M., Cook, K.** 1994. *The Smaller Moths of South-East Asia*. Kuala Lumpur, Malaysian Nature Society. 308 pp., 51 figs., 32 pls.
- Rougerie, R., Naumann, S., Nässig, W. A.** 2012. Morphology and molecules reveal unexpected cryptic diversity in the enigmatic genus *Sinobirma* Bryk, 1944 (Lepidoptera: Saturniidae). *PLoS One* 7(9), e43920: 1-12.
- Roongwal, M. L., Mathur, R. N., Bhasin, G. D., Chatterjee, P. N., Sen-Sarma, P. K., Singh, B., Chandra, A., Thapa, R. S., Kumar, K.** 1963. A systematic catalogue of the main identified entomological collection at the Forest Research Institute, Dehra Dun. *Indian Forest Leaflet*, 121(4), in *Entomology (Lepidoptera)* (31): 1295-1395.
- Rose, H. S.** 2002. An inventory of the moth fauna (Lepidoptera) of Jatinga, Assam, India. *Zoo's Print Journal* 17(2): 707-721.
- Sanyal, A. K., Dey, P., Uniyal, V. P., Chandra, K., Raha, A.** 2017. Geometridae Stephens, 1829 from different altitudes in Western Himalayan Protected Areas of Uttarakhand, India. (Lepidoptera: Geometridae). *SHILAP Revista de Lepidopterología* 45(177): 143-163.
- Sato, R.** 1994. *Geometridae: Ennominae (part)*, pp. 41-62. In: *Moths of Nepal, Part 3. Tinea* 14(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Sato, R.** 1998. *Geometridae: Ennominae (part)*, pp. 19-31. In: *Moths of Nepal, Part 5. Tinea* 15(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Sato, R.** 2000. *Geometridae: Ennominae (part)*, pp. 15-22. In: *Moths of Nepal, Part 6. Tinea* 16(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Schintlmeister, A., Pinratana, A.** 2007. *Moths of Thailand Vol. 5. Notodontidae*. Bangkok, Brothers of St. Gabriel in Thailand. 320 pp., 45 pls.
- Schintlmeister, A.** 2008. *Palearctic Macrolepidoptera Vol. 1 Notodontidae*. Apollo Books. 480 pp., 40 pls.
- Scoble, M. J., Hausmann, A.** [updated 2007]. Online list of valid and available names of the Geometridae of the World. <http://www.herbulet.de/globalspecieslist.htm>. Last accessed on 15 Aug 2020.
- Shashank, P. R., Twinkle, S.** 2018. *Plusiinae of India. A Taxonomic Database of Looper Moths*. New Delhi, DST-SERB Project, ICAR-IARI. <http://npc.iari.res.in/plusiinae/index.php>. Last accessed on 15 Aug 2020.
- Shubhalaxmi, V.** 2018. *Birdwing Field Guide to Indian Moths, 1st Edition*. India, Birdwing Publishers. 461 pp.
- Singh, K. P., Bhandari, R. S.** 2009. Biology of the Sal Defoliator *Ascotis imparata* Walk. (Lepidoptera: Geometridae). *Indian Forester* 135(10): 1407-1415.
- Singh, N., Ranjan, R.** 2018. A new species of *Orybina* Snellen, 1895 from India (Lepidoptera, Pyralidae, Pyralinae). *Zootaxa* 4392(3): 595-597.
- Singh, N., Volynkin, A. V., Kirti, J. S., Datta, H. S., Ivanova, M. S.** 2020. A review of the genus *Cyana* Walker, 1854 from India, with descriptions of five new species and three new subspecies (Lepidoptera: Erebidae: Arctiinae: Lithosiini). *Zootaxa* 4738(1): 1-93.
- Smetacek, P.** 2008. Moths recorded from different elevation in Nainital district, Kumaon Himalaya, India. *Bionotes* 10(1): 5-15.
- Sohn, J. C., Yen, S. H.** 2005. A taxonomic revision of the Korean Epipleminae (Lepidoptera: Uraniidae), with phylogenetic comments on the involved genera. *Zoological Studies* 44(1): 44-70.
- Sondhi, S., Kunte, K.** 2018. *Butterflies and Moths of Pakke Tiger Reserve. Second Edition*. Dehradun, Titli Trust; Bengaluru, National Centre for Biological Sciences; Indian Foundation for Butterflies. 242 pp.
- Sondhi, S., Sondhi, Y., Roy, P., Kunte, K. (Eds.)** 2020a. *Moths of India, v. 2.21*. Indian Foundation for Butterflies. <https://www.mothsofindia.org>. Last accessed on 18 December 2020.
- Sondhi, S., Basu, D. N., Sondhi, Y., Kunte, K.** 2020b. A new species of *Metallolophia* Warren, 1895 (Lepidoptera: Geometridae: Geometrinae), and notes on *M. opalina* (Warren, 1893), from eastern Himalaya, India. *Zootaxa* 4838(2) 289-297.
- Sondhi, Y., Sondhi, S.** 2016. A partial checklist of moths (Lepidoptera) of Dehradun, Mussoorie and Devalsari in Garhwal, Uttarakhand, India. *Journal of Threatened Taxa* 8(5): 8756-8776.
- Song, W., Xue, D., Han, H.** 2011. A taxonomic revision of *Tridrepana* Swinhoe, 1895 in China, with descriptions of three new species (Lepidoptera, Drepanidae). *Zootaxa* 3021: 39-62.
- Song, W. H., Xue, D. Y., Han, H. X.** 2012. Revision of Chinese Oretinae (Lepidoptera, Drepanidae). *Zootaxa* 3445: 1-36.
- Solov'yev, A. V.** 2014. *Parasa Moore Auct: Phylogenetic review of the complex from the Palearctic and Indomalayan regions (Lepidoptera, Limacodidae)*. Proceedings of the Museum Witt Munich 1. Munich-Vilnius. 240 pp.
- Stüning, D., Yazaki, K.** 2008. Three new species of the genus *Timandromorpha* Inoue, 1944 (Lepidoptera, Geometridae, Geometrinae) from Southeast Asia. *Tinea* 20(4): 253-263.
- Stüning, D., Walia, V. K.** 2009. The genus *Astygisa* Walker, 1864 in India, with description of a new species from Western Himalaya (Lepidoptera: Geometridae, Ennominae). *Tinea* 21(1): 9-22.
- Stüning, D.** 2000. *Additional notes on the Ennominae of Nepal with descriptions of eight new species (Geometridae)*, pp. 94-152. In: *Moths of Nepal, Part 6. Tinea* 16(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Sugi, S.** 1994. *Noctuidae: Agaristinae*, pp. 161-162. In: *Moths of Nepal, Part 3. Tinea* 14(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Sudheendrakumar, V. V., Mathew, G.** 1999. Studies on the diversity of selected group of insects in the Parambikulam wildlife sanctuary. *Kerala* Part 6. *Tinea* 16(Supplement 1). Tokyo, The Japan Heterocerists' Society.

- Forest Research Institute Research Report* 165.
- Swinhoe, C.** 1895. New species of Indian Epiplemidae, Geometridae, Thyrididae and Pyralidae. *The Annals and Magazine of Natural History* 6(16): 293-304.
- Tarmann, G. M.** 2012. Two new species of Chalcosiinae from South East Asia (Lepidoptera: Zygaenidae). *Nachrichten des Entomologischen Vereins Apollo* 32(3-4): 125-129.
- Van Nieuwerken, E. J., Kaila, L., Kitching, I. J., Kristensen, N. P., Lees, D. C., Minet, J., Mitter, C., Mutanen, M., Regier, J. C., Simonsen, T. J., Wahlberg, N.** 2011. Order Lepidoptera Linnaeus, 1758. In: Zhang, Z.-Q. (Ed.), Animal biodiversity: an outline of higher-level classification and survey of taxonomic richness. *Zootaxa* 3148(1): 212-221.
- Volynkin, A. V., Černý, K.** 2017. Revision of the Barsine *cardinalis-anomala* 'species-complex' (Lepidoptera, Erebidae, Arctiinae). *Zootaxa* 4358(3): 441-461.
- Wang, X., Wang, M., Zolotuhin, V. V., Hirowatari, T., Wu, S., & Huang, G. H.** 2015. The fauna of the family Bombycidae *sensu lato* (Insecta, Lepidoptera, Bombycoidea) from Mainland China, Taiwan and Hainan Islands. *Zootaxa* 3989(1): 1-138.
- Warren, M. A.** 1893. On new genera and species of moths of the family Geometridae from India, in the collection of H. J. Elwes. *Proceedings of the Zoological Society of London* 1893: 341-434.
- Watson, A.** 1968. The taxonomy of the Drepaninae represented in China, with an account of their world distribution (Lepidoptera: Drepanidae). *Bulletin of the British Museum (Natural History) Supplement* 12: 1-151.
- Whitaker, T., Sutton, S., Barlow, H.** 2014. *Pyralids of Borneo*. <http://pyralids.plattenbaukasten.de>. Last accessed on 21 June 2020.
- Wilkinson, C.** 1968. A taxonomic revision of the genus *Ditrigona* (Lepidoptera: Drepanidae: Drepaninae). *The Transactions of the Zoological Society of London* 31(4): 403-517.
- Yamanaka, H.** 1995. *Pyralidae of Nepal (I)*, pp. 182-193. In: *Moths of Nepal, Part 4. Tinea* 14(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Yamanaka, H.** 2000. *Pyralidae of Nepal (III)*, pp. 63-69. In: *Moths of Nepal, Part 6. Tinea* 16(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K.** 1992. *Geometridae*, pp. 5-36. In: *Moths of Nepal, Part 1. Tinea* 13(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K.** 1993. *Geometridae*, pp. 103-121. In: *Moths of Nepal, Part 2. Tinea* 13(Supplement 3). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K.** 1994. *Geometridae*, pp. 5-40. In: *Moths of Nepal, Part 3. Tinea* 14(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K.** 1995. *Geometridae*, pp. 2-27. In: *Moths of Nepal, Part 4. Tinea* 14(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K.** 1998. *Geometridae*, pp. 3-18. In: *Moths of Nepal, Part 5. Tinea* 15(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K.** 2000. *Geometridae*, pp. 9-14. in *Moths of Nepal, Part 6. Tinea* 16(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Yazaki, K., Wang, M., Huang, G. H.** 2004. Notes on geometrid moths (Lepidoptera, Geometridae) from Nanling Mts, S. China (2). *Tinea* 18(1): 56-64.
- Yen, S. H., Wu, S.** 2009. *Biota Taiwanica: Hexapoda: Lepidoptera, Noctuoidea, Noctuidae, Eriopinae*. National Sun Yat-Sen University & National Science Council; Huayu Nature Book Trade Co. Ltd. 86 pp.
- Yoshimoto, H.** 1992. *Noctuidae*, pp. 50-69. In: *Moths of Nepal, Part 1. Tinea* 13(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Yoshimoto, H.** 1993. *Thyatiridae*, pp. 122-123. In: *Moths of Nepal, Part 2. Tinea* 13(Supplement 3). Tokyo, The Japan Heterocerists' Society.
- Yoshimoto, H.** 1995. *Noctuidae*, pp. 49-88. In: *Moths of Nepal, Part 4. Tinea* 14(Supplement 2). Tokyo, The Japan Heterocerists' Society.
- Yoshimoto, H.** 1998. *Noctuidae*, pp. 45-68. In: *Moths of Nepal, Part 5. Tinea* 15(Supplement 1). Tokyo, The Japan Heterocerists' Society.
- Zhuang, H., Yago, M., Owada, M., Wang, M.** 2017. Taxonomic review of the moth family Thyatiridae (Lepidoptera) from Yunnan province, China. *Zootaxa* 4306(4): 451-477.
- Zhang, Y., Huang, S., Liang, D., Wang, H., Zhang, P.** 2020. A multilocus analysis of Epicopeiidae (Lepidoptera, Geometroidea) provides new insights into their relationships and the evolutionary history of mimicry. *Molecular Phylogenetics and Evolution* 149, p.106847.
- Zilli, A.** 2000. Remarks on the genus *Delgamma* Moore (Lepidoptera, Noctuidae), with description of a new species from South East Asia. *Lepidoptera Science* 51(4): 309-315.
- Zolotuhin, V. V., Pinratana, A.** 2005. *Moths of Thailand, Volume 4: Lasiocampidae*. Bangkok, Brothers of St Gabriel in Thailand. 205 pp., 28 pls.



Metallolophia taleensis (Geometridae, Geometrinae)