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Cover: Pseudo-flying animals and wind-dependent seed & spore dispersers – made with digital painting in Krita. © Melito Prinson Pinto



Butterflies of Silent Valley National Park and its environs, Western Ghats of Kerala, India

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Abstract: The butterfly fauna of Silent Valley National Park (SVNP) and its buffer zone in Kerala is discussed. Of the 335 species listed from the Western Ghats (WG) and 326 from Kerala, 269 species were recorded from inside the boundaries of the core of SVNP, while an additional 21 species were confirmed from its buffer zone making a total of 290 species as an aggregate for SVNP and its environs. This included 19 species of Papilionidae, 26 Pieridae, 85 Nymphalidae, one Riodinidae, 82 Lycaenidae, and 77 Hesperiidae. Thirty-one species were strictly endemic to the Western Ghats and 63 species were listed in schedules of WPA 1972, and 19 species were in the IUCN Red Lists. The region harbours 89% of all butterflies of Kerala (326 species), and 87% of those seen in the Western Ghats (335 species). About 11% of butterfly fauna of SVNP is endemic to the Western Ghats. Silent Valley and adjoining regions have 86% of all IUCN Red listed species listed for Kerala and the WG. The region also holds 91% of the species listed under WPA known from Kerala and 90% of those listed from WG. Thus, SVNP and its environs are one of the richest regions with respect to butterflies.

Keywords: Lepidoptera, Checklist, endemics, grasslands, IUCN, Shola, WPA.

Abbreviations: ASL—Above sea level | TLRG—TNHS Lepidoptera Research Group | SVNP—Silent Valley National Park | TNHS—Travancore Nature History Society | IUCN—The International Union for Conservation of Nature | WG—Western Ghats | WPA—Indian Wildlife (Protection) Act 1972.

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Author contributions: KS and SPC conceived the idea and wrote the primary draft. KS, TA, EK, MDM, BK did field work and corrected the draft. SPC and VPN worked on the final manuscript.

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INTRODUCTION

Silent Valley National Park (SVNP) is located just north of the Palghat gap, on the southwestern slopes of the Nilgiri Landscape of the Western Ghats. The major portion of the division is in the Mannarkkad Taluk of Palakkad District in Kerala. A portion of the buffer zone is in Nilambur Taluk of Malappuram District. The area lies within the latitudes 11.03–11.22 °N and 76.40–76.53 °E. The Silent Valley Forest Division now comprises Silent Valley Range (143.52 km²) and the buffer zone of Bhavani Range (94 km²), thus making a total area of 237.52 km² (Image 1). The National Park and its buffer zone are surrounded by the reserved and vested forests of Attapady Range of Mannarkkad Division towards the east, Mannarkkad Range of Mannarkkad Division towards south & west, and Kalikavu Range of Nilambur South Division towards the north-west, and the forests of Mukurthi National Park of Tamil Nadu border on eastern limits (Anonymous 2012).

The terrain is generally undulating with steep escarpments and many hillocks. The elevation of this region ranges from 95 m at Thatthengalam to 2,383 m at the Anginda peak. Both the south-west monsoon and the north-east monsoon cause rains in this area. The major share, however, comes from the south-west monsoon, which sets in during the first week of June. The heaviest rainfall is during June, July, and August. As per data from weather recorded from forest sections the rainfall varies from 7,500 mm per year in the northern side to 2,800 mm (southeastern dry zone). The main drainage basins are of the river Kunthipuzha (Bharatapuzha) for the core zone, and Bhavanipuzha for the buffer zone (Nair 1991).

The average minimum temperature ranges 8–14 °C and the average maximum temperature varies 23–29 °C. The forests and environs of Silent Valley Division can be categorized into the following types based on Champion & Seth (1968): Southern Hill Top Tropical Evergreen Forest, West Coast Tropical Evergreen Forests, Cane Brakes, Wet Bamboo Brakes, West Coast Semi Evergreen Forests, West Coast Secondary Evergreen Dipterocarp Forests, Southern Sub-tropical Hill Forests, Reed Brakes, South Indian Sub-tropical Hill Savannah, Southern Montane Wet Temperate Forests, Southern Montane Wet Scrub, and Southern Montane Wet Grasslands (Image 2) (Nair 1991; Anonymous 2012). About 75–80% of the protected area is covered with thick woody vegetation and about 20% of the area has grasslands. The regions on the northwestern slopes have rich wet evergreen forests, while the southeastern borders have drier Dry Deciduous Scrub vegetation (Image 2).

The region has excellent biodiversity as exemplified by 2,000 species of plants, 41 species of mammals, 97 species of birds, 42 reptiles, and 46 amphibians reported there (Manoharan et al. 1999). The management plan of SVNP mentions 92 species of butterflies (Anonymous 2012). British naturalists like G.F. Hampson, J.A. Yates, W.H. Evans, and M.A. Wynter-Blyth occasionally visited the region as gathered from their works, but the finer details of the visits are still unknown (Hampson 1888; Evans 1927; Yates 1935; Wynter-Blyth 1957). Larsen (1987a,b,c; 1988) briefly visited Mukkali in the 1980s while working on the butterflies of the Nilgiris District of Tamil Nadu. Yata & Gaonkar (1999) discovered and described new subspecies of *Eurema andersoni shimali* from Nilgiris, and mentioned the presence of this taxon as well as its host plants and flight periods. Mathew (1999) reported 96 species from SVNP during a study from 1987–1990. Mathew & Rahamathulla (1993) and Mathew (1994) surveyed butterflies and documented 100 species of butterflies. Reports of butterfly migrations were recorded from adjacent landscapes like Nilgiris by (Larsen 1978), and New Amarambalam Reserve Forest by Mathew & Binoy (2002).

No other published records are available on the butterfly fauna of this protected tract. There had not been any formally structured surveys for butterflies in the Silent Valley National Park and the first one was done by TNHS in association with SVNP in September 2016 with records of 180 species over a span of three days (Sadasivan & Jayakumar 2016). In this paper, we report 290 species of butterflies from SVNP, based on a review of past literature and our fieldwork in the region.

MATERIALS AND METHODS

This paper is a compilation of the field data from the authors over the last two decades. The previous literature on butterflies of the region Hampson (1888), Larsen (1987a,b,c, 1988), Mathew & Rahamathulla (1993), Mathew (1994, 1999), and Mathew & Binoy (2002) were reviewed. The data logged in the management plan (Anonymous 2012) was also consulted, as well as the report on the first comprehensive invertebrate survey of SVNP done in 2016 submitted by TNHS to the Kerala Forest Department (Sadasivan & Jayakumar 2016). In addition, the field data of the authors from casual visits to the region and a 4-day expedition from Mukurthi to Mukkali was also added. The standard transect methodology (3 km in 3 hours) was employed in field surveys with strategically placed basecamps covering

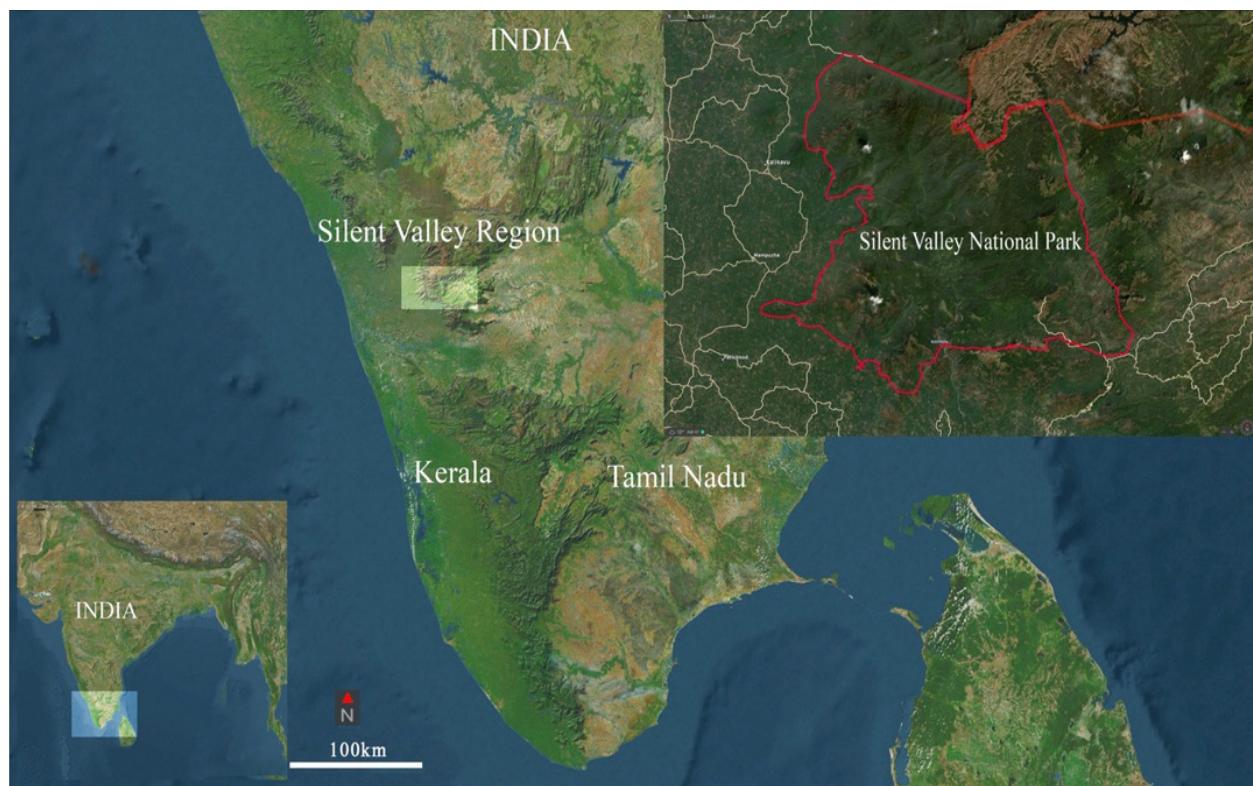


Image 1. Silent Valley National Park.

all habitats and elevational gradients of the National Park. The core region was assessed using Walakkad, Poochipara, Sispara, Punnamala, Havelock, Neelikkal, and Sairandry as the basecamps. The areas sampled in the buffer zone were Keerippara, Kottappuzha, Mukkali, Panthanthuruth, Thudukki, and Thatthengalam. Occasional visits were done to Karuvarakundu in wetter evergreen Nilambur slopes on the northwest side and Mukkali side in the southeast dry zone. For all calculation purposes, the butterfly fauna of the core of SVNP and its buffer are considered together. The general taxonomic placement follows Evans (1927 & 1949), Larsen (1987–88), Gaonkar (1996), Kunte et al. (2021), and Sadasivan & Sengupta 2023 (in press). Geographical divisions and landscapes follow Sankar (2013) with necessary modifications. In this paper we have classified the occurrence data based on transect encounters with the status as Very Common (VC) if seen in >75% of transects, Common (C) if seen in 50–75%, Not Rare (NR) if seen in 25–50% transects, Rare (R) in a case seen in 5–25%, and Very Rare (VR) if seen in <5% of the transects. Doubtful records are mentioned under the discussion part of each family. Species of the genera *Mycalesis*, *Nacaduba*, *Pelopidas*, and *Potanthus* were identified based on examination of male brands, observation & rearing of early stages, and examination of the male genitalia of specimens outside protected

areas adjoining the study region. Detailed analysis of transects with biodiversity indices and conservation values shall be published elsewhere. The global conservation status data was derived from the IUCN site <http://www.iucnredlist.org> (IUCN 2021). Indian Wildlife Protection Act (WPA) 1972 and its amendments till 2022 as the Wildlife (Protection) Amendment Act 2002 has been consulted to arrive at the species listed under the schedules.

RESULTS AND DISCUSSION

Western Ghats has 335 species and Kerala state has 326 species as per the latest estimates (Sadasivan & Sengupta 2023, in press; Sadasivan et al. 2023, in press). We found 290 species of butterflies from SVNP and its buffer zone. This included 19 species of Papilionidae, 26 species of Pieridae, 85 species of Nymphalidae, one species of Riodinidae, 82 Lycaenidae, and 77 species of Hesperiidae (Figure 1A). We found 269 species from inside the boundaries of the core of SVNP, while an additional 21 species were confirmed from its buffer zone. The records of 13 species need further confirmation.

Analysis of historical works in the SVNP and adjoining

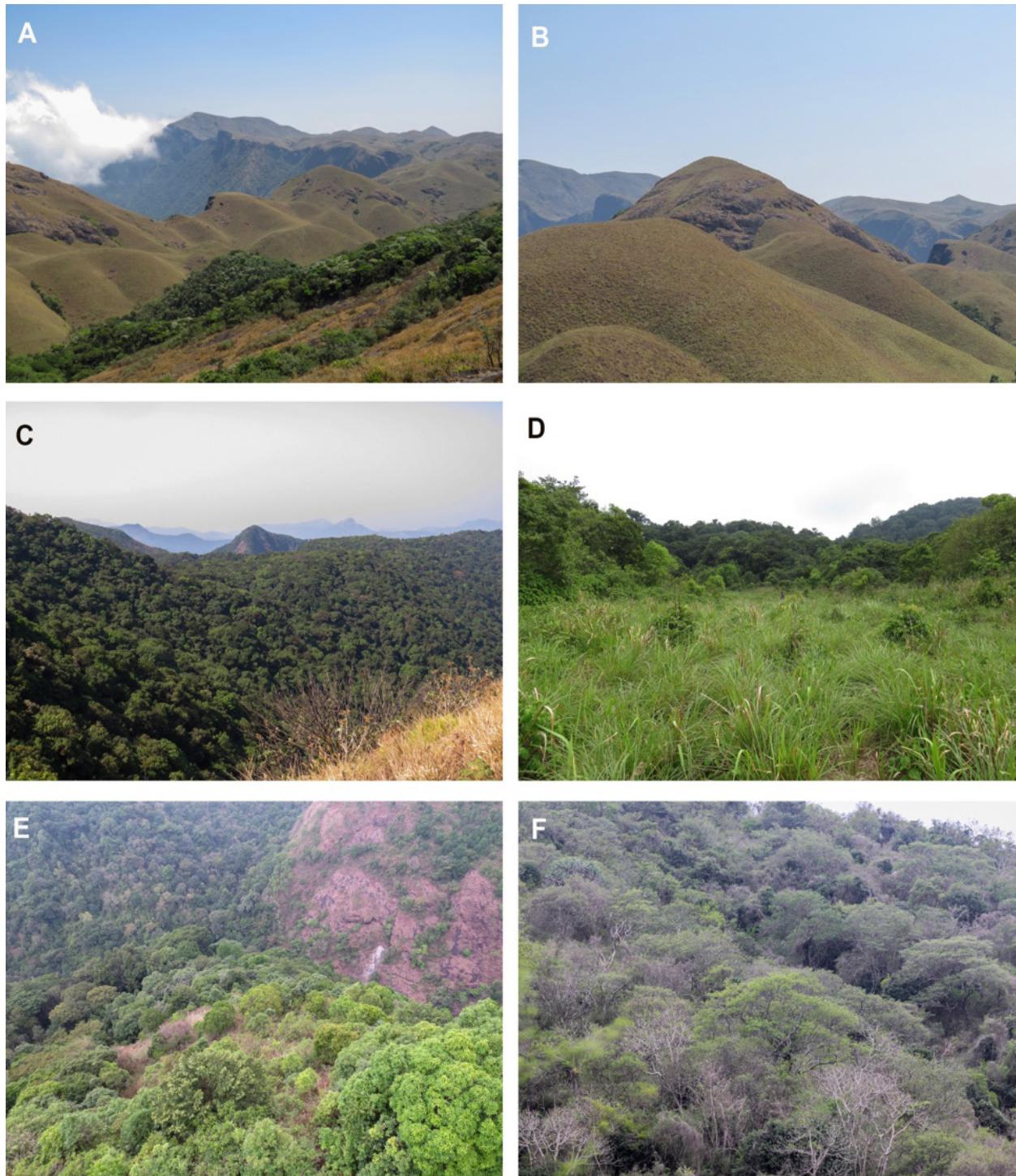


Image 2. Major vegetation types of SVNP: A—Southern Montane Wet Temperate Forests at Sispara | B—Southern Montane Wet Grasslands at Sispara | C—West Coast Tropical Evergreen Forests at Walakkad | D—Southern Sub-tropical Hill Forests Poochipara | E—West Coast Semi Evergreen Forests at Sairandhri | F—Dry Deciduous Scrub jungle at Attapady. © M. Divin Murukesh.

regions suggests the high diversity of butterflies. From the Nilgiri region, Hampson (1888) had 260 valid taxa, Yates (1935) included 282 species, Wynter-Blyth mentioned 290 species, and Larsen (1987–88) had 299 species. From the SVNP on the western slopes of the

Nilgiris, we see that Mathew & Rahamathulla (1993), Mathew (1994, 1999), and Mathew & Binoy (2002) reported around 100 species. In this study, we report 290 species, a more realistic aggregate for a highly biodiverse region like SVNP. The reason for the lesser

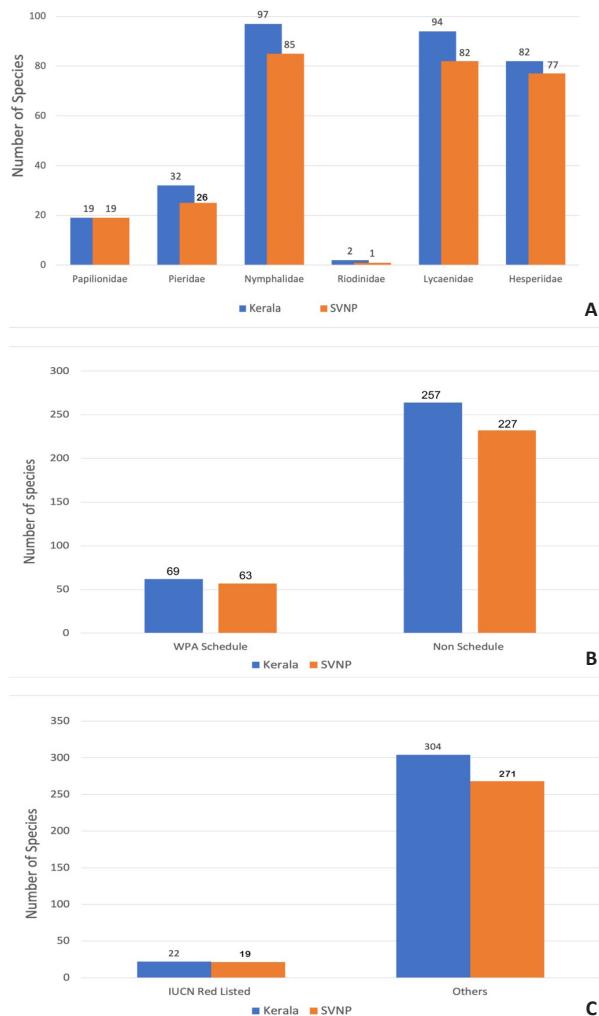


Figure 1. A—Family wise distribution of species in SVNP and Kerala | B—Number of species in the schedules of the WPA 1971 Kerala and SVNP | C—Number of species in the Red List of IUCN from Kerala and SVNP.

total compared to Nilgiris proper may be due to less land area and the absence of pure dry scrub vegetation in SVNP that harbours quite a few arid species in the northern slopes of Nilgiris.

All 19 species of Papilionidae seen in the Western Ghats and Kerala are recorded at SVNP. This includes the three strict Western Ghat endemics namely *Pachliopta pandiyana* (Moore, 1881), *Papilio liomedon* Moore, [1875] and *Papilio buddha* Westwood, 1872. All three species of peacocks *Papilio paris tamilana* Moore, 1881, *P. buddha* Westwood, 1872 and *P. crino* Fabricius, 1793 are seen in the region. Three species were not recorded in the core but were recorded from the buffer zone—*Graphium antiphates naira* (Moore, [1903]) from the northwestern wet zone and *Graphium nomius nomius* (Esper, 1799) and *Papilio crino* from the southeastern part of the dry zone.

In Pieridae only 26 species were documented in the core and buffer of SVNP. This includes the endemics *Eurema (Terias) nilgiriensis* (Yata, 1990), *Colias nilagiriensis* Felder & Felder, 1859 (Image 3A), and *Appias wardii* (Moore, 1884). Though absent inside SVNP, *Colotis amata* (Fabricius, 1775), *C. aurora* (Cramer, [1780]), *C. danae danae* (Fabricius, 1775), *C. etrida etrida* (Boisduval, 1836), and *C. fausta fulvia* (Wallace, 1867), were reported from the drier south-eastern border of the buffer zone. The presence of these straggler species in the SVNP needs further confirmation. These species are also listed in a paper on butterflies of Anaikatti, a region adjoining the south-eastern part of the SVNP (Selvaraj & Arun 2014). There are also reports of *Appias lalage lalage* (Doubleday, 1842), from Walakkad and Mukurthi.

Out of the 97 species of Nymphalidae in Kerala and the 100 in WG, SVNP and its environs have 85 species, including the following 12 Western Ghat endemics – *Parantirrhoea marshalli* Wood-Mason, 1881, *Kallima horsfieldii* Kollar, [1844], *Idea malabarica* (Moore, 1877), *Zipaetus saitis* Hewitson, 1863, *Cethosia mahratta* Moore, 1872 were from the wetter north-western Nilambur slopes; while *Mycalesis igilia* Fruhstorfer, 1911, *Mycalesis orcha* Evans, 1912, *Ypthima tabella* Marshall & de Nicéville, 1883 were from the grasslands; and *Telinga adolphei* (Guérin-Méneville, 1843) (Image 3E), *Ypthima chenu* (Guérin-Méneville, 1843) (Image 3C), *Argynnis hybrida* (Evans, 1912) (Image 3B), and *Parantica nilgiriensis* (Moore, 1877) (Image 3D), were recorded from Sispara region and adjoining Mukurthi border. *Ypthima asterope mahratta* Moore, 1884, and *Ypthima ceylonica* Hewitson, 1865 are included based on their records from the dry southeast. Three species from the dry southeast zone *Byblia ilithyia* (Drury, [1773]), *Charaxes agraria* Swinhoe, 1887, and *Symphaedra nais* (Forster, 1771), are needing further confirmation.

Of the two species of Riodinidae reported from the WG, only *Abisara bifasciata suffusa* Moore, 1882, was observed in the region. *Abisara echerius prunosa* Moore, 1879, is yet to be found here.

Lycaenidae was represented by 82 out of the 94 species in Kerala and 98 in the Western Ghats. Three strict endemic species reported were *Celatoxia albidisca* (Moore, [1884]), *Arhopala alea* (Hewitson, 1862), and *Curetis siva* Evans, 1954. Two species were included based on our records from the buffer zone, namely, *Nacaduba calauria evansi* Toxopeus, 1927, and *Thaduka multicaudata kanara* Evans, 1925; and three species from the south-west dry zone—*Hypolycaena nilgirica* Moore, [1884], *Tajuria jehana jehana* Moore, [1884],

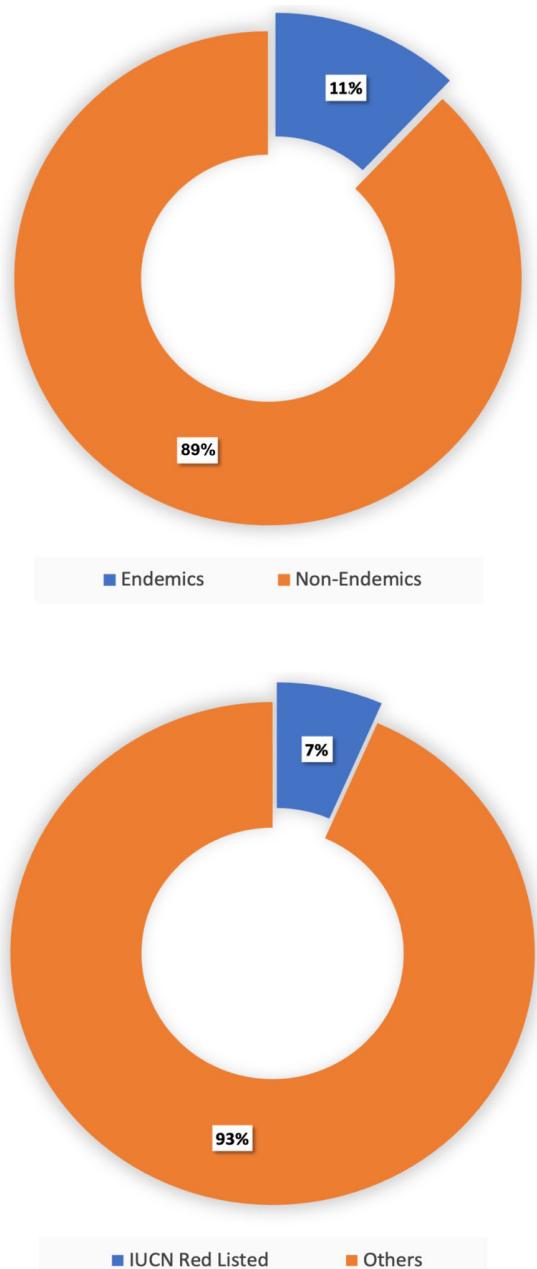


Figure 2. Species composition with respect to endemicity and IUCN Threatened list status: A—Endemics and non-endemics in SVNP | B—IUCN Red Listed and others.

and *Ancema sudica* (Evans, 1926). However, *Freyeria trochylus* (Freyer, 1845), *Arhopala bazaloides bazaloides* (Hewitson, 1878), *Tajuria maculatus* (Hewitson, 1865), and *Tajuria melastigma* de Nicéville, 1887, known from the adjacent Nilgiris and Nilambur valley are still unrecorded inside SVNP. *Udara akasa mavisa* (Fruhstorfer, 1917) (Image 3F), was common in the shola-grasslands of the region.

Seventy-seven species of Hesperiidae out of 82 in Kerala and Western Ghats were observed in SVNP.

Both the endemic grassland-dependent Hedgehoppers *Baracus hampsoni* Elwes & Edwards, 1897, and *B. subditus* Moore, [1884] were recorded. The grassland species *Arnetta mercara* Evans, 1932, was not uncommon. *Quedara basiflava* (de Nicéville, [1889]), *Halpemorpha hyrtacus* (de Nicéville, 1897), *Halpe hindu* Evans, 1937, *Thoressa astigmata* (Swinhoe, 1890) (Image 3G), and *Thoressa honorei* (de Nicéville, 1887) were recorded in the wetter north-western slopes. *Thoressa sitala* (de Nicéville, 1885), *Oriens concinna* (Elwes & Edwards, 1897), and *Caloris canaraica* (Moore, [1884]) (Image 3H), were found in the higher reaches >1200 m ASL. *Sarangesa purendra hopkinsi* Evans, 1921, *Caprona alida vespa* Evans, 1949 and *Aeromachus dubius dubius* Elwes & Edwards, 1897 were absent. While *Gerosis bhagava bhagava* (Moore, [1866]), and *Gomalia elma albofasciata* Moore, 1879, were found in the dry zone; *Spialia galba* (Fabricius, 1793), *Zographetus ogygia ogygia* (Hewitson, [1866]), *Cephrenes acalle oceanica* (Mabille, 1904), *Taractrocera maevius* (Fabricius, 1793), *Telicota colon colon* (Fabricius, 1775), *Baoris farri* (Moore, 1878), *Caloris kumara kumara* (Moore, 1878), *Caloris philippina philippina* (Herrich-Schäffer, 1869), and *Pelopidas conjuncta narooa* (Moore, 1878) were added from the northwest zone near the Nilambur slopes.

Endemicity

Sixty species out of the 290 species in SVNP and environs had some element of endemicity, of which 31 species were strictly endemic to the Western Ghats. Thus 11% of the butterflies in SVNP are WG endemics (Figure 3A). This is out of the 38 species that are currently considered strictly restricted to the Western Ghats. Thus, it hosts 82% of all the butterflies listed as strictly endemic to the Western Ghats. Of these, *Telinga adolphei*, *Argynnis hybrida*, *Mycalesis igilia*, *Mycalesis orcha*, and *Thoressa sitala* are montane endemics seen only in this Nilgiris-Coorg landscape of Western Ghats (Table 1). Since geographically restricted to a very small landscape inside the WG, they must be considered super-endemics.

IUCN Red List

SVNP and its environs had 19 species (6.55% of its butterfly fauna) listed in the IUCN Red List (Figure 1C, 2B). Seventeen species are listed under Least Concern and two species namely *Idea malabarica* and *Parantica nilgiriensis* are under the Near Threatened category. Except *Gomalia elma albofasciata* all others were listed inside the core zone (See Appendix I).

Table 1. Family-wise list of endemic species and their known distribution.

	Family	Taxon	Endemicity*
1	Papilionidae	<i>Troides minos</i> (Cramer, [1779])	WG & SI
2	Papilionidae	<i>Pachliopta pandiyana</i> (Moore, 1881)	WG
3	Papilionidae	<i>Pachliopta hector</i> (Linnaeus, 1758)	PI & SL
4	Papilionidae	<i>Graphium teredon</i> (Felder & Felder, 1865)	SI
5	Papilionidae	<i>Papilio dravidarum</i> Wood-Mason, 1880	SI
6	Papilionidae	<i>Papilio liomedon</i> Moore, [1875]	WG
7	Papilionidae	<i>Papilio buddha</i> Westwood, 1872	WG
8	Papilionidae	<i>Papilio crino</i> Fabricius, 1793	PI
9	Pieridae	<i>Eurema (Terias) nilgiriensis</i> (Yata, 1990)	WG
10	Pieridae	<i>Colias nilagiriensis</i> Felder & Felder, 1859	WG
11	Pieridae	<i>Prioneris sita</i> (Felder & Felder, 1865)	SI & SL
12	Pieridae	<i>Appias wardii</i> (Moore, 1884)	WG
13	Pieridae	<i>Pareronia ceylanica ceylanica</i> (Felder & Felder, 1865)	WG & SL
14	Nymphalidae	<i>Discophora lepida lepida</i> (Moore, 1857)	SI & SL
15	Nymphalidae	<i>Elymnias caudata</i> Butler, 1871	SI & SL
16	Nymphalidae	<i>Parantirhoea marshalli</i> Wood-Mason, 1881	WG
17	Nymphalidae	<i>Lethe drypetis todara</i> Moore, 1881	SI & SL
18	Nymphalidae	<i>Mycalesis igilia</i> Fruhstorfer, 1911	WG
19	Nymphalidae	<i>Mycalesis junonia</i> Butler, 1868	SI
20	Nymphalidae	<i>Mycalesis orcha</i> Evans, 1912	WG
21	Nymphalidae	<i>Mycalesis subdita</i> Moore, 1892	SI & SL
22	Nymphalidae	<i>Telinga adolphei</i> (Guérin-Méneville, 1843)	WG
23	Nymphalidae	<i>Ypthima ceylonica</i> Hewitson, 1865	PI & SL
24	Nymphalidae	<i>Ypthima chenu</i> (Guérin-Méneville, 1843)	WG
25	Nymphalidae	<i>Ypthima striata</i> Hampson, 1888	SI
26	Nymphalidae	<i>Ypthima tabella</i> Marshall & de Nicéville, 1883	WG
27	Nymphalidae	<i>Zipaetis saitis</i> Hewitson, 1863	WG
28	Nymphalidae	<i>Cethosia mahratta</i> Moore, 1872	WG
29	Nymphalidae	<i>Argynnis hybrida</i> (Evans, 1912)	WG
30	Nymphalidae	<i>Cirrochroa thais thais</i> (Fabricius, 1787)	SI & SL

*WG—Western Ghats | PI—Peninsular India | SL—Sri Lanka | SI—Southern India.

WPA 1972

Of the 69 species of butterflies protected under the WPA 1972 in Kerala, and 70 in WG, SVNP had 63 species under the schedules (Figure 1B). Thus 21.72% of all its butterfly fauna is under the WPA. The region also holds 91% of the species listed under WPA known from Kerala and 90% of those listed from WG. Under Schedule I there are four species, one species is under both Schedule I

	Family	Taxon	Endemicity*
31	Nymphalidae	<i>Kallima horsfieldii</i> Kollar, [1844]	WG
32	Nymphalidae	<i>Idea malabarica</i> (Moore, 1877)	WG
33	Nymphalidae	<i>Parantica nilgiriensis</i> (Moore, 1877)	WG
34	Lycaenidae	<i>Celatoxia albidisca</i> (Moore, [1884])	WG
35	Lycaenidae	<i>Ionolyce helicon viola</i> (Moore, 1877)	WG & SL
36	Lycaenidae	<i>Nacaduba berenice plumbeomicans</i> (Wood-Mason & de Nicéville, 1881)	WG & SL
37	Lycaenidae	<i>Nacaduba calauria evansi</i> Toxopeus, 1927	WG & SL
38	Lycaenidae	<i>Cigaritis schistacea</i> (Moore, [1881])	PI & SL
39	Lycaenidae	<i>Arhopala alea</i> (Hewitson, 1862)	WG
40	Lycaenidae	<i>Rapala lankana</i> (Moore, 1879)	WG & SL
41	Lycaenidae	<i>Rathinda amor</i> (Fabricius, 1775)	PI & SL
42	Lycaenidae	<i>Hypolycaena nilgirica</i> Moore, [1884]	WG & SL
43	Lycaenidae	<i>Zeltus amasa amasa</i> (Hewitson, 1865)	India & SL
44	Lycaenidae	<i>Ancema sudica</i> (Evans, 1926)	WG
45	Lycaenidae	<i>Curetis siva</i> Evans, 1954	WG
46	Hesperiidae	<i>Celaenorhinus ambareesa</i> (Moore, [1866])	PI
47	Hesperiidae	<i>Celaenorhinus fusca</i> (Hampson, 1888)	PI
48	Hesperiidae	<i>Arnetta mercara</i> Evans, 1932	WG
49	Hesperiidae	<i>Arnetta vindhiana</i> (Moore, [1884])	PI
50	Hesperiidae	<i>Baracus hampsoni</i> Elwes & Edwards, 1897	WG
51	Hesperiidae	<i>Baracus subditus</i> Moore, [1884]	WG
52	Hesperiidae	<i>Quedara basiflava</i> (de Nicéville, [1889])	WG
53	Hesperiidae	<i>Halpemorpha hyrtacus</i> (de Nicéville, 1897)	WG
54	Hesperiidae	<i>Halpe hindu</i> Evans, 1937	SI
55	Hesperiidae	<i>Thoressa astigmata</i> (Swinhoe, 1890)	WG
56	Hesperiidae	<i>Thoressa sitala</i> (de Nicéville, 1885)	WG
57	Hesperiidae	<i>Thoressa honorei</i> (de Nicéville, 1887)	WG
58	Hesperiidae	<i>Oriens concinna</i> (Elwes & Edwards, 1897)	WG
59	Hesperiidae	<i>Potanthus diana</i> (Evans, 1932)	PI
60	Hesperiidae	<i>Caltoris canaraica</i> (Moore, [1884])	SI

&II, 58 species are under Schedule II (See Appendix I).

CONCLUSIONS

With 269 species inside the core and with 290 species as an aggregate including the adjoining buffer zones (21 species), SVNP is one of the richest regions



Image 3. Some butterfly species endemic to Western Ghats and southern India recorded from SVNP: A—*Colias nilagiriensis* Felder & Felder, 1859 | B—*Argynnis hybrida* (Evans, 1912) | C—*Ypthima chenu* (Guérin-Méneville, 1843) | D—*Parantica nilgiriensis* (Moore, 1877) | E—*Telenga adolphi* (Guérin-Méneville, 1843) | F—*Udara akasa mavisa* (Fruhstorfer, 1917) | G—*Thoressa astigmata* (Swinhoe, 1890) | H—*Caloris canaraica* (Moore, [1884]). © Kalesh Sadasivan.

with respect to butterflies. The region harbours 89% of all butterflies of Kerala (326 species) and 87% of those in the Western Ghats (335 species). Eleven percent of its butterfly fauna is endemic to the Western Ghats. It hosts 82% of all butterflies listed as endemic to the Western Ghats. Around 96% of all the IUCN Red listed species in Kerala and WG and 90 % of species listed in WPA from WG and 91% of them from Kerala are also found in the region. The diversity of the region with 290 species is much more than that of states like Goa (267 species), Maharashtra (257) species and Gujarat (169 species) along the Western Ghats. SVNP and its environs have rich butterfly diversity. The buffer zone has good diversity and significantly adds to the butterfly fauna of the core of SVNP. More areas from the drier southeast and the wet evergreen region to the northwest may be incorporated into the National Park, thereby preserving the remaining tracts of benchmark evergreen forests of southern India.

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Appendix 1. Checklist of butterflies of Silent Valley National Park and Its environs, Kerala.

	Common name-Subspecies scientific name	POP*	END**	IUCN*	WPA#	Source [®]
Papilionidae						
1	<i>Troides minos</i> (Cramer, [1779]) — Sahyadri Birdwing	NR	WG & SI	LC	Sch II	H, C
2	<i>Pachliopta pandiyana</i> (Moore, 1881) — Malabar Rose	NR	WG	LC		H, C
3	<i>Pachliopta aristolochiae aristolochiae</i> (Fabricius, 1775) — Indian Common Rose	VC		LC		H, C
4	<i>Pachliopta hector</i> (Linnaeus, 1758) — Crimson Rose	C	PI & SL	LC	Sch II	H, C
5	<i>Graphium agamemnon menides</i> (Fruhstorfer, 1904) — Dakhan Tailed Jay	C				H, C
6	<i>Graphium antiphates naira</i> (Moore, [1903]) — Sahyadri Five-bar Swordtail	NR				C
7	<i>Graphium doson eleius</i> (Felder & Felder, 1864) — Dakhan Common Jay	C				H, C
8	<i>Graphium nomius nomius</i> (Esper, 1799) — Indian Spot Swordtail	NR				C
9	<i>Graphium teredon</i> (Felder & Felder, 1865) — Narrow-banded Bluebottle	C	SI		(Sch II)	H, C
10	<i>Papilio clytia clytia</i> Linnaeus, 1758 — Oriental Common Mime	NR			(Sch II)	H, C
11	<i>Papilio demoleus demoleus</i> Linnaeus, 1758 — Northern Lime Swallowtail	VC				H, C
12	<i>Papilio dravidarum</i> Wood-Mason, 1880 — Malabar Raven	R	SI			C
13	<i>Papilio helenus daksha</i> Hampson, 1888 — Sahyadri Red Helen	NR				H, C
14	<i>Papilio liomedon</i> Moore, [1875] — Malabar Banded Swallowtail	R	WG		Sch I	H, C
15	<i>Papilio polymnester polymnester</i> Cramer, [1775] — Indian Blue Mormon	NR				H, C
16	<i>Papilio polytes romulus</i> Cramer, [1775] — Indian Common Mormon	VC				H, C
17	<i>Papilio paris tamilana</i> Moore, 1881 — Sahyadri Paris Peacock	NR				H, C
18	<i>Papilio buddha</i> Westwood, 1872 — Malabar Banded Peacock	R	WG		Sch II	H, C
19	<i>Papilio crino</i> Fabricius, 1793 — Common Banded Peacock	NR	PI		Sch II	C
Pieridae						
20	<i>Catopsilia pomona pomona</i> (Fabricius, 1775) — Oriental Lemon Emigrant	VC				H, C
21	<i>Catopsilia pyranthe pyranthe</i> (Linnaeus, 1758) — Oriental Mottled Emigrant	VC				H, C
22	<i>Eurema (Terias) andersoni shimai</i> Yata & Gaonkar, 1999 — Sahyadri One-spot Grass Yellow	R		LC	Sch II	C
23	<i>Eurema (Terias) nilgiriensis</i> (Yata, 1990) — Sahyadri Grass Yellow/Nilgiri grass yellow	R	WG			C
24	<i>Eurema (Terias) blanda silhetana</i> (Wallace, 1867) — Sylhet Three-spot Grass Yellow	C				H, C
25	<i>Eurema (Terias) hecate hecate</i> (Linnaeus, 1758) — Oriental Common Grass Yellow	VC				H, C
26	<i>Eurema laeta laeta</i> (Boisduval, 1836) — Indian Spotless Grass Yellow	NR				C
27	<i>Eurema brigitta rubella</i> (Wallace, 1867) — Small Grass Yellow	NR		LC		H, C
28	<i>Colias nilagiriensis</i> Felder & Felder, 1859 — Nilgiri Clouded Yellow	NR	WG			C
29	<i>Delias eucharis</i> (Drury, 1773) — Indian Jezebel	C				H, C
30	<i>Prioneris sita</i> (Felder & Felder, 1865) — Painted Sawtooth	R	SI & SL			C
31	<i>Pieris canidia canis</i> Evans, 1912 — Sahyadri Cabbage White	C				C
32	<i>Cepora nadina remba</i> (Moore, [1858]) — Sahyadri Lesser Gull	R			Sch II	H, C
33	<i>Cepora nerissa phryne</i> (Fabricius, 1775) — Dakhan Common Gull	C				H, C
34	<i>Belenois aurota aurota</i> (Fabricius, 1793) — Indian Pioneer	C		LC		C
35	<i>Appias (Catopha) albina swinhoei</i> (Moore, 1905) — Sahyadri Common Albatross	C			Sch II	H, C
36	<i>Appias (Hiposcritia) indra shiva</i> (Swinhoe, 1885) — Sahyadri Plain Puffin	NR			Sch II	H, C
37	<i>Appias lalage lalage</i> (Doubleday, 1842) — Himalayan Spot Puffin	R				H, C
38	<i>Appias libythea</i> (Fabricius, 1775) — Western Striped Albatross	NR				H, C
39	<i>Appias lyncida latifasciata</i> Moore, 1881 — Sahyadri Chocolate Albatross	NR			Sch II	C
40	<i>Appias wardii</i> (Moore, 1884) — Sahyadri Albatross / Ward's Albatross	NR	WG		Sch II	C

	Common name-Subspecies scientific name	POP*	END**	IUCN*	WPA#	Source®
41	<i>Leptosia nina nina</i> (Fabricius, 1793) — Oriental Psyche	C				H, C
42	<i>Ixias pyrene sesia</i> (Fabricius, 1777) — Dakhan Yellow Orange-tip	C				C
43	<i>Pareronia ceylanica ceylanica</i> (Felder & Felder, 1865) — Sri Lankan Dark Wanderer	NR	WG & SL			C
44	<i>Pareronia hippia</i> (Fabricius, 1787) — Common Wanderer	C				C
45	<i>Hebomoia glaucippe australis</i> Butler, 1898 — Sahyadri Great Orange-tip	C				C
Nymphalidae						
46	<i>Discophora lepida lepida</i> (Moore, 1857) — Sahyadri Duffer	R	SI & SL			C
47	<i>Elymnias caudata</i> Butler, 1871 — Tailed Palmfly	C	SI & SL			H, C
48	<i>Melanitis leda leda</i> (Linnaeus, 1758) — Oriental Common Evening Brown	VC		LC		H, C
49	<i>Melanitis phedima varaha</i> Moore, 1857 — Sahyadri Dark Evening Brown	C				H, C
50	<i>Melanitis zitenius gokala</i> Moore, 1857 — Sahyadri Great Evening Brown	NR			Sch II	C
51	<i>Parantirhoea marshalli</i> Wood-Mason, 1881 — Travancore Evening Brown	R	WG		Sch II	C
52	<i>Lethe drypetis todara</i> Moore, 1881 — Dakhan Treebrown	NR	SI & SL			C
53	<i>Lethe europa europa</i> (Fabricius, 1775) — Dakhan Bamboo Treebrown	NR			Sch I & II	H, C
54	<i>Lethe rohria neelgheriensis</i> (Guérin-Méneville, 1843) — Common Treebrown	C				H, C
55	<i>Mycalesis anaxias anaxias</i> Hewitson, 1862 — Sahyadri White-bar Bushbrown	NR			Sch II	H, C
56	<i>Mycalesis igilia</i> Fruhstorfer, 1911 — Sahyadri Small Long-brand Bushbrown	NR	WG			H, C
57	<i>Mycalesis junonia</i> Butler, 1868 — Malabar Glad-eye Bushbrown	C	SI			H, C
58	<i>Mycalesis mineus polydecta</i> (Cramer, [1777]) — Dakhan Dark-branded Bushbrown	C				C
59	<i>Mycalesis orcha</i> Evans, 1912 — Pale-brand Bushbrown	NR	WG			C
60	<i>Mycalesis perseus tabitha</i> (Fabricius, 1793) — Dakhan Common Bushbrown	C				C
61	<i>Mycalesis subdita</i> Moore, 1892 — Tamil Bushbrown	NR	SI & SL			C
62	<i>Mycalesis visala visala</i> Moore, [1858] — Indian Long-branded Bushbrown	NR				C
63	<i>Orsotriaena medus mandata</i> (Moore, 1857) — Sahyadri Medus Brown	NR				C
64	<i>Telina adolphei</i> (Guérin-Méneville, 1843) — Red-eye Bushbrown	NR	WG			C
65	<i>Ypthima asterope mahratta</i> Moore, 1884 — Indian Common Three-ring	R				C
66	<i>Ypthima baldus baldus</i> (Fabricius, 1775) — Common Five-ring	VC				H, C
67	<i>Ypthima ceylonica</i> Hewitson, 1865 — White Four-ring	C	PI & SL			C
68	<i>Ypthima chenu</i> (Guérin-Méneville, 1843) — Nilgiri Four-ring	NR	WG			C
69	<i>Ypthima huebneri</i> Kirby, 1871 — Common Four-ring	VC				H, C
70	<i>Ypthima striata</i> Hampson, 1888 — Nilgiri Jewel Four-ring	R	SI			C
71	<i>Ypthima tabella</i> Marshall & de Nicéville, 1883 — Sahyadri Baby Five-ring	NR	WG			C
72	<i>Zipaetis saitis</i> Hewitson, 1863 — Banded Catseye	NR	WG		Sch II	H, C
73	<i>Euripus consimilis meridionalis</i> Wood-Mason, 1881 — Sahyadri Painted Courtesan	R			Sch II	C
74	<i>Rohana parisatis atacinus</i> Fruhstorfer, 1913 — Sahyadri Black Prince	NR		LC		C
75	<i>Ariadne ariadne indica</i> (Moore, 1884) — Indian Angled Castor	VC				C
76	<i>Ariadne merione merione</i> (Cramer, [1777]) — Dakhan Common Castor	VC				H, C
77	<i>Charaxes bharata</i> Felder & Felder, [1867] — Indian Nawab	C			(Sch II)	C
78	<i>Charaxes psaphon imna</i> Butler, 1870 — Indian Plain Tawny Rajah	NR			(Sch II)	C
79	<i>Charaxes schreiber wardii</i> (Moore, 1896) — Sahyadri Blue Nawab	VR			Sch I	C
80	<i>Charaxes solon solon</i> (Fabricius, 1793) — Pale Black Rajah	C			Sch II	C
81	<i>Cyrestis thyodamas indica</i> Evans, 1924 — Common Map	C				H, C
82	<i>Acraea terpsicore</i> (Linnaeus, 1758) — Tawny Coster	C				C
83	<i>Cethosia mahratta</i> Moore, 1872 — Sahyadri Lacewing	NR	WG		(Sch II)	H, C

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84	<i>Argynnis hybrida</i> (Evans, 1912) — Nilgiri Fritillary	NR	WG			C
85	<i>Cirrochroa thais thais</i> (Fabricius, 1787) — Sahyadri Yeoman	VC	SI & SL			H, C
86	<i>Cupha erymanthis maja</i> Fruhstorfer, 1898 — Sahyadri Rustic	VC				H, C
87	<i>Phalanta phalantha phalantha</i> (Drury, [1773]) — Oriental Common Leopard	VC				H, C
88	<i>Vindula erota saloma</i> de Nicéville, 1886 — Sahyadri Cruiser	C				H, C
89	<i>Libythea laius leptoides</i> Moore, 1903 — Sahyadri Lobed Beak	NR			(Sch II)	C
90	<i>Libythea myrrha rama</i> Moore, 1872 — Sri Lankan Club Beak	C				C
91	<i>Dophla evelina laudabilis</i> Swinhoe, 1890 — Sahyadri Redspot Duke	NR			Sch II	C
92	<i>Euthalia aconthea meridionalis</i> Fruhstorfer, 1913 — Dakhan Baron	C			Sch II	H, C
93	<i>Euthalia lubentina lubentina</i> (Cramer, [1777]) — Sahyadri Gaudy Baron	NR				C
94	<i>Tanaecia lepidea miyana</i> (Fruhstorfer, 1913) — Peninsular Grey Count	NR			(Sch II)	C
95	<i>Athyma inara</i> Westwood, 1850 — Color Sergeant	NR				C
96	<i>Athyma perius perius</i> (Linnaeus, 1758) — Oriental Common Sergeant	NR				H, C
97	<i>Athyma ranga karwara</i> (Fruhstorfer, 1906) — Karwar Blackvein Sergeant	C			Sch II	C
98	<i>Athyma selenophora kanara</i> (Evans, 1924) — Staff Sergeant	NR				C
99	<i>Moduza procris procris</i> Fruhstorfer, 1906 — Sahyadri Commander	C				H, C
100	<i>Lasippa viraja kanara</i> (Evans, 1924) — Sahyadri Yellowjack Sailer	R			Sch II	C
101	<i>Neptis clinia kallaura</i> Moore, 1881 — Sahyadri Sullied Sailer	R			Sch II	C
102	<i>Neptis hylas varmona</i> Moore, 1872 — Indian Common Sailer	VC				C
103	<i>Neptis jumbah nalanda</i> Fruhstorfer, 1908 — Nalanda Chestnut-streaked Sailer	VC			Sch II	C
104	<i>Neptis nata hampsoni</i> Moore, 1899 — Sahyadri Clear Sailer	R				C
105	<i>Pantoporia hordonia hordonia</i> (Stoll, [1790]) — Oriental Common Lascar	NR				C
106	<i>Phaedyma columella nilgirica</i> (Moore, 1889) — Dakhan Short-banded Sailer	NR			Sch II	C
107	<i>Parthenos sylvia virens</i> Moore, 1877 — Sahyadri Clipper	C			Sch II	H, C
108	<i>Hypolimnas bolina jacintha</i> (Drury, 1773) — Oriental Great Eggfly	VC				H, C
109	<i>Hypolimnas misippus</i> (Linnaeus, 1764) — Danaid Eggfly	NR			Sch II	H, C
110	<i>Junonia almana almana</i> (Linnaeus, 1758) — Oriental Peacock Pansy	C		LC		H, C
111	<i>Junonia atlites atlites</i> (Linnaeus, 1763) — Oriental Grey Pansy	C				H, C
112	<i>Junonia hirta hirta</i> (Fabricius, 1798) — Oriental Yellow Pansy	C		LC		H, C
113	<i>Junonia iphita iphita</i> (Cramer, [1779]) — Chocolate Pansy	VC				
114	<i>Junonia lemonias lemonias</i> (Linnaeus, 1758) — Chinese Lemon Pansy	VC				H, C
115	<i>Junonia orithya</i> Butler, 1885 — Pale Blue Pansy	C				C
116	<i>Doleschallia bisaltide malabarica</i> Fruhstorfer, 1899 — Malabar Autumn Leaf	NR			Sch II	C
117	<i>Kallima horsfieldii</i> Kollar, [1844] — Southern Blue Oakleaf	NR	WG		Sch II	C
118	<i>Kaniska canace viridis</i> Evans, 1924 — Sahyadri Blue Admiral	NR				H, C
119	<i>Vanessa indica pholoe</i> (Fruhstorfer, 1912) — Sahyadri Red Admiral	NR				H, C
120	<i>Vanessa cardui</i> (Linnaeus, 1758) — Painted Lady	NR		LC		H, C
121	<i>Danaus chrysippus chrysippus</i> (Linnaeus, 1758) — Oriental Plain Tiger	VC				C
122	<i>Danaus genutia genutia</i> (Cramer, [1779]) — Oriental Striped Tiger	C				H, C
123	<i>Euploea core core</i> (Cramer, [1780]) — Indian Common Crow	VC		LC		H, C
124	<i>Euploea klugii kollaris</i> Felder & Felder, [1865] — Brown King Crow	R				C
125	<i>Euploea sylvester coreta</i> (Godart, 1819) — Double-branded Black Crow	C				C
126	<i>Idea malabarica</i> (Moore, 1877) — Malabar Tree-Nymph	NR	WG	NT	Sch II	H, C
127	<i>Parantica aglea aglea</i> (Stoll, [1782]) — Coromandel Glassy Tiger	C				H, C
128	<i>Parantica nilgiriensis</i> (Moore, 1877) — Nilgiri Tiger	NR	WG	NT		H, C

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129	<i>Tirumala limniace exoticus</i> (Gmelin, 1790) — Oriental Blue Tiger	VC				H, C
130	<i>Tirumala septentrionis dravidarum</i> Fruhstorfer, 1899 — Dakhan Dark Blue Tiger	VC				C
Riodinidae						
131	<i>Abisara bifasciata suffusa</i> Moore, 1882 — Suffused Double-banded Judy	NR				H, C
Lycaenidae						
132	<i>Spalgis epius epius</i> (Westwood, 1852) — Oriental Apefly	C				C
133	<i>Anthene emolus emolus</i> (Godart, [1824]) — Bengal Common Ciliate Blue	NR				C
134	<i>Anthene lycaenina lycaenina</i> (Felder, 1868) — Dakhan Pointed Ciliate Blue	C			Sch II	C
135	<i>Acytolepis lilacea lilacea</i> (Hampson, 1889) — Sahyadri Lilac Hedge Blue	R			Sch II	C
136	<i>Acytolepis puspa felderii</i> Toxopeus, 1927 — Malabar Common Hedge Blue	VC				C
137	<i>Caleta decidia</i> (Hewitson, 1876) — Angled Pierrot	NR				H, C
138	<i>Castalius rosimon rosimon</i> (Fabricius, 1775) — Continental Common Pierrot	C				H, C
139	<i>Catochrysops strabo strabo</i> (Fabricius, 1793) — Oriental Forget-me-not	NR				C
140	<i>Celatoxia albidisca</i> (Moore, [1884]) — White-disc Hedge Blue	R	WG			C
141	<i>Celastrina lavendularis lavendularis</i> (Moore, 1877) — Sri Lankan Plain Hedge Blue	NR				H, C
142	<i>Chilades lajus lajus</i> (Stoll, [1780]) — Indian Lime Blue	C				C
143	<i>Luthrodes pandava pandava</i> (Horsfield, [1829]) — Oriental Plains Cupid	C				C
144	<i>Discolampa ethion ethion</i> Westwood, 1851 — Oriental Banded Blue Pierrot	NR				C
145	<i>Euchrysops cneus cneus</i> (Fabricius, 1798) — Oriental Gram Blue	C				C
146	<i>Everes lacturnus syntala</i> Cantlie, 1963 — Dakhan Cupid	C				C
147	<i>Freyeria putli</i> (Kollar, [1844]) — Oriental Grass Jewel	C				C
148	<i>Ionolyce helicon viola</i> (Moore, 1877) — Sri Lankan Pointed Lineblue	R	WG & SL		Sch II	C
149	<i>Jamides alecto eurytaces</i> (Fruhstorfer, 1916) — Himalayan Metallic Cerulean	NR			Sch II	H, C
150	<i>Jamides bochus bochus</i> (Stoll, [1782]) — Indian Dark Cerulean	C				H, C
151	<i>Jamides celeno celeno</i> (Cramer, [1775]) — Oriental Common Cerulean	VC				H, C
152	<i>Lampides boeticus</i> (Linnaeus, 1767) — Pea Blue	NR				C
153	<i>Leptotes plinius plinius</i> (Fabricius, 1793) — Asian Zebra Blue	C				C
154	<i>Megisba malaya thwaitesi</i> (Moore, [1881]) — Tailless Malayan	NR			Sch II	C
155	<i>Nacaduba beroe gythion</i> Fruhstorfer, 1916 — Assam Opaque Six-Lineblue	NR				C
156	<i>Nacaduba berenice plumbeomicans</i> (Wood-Mason & de Nicéville, 1881) — Rounded Six-Lineblue	R	WG & SL			C
157	<i>Nacaduba calauria evansi</i> Toxopeus, 1927 — Dark Ceylon Six-Lineblue	VR	WG & SL			C
158	<i>Nacaduba hermus sidoma</i> Fruhstorfer, 1916 — Dakhan Pale Four-Lineblue	NR			Sch II	C
159	<i>Nacaduba kurava canaraica</i> Toxopeus, 1927 — Karwar Transparent Six-Lineblue	NR				C
160	<i>Nacaduba pactolus continentalis</i> Fruhstorfer, 1916 — Continental Large Four-Lineblue	R			Sch II	C
161	<i>Neopithecops zalmora dharma</i> (Moore, [1881]) — Sri Lankan Common Quaker	NR				C
162	<i>Petrelaea dana</i> (de Nicéville, [1884]) — Dingy Lineblue	NR				C
163	<i>Prosotas dubiosa indica</i> (Evans, [1925]) — Indian Tailless Lineblue	C			Sch II	C
164	<i>Prosotas nora ardates</i> (Moore, [1875]) — Indian Common Lineblue	VC				C
165	<i>Prosotas noreia hampsonii</i> (de Nicéville, 1885) — Indian White-tipped Lineblue	R			Sch II	C
166	<i>Pseudozizeeria maha ossa</i> (Swinhoe, 1885) — Dakhan Pale Grass Blue	C				C
167	<i>Talicada nyseus nyseus</i> (Guérin-Méneville, 1843) — Indian Red Pierrot	C				C
168	<i>Tarucus ananda</i> (de Nicéville, [1883]) — Dark Pierrot	R				C
169	<i>Udara akasa mavisa</i> (Fruhstorfer, 1917) — Sahyadri White Hedge Blue	NR				H, C
170	<i>Zizeeria karsandra</i> (Moore, 1865) — Dark Grass Blue	VC				C

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171	<i>Zizina otis indica</i> (Murray, 1874) — Indian Lesser Grass Blue	C				C
172	<i>Zizula hylax hylax</i> (Fabricius, 1775) — Indian Tiny Grass Blue	VC		LC		C
173	<i>Amblypodia anita dina</i> Fruhstorfer, 1907 — Indian Purple Leaf Blue	NR				C
174	<i>Iraota timoleon arsaces</i> Fruhstorfer, 1907 — Dakhan Silverstreak Blue	R				C
175	<i>Thaduka multicaudata kanara</i> Evans, 1925 — Karwar Many-tailed Oakblue	NR			Sch II	C
176	<i>Cigaritis elima elima</i> (Moore, 1877) — Scare Shot Silverline	R			Sch II	C
177	<i>Cigaritis ictis ictis</i> (Hewitson, 1865) — Indian Common Shot Silverline	R				C
178	<i>Cigaritis lohita lazularia</i> (Moore, 1881) — Tamil Long-banded Silverline	NR			Sch II	C
179	<i>Cigaritis schistacea</i> (Moore, [1881]) — Plumbeous Silverline	NR				C
180	<i>Cigaritis vulcanus</i> (Fabricius, 1775) — Common Silverline	C	PI & SL			C
181	<i>Arhopala abseus indicus</i> Riley, 1923 — Indian Aberrant Oakblue	VR				C
182	<i>Arhopala alea</i> (Hewitson, 1862) — Sahyadri Rosy Oakblue	R	WG		Sch I	C
183	<i>Arhopala amantes amantes</i> (Hewitson, 1862) — Lankan Large Oakblue	C				H, C
184	<i>Arhopala centaurus pirama</i> (Moore, [1881]) — Tamil Centaur Oakblue	C				H, C
185	<i>Surendra quercketorum biplagiata</i> Butler, 1883 — Dakhan Common Acacia Blue	C				C
186	<i>Zinaspas todara todara</i> (Moore, [1884]) — Sahyadri Silver-streaked Acacia Blue	NR			Sch II	C
187	<i>Catapaecilma major callone</i> (Fruhstorfer, 1915) — Sahyadri Common Tinsel	R			Sch II	C
188	<i>Cheritra freja butleri</i> Cowan, 1965 — Sahyadri Common Imperial	C		LC		H, C
189	<i>Bindahara moorei</i> Fruhstorfer, 1904 — Blue-bordered Plane	R			(Sch II)	C
190	<i>Deudorix epijarbas epijarbas</i> (Moore, 1857) — Oriental Cornelian	NR				C
191	<i>Rapala iarbus sorya</i> (Kollar, [1844]) — Indian Red Flash	NR				C
192	<i>Rapala lankana</i> (Moore, 1879) — Malabar Flash	VR	WG & SL			C
193	<i>Rapala manea schistacea</i> (Moore, 1879) — Bengal Slate Flash	C				C
194	<i>Rapala varuna lazulina</i> (Moore, 1879) — Lazuli Flash	NR			Sch II	C
195	<i>Virachola isocrates</i> (Fabricius, 1793) — Common Guava Blue	NR				C
196	<i>Virachola perse ghela</i> Fruhstorfer, 1912 — Tamil Large Guava Blue	NR				C
197	<i>Horaga onyx cingalensis</i> Moore, [1884] — Bright Blue Common Onyx	R			Sch II	C
198	<i>Horaga viola</i> Moore, 1882 — Brown Onyx	VR				C
199	<i>Rathinda amor</i> (Fabricius, 1775) — Monkey Puzzle	C	PI & SL			C
200	<i>Hypolycaena othona othona</i> (Hewitson, 1865) — Oriental Orchid Tit	R			Sch I	C
201	<i>Hypolycaena nilgirica</i> Moore, [1884] — Nilgiri Tit	VR	WG & SL		Sch II	C
202	<i>Zeltus amasa amasa</i> (Hewitson, 1865) — Indian Fluffy Tit	R	India & SL			C
203	<i>Creon cleobis cleobis</i> (Godart, [1824]) — Bengal Broad-tail Royal	NR				C
204	<i>Pratapa deva deva</i> (Moore, [1858]) — Indian White Tufted Royal	NR			Sch II	C
205	<i>Rachana jalindra macanita</i> (Fruhstorfer, 1912) — Sahyadri Banded Royal	R			Sch II	C
206	<i>Tajuria cippus cippus</i> (Fabricius, 1798) — Indian Peacock Royal	C			Sch II	C
207	<i>Tajuria jehana jehana</i> Moore, [1884] — Indian Plains Blue Royal	C				C
208	<i>Loxura atymnus atymnus</i> (Stoll, [1780]) — Yamfly	C				C
209	<i>Ancema sudica</i> (Evans, 1926) — Sahyadri Silver Royal	R	WG		(Sch II)	C
210	<i>Zesius chrysomallus</i> Hübner, 1819 — Redspot	NR				C
211	<i>Curetis acuta dentata</i> Moore, 1879 — Indian Acute Sunbeam	NR				C
212	<i>Curetis siva</i> Evans, 1954 — Shiva Sunbeam	R	WG			C
213	<i>Curetis thetis</i> (Drury, [1773]) — Indian Sunbeam	C				H, C
Hesperiidae						
214	<i>Badamia exclamationis</i> (Fabricius, 1775) — Brown Awl	C				C

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215	<i>Bibasis sena sena</i> (Moore, [1866]) — Indian Orange-tail Awl	R			Sch II	C
216	<i>Burara gomata kanara</i> (Evans, 1926) — Sahyadri Pale Green Awlet	R				C
217	<i>Burara jaina fergusonii</i> (de Nicéville, [1893]) — Sahyadri Orange Awlet	NR				C
218	<i>Choaspes benjaminii benjaminii</i> (Guérin-Méneville, 1843) — Sahyadri Indian Awlking	R				C
219	<i>Hasora badra badra</i> (Moore, [1858]) — Oriental Common Awl	R				C
220	<i>Hasora chromus chromus</i> (Cramer, [1780]) — Oriental Common Banded Awl	VC				C
221	<i>Hasora taminatus taminatus</i> (Hübner, 1818) — Lankan White-banded Awl	R				C
222	<i>Hasora vitta indica</i> Evans, 1932 Indian — Plain Banded Awl	R				C
223	<i>Celaenorhinus ambareesa</i> (Moore, [1866]) — Dakhan Spotted Flat	NR	PI			H, C
224	<i>Celaenorhinus fusca</i> (Hampson, 1888) — Dusky Spotted Flat	NR	PI			C
225	<i>Celaenorhinus leucocera</i> (Kollar, [1844]) — Common Spotted Flat	C				H, C
226	<i>Celaenorhinus putra</i> (Moore, [1866]) — Bengal Restricted Spotted Flat	C				C
227	<i>Pseudocoladenia dan dan</i> (Fabricius, 1787) — Sahyadri Fulvous Pied Flat	C				C
228	<i>Sarangesa dasahara davidsoni</i> Moore, [1866] — Indian Common Small Flat	C				C
229	<i>Caprona agama agama</i> (Moore, [1858]) — Oriental Spotted Angle	R				C
230	<i>Caprona ransonnetti potiphera</i> (Hewitson, 1873) — Dakhan Golden Angle	C				C
231	<i>Coladenia indrani indra</i> Evans, 1926 — Dakhan Tricolor Pied Flat	NR				C
232	<i>Gerosis bhagava bhagava</i> (Moore, [1866]) — Bengal Yellow-breasted Flat	R				C
233	<i>Odontoptilum angulata angulata</i> (Felder, 1862) — Oriental Chestnut Angle	NR				C
234	<i>Tagiades gana silvia</i> Evans, 1934 — Dakhan Suffused Snow Flat	C				C
235	<i>Tagiades japerus obscurus</i> Mabille, 1877 — Dravidian Common Snow Flat	NR				C
236	<i>Tagiades litigiosa litigiosa</i> Möschler, 1878 — Sylhet Water Snow Flat	C				H, C
237	<i>Tapena thwaitesi</i> Moore, [1881] — Black Angle	NR				C
238	<i>Gomalia elma albofasciata</i> Moore, 1879 — African Marbled Skipper	NR		LC		C
239	<i>Spialia galba</i> (Fabricius, 1793) — Indian Grizzled Skipper	C				C
240	<i>Aeromachus pygmaeus</i> (Fabricius, 1775) — Pygmy Scrub Hopper	C				C
241	<i>Ampittia dioscorides dioscorides</i> (Fabricius, 1793) — Indian Bush Hopper	C				C
242	<i>Arnetta mercara</i> Evans, 1932 — Coorg Forest Bob	R	WG			C
243	<i>Arnetta vindhiana</i> (Moore, [1884]) — Vindhyan Bob	NR	PI			C
244	<i>Baracus hampsoni</i> Elwes & Edwards, 1897 — Malabar Hedge Hopper	NR	WG			C
245	<i>Baracus subditus</i> Moore, [1884] — Yellow-striped Hedge Hopper	R	WG			C
246	<i>Cupitha purreea</i> (Moore, 1877) — Wax Dart	R				C
247	<i>Erionota torus</i> Evans, 1941 — Rounded Palm-Redeye	C				C
248	<i>Gangara thyrsis thyrsis</i> (Fabricius, 1775) — Oriental Giant Redeye	C				C
249	<i>Hyarotis adrastus praba</i> (Moore, [1866]) — Bengal Tree Flitter	NR				C
250	<i>Iambrix salsala luteipalpis</i> (Plötz, 1886) — Southern Chestnut Bob	C				C
251	<i>Matapa aria</i> (Moore, [1866]) — Common Branded Red-Eye	C				C
252	<i>Notocrypta curvifascia curvifascia</i> (Felder & Felder, 1862) — Chinese Restricted Demon	NR				C
253	<i>Notocrypta paralysos mangla</i> Evans, 1949 — Sahyadri Common Banded Demon	NR				C
254	<i>Psolos fuligo subfasciatus</i> (Moore, 1878) — Indian Dusky Partwing	NR				C
255	<i>Quedara basiflava</i> (de Nicéville, [1889]) — Yellow-base Flitter	VR	WG			C
256	<i>Salanoemia sala</i> (Hewitson, [1866]) — Maculate Lancer	VR				C
257	<i>Suastus gremius gremius</i> (Fabricius, 1798) — Indian Palm Bob	C				C
258	<i>Suastus minuta bipunctus</i> Swinhoe, 1894 — Sahyadri Small Palm Bob	VR				C

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259	<i>Halpemorpha hyrtacus</i> (de Nicéville, 1897) — White-branded Ace/Bicolor Ace	R	WG			C
260	<i>Halpe hindu</i> Evans, 1937 — Sahyadri Banded Ace	C	SI		Sch II	C
261	<i>Halpe porus</i> (Mabille, [1877]) — Bispot Banded Ace	C				C
262	<i>Thoressa astigmata</i> (Swinhoe, 1890) — Unbranded Ace	NR	WG			C
263	<i>Thoressa sitala</i> (de Nicéville, 1885) — Nilgiri Plain Ace	R	WG			C
264	<i>Thoressa honorei</i> (de Nicéville, 1887) — Sahyadri Orange Ace	NR	WG			C
265	<i>Udaspes folus</i> (Cramer, [1775]) — Grass Demon	C				C
266	<i>Zographetus ogygia ogygia</i> (Hewitson, [1866]) — Continental Purple-spotted Flitter	VR				C
267	<i>Cephrenes acalle oceanica</i> (Mabille, 1904) — Variable Plain Palm-Dart	NR				C
268	<i>Oriens concinna</i> (Elwes & Edwards, 1897) — Sahyadri Dartlet	R	WG			C
269	<i>Oriens goloides</i> (Moore, [1881]) — Smaller Dartlet	C				C
270	<i>Potanthus diana</i> (Evans, 1932) — Chinese Dart	R	PI			C
271	<i>Potanthus pallidus</i> (Evans, 1932) — Pale Dart	R				C
272	<i>Potanthus palnia palnia</i> (Evans, 1914) — Palni Dart	C				H, C
273	<i>Potanthus pava pava</i> (Fruhstorfer, 1911) — Yellow Dart	R				H, C
274	<i>Potanthus pseudomaesa</i> (Moore, [1881]) — Indian Dart	NR				C
275	<i>Taractrocera ceramas</i> (Hewitson, 1868) — Incomplete Tawny-spotted Grass Dart	NR				H, C
276	<i>Taractrocera maevius</i> (Fabricius, 1793) — Oriental Grass Dart	NR				C
277	<i>Telicota bambusae bambusae</i> (Moore, 1878) — Oriental Dark Palm-Dart	C				H, C
278	<i>Telicota colon colon</i> (Fabricius, 1775) — Indian Pale Palm-Dart	NR				C
279	<i>Baoris farri</i> (Moore, 1878) — Complete Paint-brush Swift	NR				C
280	<i>Borbo bevani</i> (Moore, 1878) — Lesser Rice Swift	R				C
281	<i>Borbo cinnara</i> (Wallace, 1866) — Rice Swift	C				C
282	<i>Caltoris canaraica</i> (Moore, [1884]) — Karwar Swift	R	SI			H, C
283	<i>Caltoris kumara kumara</i> (Moore, 1878) — Sahyadri Blank Swift	NR				C
284	<i>Caltoris philippina philippina</i> (Herrich-Schäffer, 1869) — Philippine Swift	NR				C
285	<i>Parnara bada bada</i> (Moore, 1878) — Oriental Variable Swift	C				C
286	<i>Pelopidas agna agna</i> (Moore, [1866]) — Bengal Obscure Branded Swift	NR				C
287	<i>Pelopidas conjuncta narooa</i> (Moore, 1878) — Sahyadri Conjoined Swift	NR				C
288	<i>Pelopidas mathias mathias</i> (Fabricius, 1798) — Dakhan Small Branded Swift	C		LC		C
289	<i>Pelopidas subochracea subochracea</i> (Moore, 1878) — Bengal Large Branded Swift	NR				C
290	<i>Polytremis lubricans lubricans</i> (Herrich-Schäffer, 1869) — Oriental Contiguous Swift	NR				C

*POP—Population status as VC—Very Common | C—Common | NR—Not Rare | R—Rare | VR—Very Rare | **END—Endemicity as WG—Western Ghats | PI—Peninsular India | SL—Sri Lanka | SI—Southern India | +IUCN—IUCN Red List Status | #WPA—Indian Wildlife Protection Act and its amendments till 2023 Schedule as Sch. Parenthesis in Schedules indicate that the taxon is protected under the Wildlife (Protection) Amendment Act 2002 under its old taxonomic name | ®Sources: H—Historical works (Mathew & Rahmathulla 1993; Mathew 1994 & 1999) | C—Current study.



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