Butterflies (Lepidoptera—Rhopalocera) of the Palni Hills, southern Western Ghats in peninsular India: an updated review, with an appreciation of Brigadier W.H. Evans

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Abstract. This paper attempts to supplement the earlier works on butterflies of the Palni Hills published in 1910 and 1960, and also to present a complete list of all species so far known from these ranges in the Tamil Nadu State in southern India. A total of 310 species, placed in 162 genera among six families are listed, with abbreviated references to them (illustrations and text) in most of the currently available and used guide books and papers. The scientific nomenclature of Western Ghats butterflies has been critically researched and brought up to date, in some cases based on taxonomic studies involving examination of primary types. All pertinent published references are appended and an appreciation is made of the valuable field and museum research done by Brigadier W. Harry Evans (1876-1956), who pioneered butterfly studies on these hills exactly one hundred years ago. A complete list of his publications on Indian butterflies (1904-1957) is also presented.

Introduction

It is exactly 100 years since Evans (1910) presented the earliest annotated faunistic checklist of butterflies from the Palni Hills in the erstwhile Madras Presidency (now in Tamil Nadu state). He had listed 191 species in 97 genera which he had found, “from the end of August to the beginning of October 1909,” in his pioneering survey of these west-east directed hills in the southern section of the Western Ghats below the Palghat Gap biogeographical barrier. Evans (1910: 381) summarized his pioneering effort of documenting Palni butterflies thus: “The list is, I am afraid, rather meagre; there are a number of common species not included, which are bound to occur and I think that an ardent resident collector would not take long to add another hundred species.”

Fifty years later, Fathers Ugarte and Rodricks, from the Sacred Heart College at Shembaganur, below KodaiKanal, gave an update based on a decade of their samplings on these hills. They listed seven particular locations, from “The Tope” (300m) up to their Sacred Heart College at Shembaganur (1820m) where collections were made, with “heavy emphasis on the Tope-Vengayaparai region.” They discovered 54 more species as new records for the Palnis and confirmed 171 of Evans’ 191 species, but failed to sample 17 species that Evans had collected earlier. They concluded: “the Palnis are not quite the same today as Evans knew them 50 years ago. For with ruthless cutting down of forests, species once apparently abundant have now become quite rare, not to say extinct.”

A further half century later, we are compiling this second update, of 310 species in 162 genera, based on research done until now, and Palni additions based principally on the Western Ghats survey of Gaonkar (1996). Evans’ (1910) estimate of butterfly species richness on the Palni Hills has been more than proved accurate! The present 82 additional species recorded from the Palnis after Evans, Ugarte & Rodricks are indicated by an
asterisk (*). Not all these records have been published yet with specific Palnis locality data. Though Gaonkar did a lot of field collecting on the Palnis during the course of his project surveying the Western Ghats, there is need to publish factual records of species, with collection data, to confirm these 82 species here proposed as new additions. The 45 species we have been able to see or capture on the Palnis (by KG cursorily while hunting for Diptera), are marked in the list below with a dagger (†). These are also based on samplings of a few other entomologist—naturalist colleagues at Kookal (or Kukkal), located some 40km NW of Kodaikanal, from May 2005. Scattered samplings were also made by KG in Kodaikanal from October 1975. The meagre 45 species that have fallen to our nets or eyes, even if butterflies were not specifically targeted, indicates that populations of all but these most common species are now restricted to still undisurbed sholahs and grasslands, etc., that are away from regular paths of humans and their domesticated animals on these hills. These recent samplings perhaps also indicate which species are still abundant, and frequently flying on the Palni Hills.

The Palni Hills are located south of the Palghat Gap and constitute a portion of the southernmost section of the Western Ghats which is known for much endemism in the Indian subregion. These hills embrace an area of 2068km² with altitudes rising from 400m to 2554m. For a general account of these hills, and the hill station of Kodaikanal, the compilation of Matthew (1994; see also Fyson, 1917) is a good introduction. The flora of these hills has been adequately documented by Pallithanam (1957), Matthew (1959, 1969, 1996, 1998, 1999), Gupta (1960a,b, 1961), Foreau (1961) and Blasco (1971). Details of the vegetation and phytogeography of the Western Ghats have been provided by Subramanyam & Nayar (1974). They quoted Spate who wrote in 1957 of the topography of the Anaimalai, Palni and Cardamom Hills as follows: “This remarkable group of hills is more complex than the Nilgiri, and in Anaimudi itself they have the highest peak of the Peninsula, 8841 ft [2695m]. The front of the Palghat Gap is remarkably steep and in the E remarkably straight; SE flanks of Palnis, overlooking the upper re-entrant, are also remarkably abrupt, as are the Cardamoms and their protrusions (Varusanad Hills) S of Vaigai. But to the NW the hills fray out into long SE-NW ridges; and indeed over much of the area this trend is most marked, the rivers (e.g. the Periyar) having longitudinal stretches of such straightness as to suggest control by faults, with transverse gorges producing a perfect trellis-pattern. Between 10°N and the Shencottah Gap the active streams of the exposed Arabian Sea front have pushed the watershed back to within 4 or 5 miles of the eastern edge of the hills: here the change from jungle-clad mountains to the tank-pitted Tamilnad plains is very sudden.”

Brigadier William Harry Evans (1876-1956; see Cantlie, 1957), Royal Engineer, born at Shillong (Meghalaya, NE. India), was the only worker who completed documenting all our butterfly species in his still useful and classic work on The Identification of Indian Butterflies (Evans, 1932) which also keyed all ‘races.’ Evans published some 59 papers on Indian butterflies from 1904-1957 (see References given below, especially Evans, 1957c), including his “Identification” serial papers started in the Journal of the Bombay Natural History Society (Evans, 1922b) which were later compiled and published as a book in 1927 by the Bombay Natural History Society (BNHS). All these were preceded (Evans, 1922a) by an article on “Butterfly collecting in India.” Evans was never a rambling, long-winded author and almost all his works display brevity, summarizing his findings succinctly, like the keys in his Identification reveal. “Evan’s keys for the identification of Indian butterflies published in 1927, though at first sight disconcerting due to 2 systems of numbering and abbreviation of Evan’s own devising, proved so practical and popular that a second edition was called in 1932. In a single handy book of 300 pages, illustrated by thirty-two not at all beautiful half-tone plates, gave the student just that essential information which he would fail to find in ten volumes of Moore’s “Lepidoptera Indica”...” (Subba Rao, 1998: 36). As a full time working engineer, Evans was surprisingly able to find time to do so much on Indian subcontinent butterflies, from hunting and catching them in the field to pinning and spreading them indoors and also dissecting genitalia and preparing illustrations, besides writing a whole lot of revisions and monographs. As Cantlie (1957: 441) wrote, “He delighted to talk of old days in India and his happy wanderings in the villages, where he was received with such kindness and courtesy.” After his retirement in 1931 “he worked daily at the British Museum (Natural History) [London] as an Honorary Associate, devoting himself to the Hesperidae of the World” (Cantlie, 1957: 440). Evans presented his collection in 1931 to the British Museum and in the next year (Evans, 1932c) he published a very valuable paper on the butterflies of Baluchistan.
consisting almost entirely of keys. He published six volumes (1937-1955) on Hesperidae of the world, examining and dissecting thousands of specimens (he did each genitalia in two minutes!) and studying hundreds of type specimens of world species (actually some 75,000+ specimens and 1,065 types). His collection now lies also in Bombay, or Mumbai (BNHS), and Calcutta, or Kolkata (Zoological Survey of India), but the major portion was deposited in London (then British Museum of Natural History) in 1931.

This present second update is also an appreciation of Brig. Evans (see other obituaries by Cantlie, 1957; Riley, 1957 and Cowan, 1971), who was the only person able to complete a comprehensive account of Indian subregion butterflies in a single compact book, after earlier multi-volume attempts by Marshall & de Nicéville (1883), de Niceville (1896, 1890), Bingham (1905, 1907), and Talbot (1939, 1947) had aborted. The only other completed works, but in several volumes, were the magnificent 10-volume *Lepidoptera Indica* by Moore and Swinhoe (1890-1913), *The Macrolepidoptera of the World* edited by Seitz (1908-1927), besides the still conveniently useable illustrated amateur's guide by Wynter-Blyth (1957) *Butterflies of the Indian region*, but this latter only to a thousand species (843 described fully). Recent photographic guides, which attempt to 'make IDs easy' (a bad dream or dishonest claim, really), like that of Kehimkar (2008), etc., are useful (colour images) but incomplete and with little original research. The attempt for peninsular species by Kunte (2000) was introductory, written for the rank beginner in school, or for other novice amateurs.

Harish Gaonkar's (*in prep.*) historical summary of his understanding of Evans' life and work is reproduced here, which will give the reader a good account: “The second to emerge [the first was T.R.D. Bell] from the tradition of de Nicéville on the systematic and taxonomic side was W.H. Evans (1876-1956). Evans was born in Shillong, now the capital of Meghalaya, where he lived up to the age of nine. The environs around Shillong on the Khasi Hills, and his talented mother's own enlightened interest in nature, did much to kindle in him an everlasting interest in butterflies. After schooling in Canterbury [Kent, U.K.], Evans joined the Royal Engineers (Sappers) at the age of eighteen, and came out to India in 1898. He started seriously collecting butterflies in Chitral, and published his first paper, with G.A. Leslie, in 1904 on the butterflies of Chitral (now in Pakistan) in the *Journal of the Bombay Natural History Society*. His last paper on Indian butterflies appeared in the same journal in 1955, so that Evans had devoted, directly or indirectly, more than fifty years to the study of Indian butterflies (see Riley, 1957). Evans spent the first world war in France, was awarded the Distinguished Service Order (DSO), and because of exposure to gas suffered permanent chest trouble throughout his life. However, that did not hinder his achieving two distinguished careers. Evans' military career took him to all parts of the Indian region, and that appears to have suited his natural history interest. Throughout his service, Evans collected butterflies wherever he was posted, and spent his annual leave in those areas that were very little known then. The Palni Hills (Western Ghats in Tamil Nadu), Sri Lanka, Jabalpur (Satpura Hills in central India), Chitral, Murree Hills (in Pakistan), Simla Hills, Darjeeling and Sikkim, the Khasi Hills, Burma, Andaman & Nicobar Islands and finally Baluchistan (Pakistan) were the localities where he worked and published local notes. Since I have personally visited many of these areas, how disappointed I am that I could add very little to what was achieved by him; such was his industry and completeness. Evans retired from service as a Brigadier in 1931, and from then on until his death, he worked in the Natural History Museum in London, himself becoming an 'institution' within that great museum (Riley, 1957). Evans was an exceptional personality in the annals of natural history, having devoted the first three decades of his career to the field study and classification of Indian butterflies and the remaining years working as a researcher in the Natural History Museum in London, especially on the massive task of bringing order to the Hesperidae of the world. This was an achievement that demanded total and complete devotion. The broad conception of his higher classification has stood the test of time, and only when more refined methods, like cladistics and DNA sequencing, are employed will some correction become necessary.

“Evans' approach to classification was practical, methodical, clearly matter of fact, and accurate, and he was suspicious of phylogeny. By 1927, he had identified and keyed out 1,438 species and several hundred subspecies in a series of papers in the *Journal of the Bombay Natural History Society* [actually 312 genera, 1,466 species, 918 races = 2,384 total taxa in his 1932 edition ], the first edition being limited to 200 copies. As a result, that edition was sold out within two years. However, after retirement in 1931, Evans spent
a great deal of time in London revising and bringing the nomenclature up to date, and writing what was then one of the best general introductions to Indian butterflies. The result was the second edition that came out in 1932. It also contained 32 (unattractive) black and white plates of representative species of each genus as recognized by him. It became an instant success among the local natural historians; for the first time the book provided for the collector and student, in a single volume of some 454 pages, reliable and accurate keys to all families, genera, species and subspecies then known to occur in the Indian region. The success of the keys was the accuracy of its application in the field. Evans’ Identification, undoubtedly generated extensive interest in butterfly collecting and study in the Indian region. That it served its purpose in the field can be seen by the number of local lists that appeared after 1927 based on the book, especially by those who had no previous knowledge of butterflies. J.A. Yates’ lists of Coorg, the Nilgiris, and Bangalore are testimony to the effectiveness of Evans’ keys. Evans then continued the same methodology and applied it successfully to the Hesperiidae of the world.

“Nevertheless, what is surprising is that in all his publications there are few references to the butterfly in nature: to the early stages, to host plants, to behavior, to ecology and to history. It appears that Evans, the field collector, did not want to record any information from his field experience! Even N.D. Riley, the museum taxonomist, wondered (or complained?) ‘during the twenty-five years that he spent as a close colleague in the Museum he never spoke of the life histories of Indian butterflies as if from personal experience; indeed, in all his writings little will be found on this aspect of the subject.’ What is even more surprising is that in the revised edition of the Identification (1932), Bell’s series of papers, published between 1909 and 1927, forming a thousand pages [actually 925 pp.], did get mentioned only in passing (no praise!); the only mention of Bell’s work in Evans was to the papers that Bell wrote with Davidson and Aitken and published way back in 1896 (Evans, 1932: 33).

“Between the two world wars, the influence of Bell and Evans was enormous, also because, apart from the quality [and being complementary—biology and taxonomy] their work was easily available through the Journal of the Bombay Natural History Society throughout the Indian region.”

“Brigadier Evans was a very kind man, ever ready to put aside his work and to welcome any one who came to visit him or discuss a butterfly identification problem. He was delighted to talk of old days in India and his wanderings in the villages, and with nostalgic feelings he would remember the villagers' kindness and courtesy extended to him. With lungs which never fully recovered from a German gas attack in France, with an unhealed phlebitis in a leg which gave him constant pain and [made] walking difficult, and with severe bronchial trouble that did not allow him to climb steps, he yet managed to get to the British Museum every day, doing original research work that demanded great concentration of mind, keenness of vision and steadiness of hand. For 25 years he was a voluntary worker at the Museum. Though short of breath his hands were steady, and his eye-sight was very good, and he worked nearly 48 hours a week at the Museum. His death occurred [sic!] due to heart failure in November 1956, at the age of 80.” (Subba Rao, 1998: 37).

**Annotated updated list**

KG has conceived and written this paper, while KK added a few new species records while furnishing updated taxonomic information, including family, subfamily and genus structure, besides giving valid scientific names of species and ‘subspecies,’ based on his ongoing taxonomic revisions. Author names are given without parentheses, since this is not a strictly taxonomic paper and reference sources to such data are presented after each listed species. Taxa are named to subspecies/race (trinomially) and updated to current nomenclature. But, there remains much more work to be done in researching ‘lumped’ taxa, in which KK is presently engaged. So, in this paper species names are placed in roman and in parentheses for recognition. The list is in alphabetical order of genera and species for convenience of reference, but families are given in currently understood phylogenetic order, from basal to derived. But, the Nymphalidae are listed also by currently recognized subfamilies (Wahlberg et al., 2009) alphabetically, for naturalists' convenience. Three additional, still unrecorded species, of Pieridae and Lycaenidae, from the Palnis are given in square brackets, which could occur, especially on the lower eastern (or western) slopes of the Palni Hills. A few synonyms are also indicated where even the FAUNA of Talbot (1939, 1947) did not make this clear, such as for the two abundant
species of *Catopsilia*. Incidentally, we are not aware of any other publications on butterflies from these hills, besides these half-century interspersed papers of Evans (1910) and Ugarte & Rodricks (1960). The 82 species marked with asterisks (*) are hypothetical Palni records, after these papers, made in the past fifty years, and those with daggers (?) are the 45 species cursorily sampled by KG, while hunting flies, and also taken by some of his colleagues, as indicated in the acknowledgements (see p. 14), as well as by KK as noted. We encourage other butterfly students to apprise us of their own samplings or observations of Palni Hills butterflies, and also of any errors they notice in this paper.

**HESPERIIDAE**

<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>Authors</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Aeromachus dubius</em></td>
<td>DINGY SCRUB HOPPER</td>
<td>Elwes &amp; Edwards</td>
<td>IK 97, 110, WB 476, HE 361, E 169, HG 278.</td>
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<td><em>Ampittia dioscorides</em></td>
<td>BUSH HOPPER</td>
<td>Fabricius</td>
<td>COORG FOREST HOPPER—WB 491, HE 358, TL 267, HG 293.</td>
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<td><em>Arnetta mercara</em></td>
<td>COORG FOREST HOPPER</td>
<td>Evans</td>
<td>WB 484, HE 358, TL 267, HG 293.</td>
</tr>
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<td><em>Arnetta vindhiana</em></td>
<td>VINDHYAN BOB</td>
<td>Moore</td>
<td>IK 86, 107, WB 484, HE 411, TL 296; HG 327.</td>
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<td><em>Badamia exclamationis</em></td>
<td>BROWN AWL</td>
<td>Fabricius</td>
<td>IK 65, 103, WB 470, HE 321, TL 235, E 190, HG 257.</td>
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<td><em>Baoris farri</em></td>
<td>PAINTBRUSH SWIFT</td>
<td>Moore</td>
<td>WB 484, HE 413, TL 298; HG 329.</td>
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<td><em>Baracus subditus</em></td>
<td>HEDGE HOPPER</td>
<td>Moore</td>
<td>IK 92, 109, WB 482, HE 359, TL 272, E 165, HG 298.</td>
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<td><em>Bibasis sena</em></td>
<td>ORANGE-TAIL AWL</td>
<td>Moore</td>
<td>IK 63, 102, WB 469, HE 320, TL 231; UR 4, HG 252.</td>
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<td><em>Borbo cinnara</em></td>
<td>RICE SWIFT</td>
<td>Wallace</td>
<td>IK 82, 106, WB 486, HE 418, TL 289, E 184, HG 318.</td>
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<td><em>Burara (jaina) fergussoni</em></td>
<td>ORANGE AWLET</td>
<td>de Nicéville</td>
<td>IK 62, 102, WB 468, HE 319, HG 251.</td>
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<tr>
<td><em>Burara (gomata) kanara</em></td>
<td>PALE GREEN AWLET</td>
<td>Evans</td>
<td>WB 469, HE 319, HG 251.</td>
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<td><em>Caltoris (philippina) belli</em></td>
<td>BELL'S SWIFT</td>
<td>Evans</td>
<td>IK 87, 107, WB 485, HE 414, TL 299, HG 330 [= philippina Herrich-Schäffer s. str.? Needs to be checked].</td>
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<tr>
<td><em>Caltoris canaraica</em></td>
<td>KANARA SWIFT</td>
<td>Moore</td>
<td>WB 484, HE 413, TL 298; HG 329.</td>
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<td><em>Celaenorrhinus ambareesa</em></td>
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<td>Moore</td>
<td>IK 68, 103, WB 460, HE 324, TL 238, E 153, HG 261.</td>
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<td><em>Celaenorrhinus fusca</em></td>
<td>TAMIL SPOTTED FLAT</td>
<td>Hampson</td>
<td>WB 460, HE 327, TL 239, E 155, HG 261.</td>
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<td><em>Eriognota thrax</em></td>
<td>PALM REDEYE</td>
<td>Linnaeus</td>
<td>WB 474, HE 373 HG 303.</td>
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<td><em>Gangara thyrsis</em></td>
<td>GIANT REDEYE</td>
<td>Fabricius</td>
<td>IK 91, 109, WB 473, HE 372, TL 275, UR 8, HG 302.</td>
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<td><em>Gerosis bhagava</em></td>
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<td>Moore</td>
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<td><em>Gomalia (elma) albofasciata</em></td>
<td>DAKHANI MARBLED SKIPPER</td>
<td>Moore</td>
<td>WB 466, HE 346, TL 251, E 164, HG 275.</td>
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<td><em>Halpe hindu</em></td>
<td>HINDOSTANI ACE</td>
<td>Evans</td>
<td>WB 480, HE 394, TL 255, E 179, HG 280.</td>
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<td><em>Halpe porus</em></td>
<td>MOORE'S ACE</td>
<td>Mabille</td>
<td>IK 99, 110, WB 481, HE 394, TL 256, HG 281. [KK found it very common on Palnis; = moorei Watson]</td>
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<td><em>Hasora badra</em></td>
<td>MOORE'S AWL</td>
<td>Moore</td>
<td>IK 64, 103, WB 468, HE 314, TL 234, HG 255.</td>
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Hasora chromus Cramer : BLUE BANDED AWL—IK 63, 102, WB 467, HE 316, TL 232, E 188/189, HG 253. [= alexis Fabricius]

Hasora (vitta) indica Evans : PLAIN BANDED AWL—IK 65, 103, WB 468, HE 315, E 187, HG 256. [KK has also found it on the Pambis, after Evans]

Hasora taminatus Hübner : WHITE-BANDED AWL—IK 64, 102, WB 468, HE 316, TL 233, UR 9, HG 254.


*Hyarotis (microsticta) coorga Evans : BRUSH FLITTER—HE 376; HG 299.

Iambrix (salsala) luteipalpus Plotz : CHESTNUT BOB—IK 93, WB 492, HE 364, TL 262, E 167, HG 287.

Matapa aria Moore : MALAY REDEYE—IK 91, 109, WB 473, HE 374, TL 276; UR 11, HG 304.


*Notocrypta (paralysos) mangla Evans : BANDED DEMON—IK 95, 109, WB 489, HE 371, TL 264; HG 289.


*Polytremis lubricans Herrich-Shäffer : CONTIGUOUS SWIFT—IK 85, 107, WB 485, HE 415, TL 295; HG 326.

*Potanthus diana Evans : DECCAN DART—WB 480, HE 403, TL 283, HG 311.


*Psalis (fuligo) subfuscatus Moore : DUSKY PARTWING—IK 93, 109, WB 491, HE 368, TL 263, HG 288. [also known as 'COON']


Tagiades (gana) silvia Evans : SUFFUSED SNOW FLAT—IK 73, 105, WB 461, HE 333, TL 241; E158/159, HG 263.

Tapena (thuaitesi) hampsoni Elwes & Edwards : ANGLED FLAT—IK 70, 104, HE 343, TL 247, AS 1, HG 270.

Taractrocera ceramas Hewitson : TAMIL GRASS DART—IK 78, 106, WB 475, HE 397, TL 278; E 166, HG 306.

**Taractrocera** (ceramas) **oberthueri** Elwes & Edwards: OBERTHÜR’S GRASS DART—IK (78, 106), WB 475, HE 397, TL 278; E 165, HG 306. [ = lynx Moschler]

**Telicota bambusae** Moore: DARK PALM DART—IK 80, 106, WB 478, HE 405, TL 287, E 175, UR1, HG 315.

**Telicota colon** Fabricius: PALE PALM DART—IK 81, WB 478, HE 405, TL 286, E 176, HG 314.

*Thoressa astigmata* Swinhoe: SOUTHERN SPOTTED ACE—IK 100, 110, HE 391; HG 284.


**Udaspes folus** Cramer: GRASS DEMON—IK 96, 109, WB 490, HE 370; TL 266, E 173, HG 292.

**PAPILIONIDAE**

**Graphium** (doson) **eleius** Frühstorfer: DRAVIDIA JAY—IK 120, 147, WB 402, HE 55, FBI 66b, TL 16, E 77, HG 6.

*Graphium* (agamemnon) **menides** Frühstorfer: TAILED JAY—IK 120, 148, WB 404, HE 56, FBI 71b, TL 17, E 78, HG 7.

*Graphium* (antiphates) **naira** Moore: FIVE-BAR SWORDTAIL—IK 121, 148, WB 400, HE 54, FBI 63b, TL 19, HG 9. [= alcibiades Fabricius?]


† **Graphium** (sarpedon) **teredon** C. & R. Felder: TAILLESS BLUEBOTTLE—IK 118, 147. WB 401, HE 55, FBI 65a, TL 15, E 79, HG 5.


**Papilio buddha** Westwood: MALABAR BANDED PEACOCK—IK 137, 156, WB 390, HE 50, FBI 40, TL 14, HG 18.

**Papilio clytia** Linnaeus: DANAID MIME—IK 126, 150, WB 381, HE 47, FBI 25a, TL 5; UR 45/46, HG 10.

**Papilio crino** Fabricius: BANDED PEACOCK—IK 136, 156, WB 389, HE 50, FBI 39, TL 13, E 76, HG 19.

**Papilio (helenus) daksha** Hampson: RED HELEN—IK 129, 151, WB 392, HE 51, FBI 45c, TL 9, E 73, HG 14.

*Papilio demoleus* Linnaeus: LIME SWALLOWTAIL—IK 133, 154, WB 395, HE 52, FBI 54a, TL 6, E 72, HG 11.


*Papilio liomedon* Moore: MALABAR BANDED SWALLOWTAIL—IK 133, 154, WB 394, HE 52, FBI 52, TL 7, HG 12.

**Papilio polymnestor** Cramer: BLUE MORMON—IK 130, 152, WB 383, HE 48, FBI 26a, TL 11, E 75, HG 16.

*Papilio (polytes) romulus* Cramer: BLACK MORMON—IK 127, 150, WB 392, HE 52, FBI 51a, TL 10, E 74, HG 15.

**Papilio (paris) tamilana** Moore: TAMIL PEACOCK—IK 134, 155, WB 388, HE 49, FBI 36a, TL 12, UR 47, HG 17.

**Troides minos** Cramer: SOUTHERN BIRDWING—IK 144, WB 372, HE 42, FBI 1b, TL 1, E 69, HG 1.

**PIERIDAE**

**Appias** (albina) **swinhoei** Moore: SOUTHERN ALBATROSS—IK 176, 193, WB 429, HE 74, FBI 128, TL 30, E 88, HG 39. [see Yata et al., 2010]

**Appias** (lynxida) **latifasciata** Moore: CHOCOLATE ALBATROSS—IK 175, 193, WB 428, HE 74, FBI 127b, TL 29, UR 49, HG 38.

**Appias libythea** Fabricius: STRIPED ALBATROSS—IK 174, 193, WB 427, HE 73, FBI 126a, TL 28, E 87, HG 37.

**Appias** (indra) **shiva** Swinhoe: PLAIN PUFFIN—IK 176, 193, WB 427, HE 73, FBI 125b, TL 27, E 89, HG 36.

Belenois aurora Fabricius: PIONEER—IK 188, 198, WB 425, HE 71, FBI 122b, TL 26, E 82, HG 35.

Catopsilia pomona Fabricius: LEMON EMIGRANT—IK 164, 190, WB 446, HE 75, FBI (165)/166, TL 42, E 90, UR 51-52, HG 20. [= crocale Cramer]

Catopsilia pyranthe Linnaeus: MOTTLED EMIGRANT—IK 164, 190, WB 447, HE 75, FBI 168, TL 43, E 90, HG 21. [= gnoma Fabricius; florella Fabricius is African and not Indian]

†Cepora (nerissa) phryne Fabricius: FIELD GULL—IK 182, 195, WB 421, HE 72, FBI (117a), TL 24, E 84, HG 33.

†Cepora (nadina) remba Moore: FOREST GULL—IK 182, 195, WB 422, HE 72, FBI 118b, TL 5, UR 53, HG 34.

†Colias nilagiriensis C. & R. Felder: NILGIRIS CLOUDED YELLOW—IK 166, WB 454, HE 80, FBI 194b, TL 49, E 93, HG 28.


Colotis danae Fabricius: CRIMSON TIP—IK 169, 191, WB 441, HE 83, FBI 159a, TL 35, E 103, HG 44.


Eurema laeta Boisduval: SPOTLESS GRASS YELLOW—IK 162, 189, WB 452, HE 83, FBI 158, TL 34, FBI 177a, E 95/97, HG 23


*Eurema (andersoni) shimaI Yata & Gaonkar: GAONKAR'S GRASS YELLOW—IK (160), HG (26) (Yata & Gaonkar, 1999).


Hebomoia (glauceps) australis Butler: GREAT ORANGE TIP—IK 172, 192, WB 442, HE 89, FBI 161b, TL 39, E 104, HG 52.


Ixias (pyrene) sesia Fabricius: YELLOW ORANGE TIP—IK 172, 192, WB 437, HE 81, FBI 151b, TL 38, E 85, HG 49.


Riodinidae

LYCAENIDAE


*Acytolepis lilacea* Hampson: HAMPSON'S HEDGE BLUE—WB 274, HE 221, TL 63, E 110, HG 168.

*Amblypodia (anita) dina* Frühstorfer: PURPLE LEAF BLUE—IK 221, 286, WB 317, HE 254, TL 104, E 142, HG 212.


*Arhopala alea* Hewitson: ROSY KANARA OAKBLUE—IK 213, 284, WB 322, HE 262/263, TL 98, HG 204. [ = *canaraica* Moore ]


*Azanus uranus* Butler: DULL BABUL BLUE—IK 264, 294, WB 267, HE 217, TL (300); HG 162.


*Catapaecilma (major) callone* Frühstorfer: BROWN TINSEL—IK 240, 290, WB 351, HE 292, TL 111, E 148, HG 221. [ = *elegans myositina* Frühstorfer ]

*Catashaexys (panormus) exiguus* Distant: SILVER FORGET-ME-NOT—IK 259, WB 289, HE 236, HG 183.


*Chilades lajus* Stoll: LIME BLUE—IK 275, WB 284, HE 233, TL 72, E 115, HG 177. [ = *laius* ]


*Chiliaria nilgirica* Moore: NILGIRI TIT—WB 354, HE 293, TL 126, E 146, HG 236.


*Curetis siva* Evans: SHIVA'S SUNBEAM—IK 251, WB 315, TL 139, HG 249.


Everes (lacturnus) syntala Cantlie: INDIAN CUPID—IK 266, 294, WB 270, HE 219, TL 60, E 123, UR18, HG 164.


Iraota (timoleon) arsaces Frühstorfer: SILVER-STREAK BLUE—IK 222, 286, WB 316, HE 254, TL 103, UR 20, HG 211.


*Jamides (alecto) eursaces Frühstorfer: METALLIC CERULEAN—IK 258, WB 293, HE 238, TL 81, E 131, HG 187.


*Petrelaea dana de Nicéville: DINGY LINEBLUE—IK 252, 292, WB 298, HE 244, TL 92, HG 198.


†Prosotas (dubiosa) indica Evans: TAIL-LESS LINEBLUE—IK 256, 293, WB 298, HE 243, TL 90, UR 22, HG 196.


*Rapala iarbus Fabricius: INDIAN RED FLASH—IK 237, WB 362, HE 299, TL 133, UR 27, HG 243. (= melampus Cramer; 'jarbas, iarbas')

*Rapala lankana Moore: MALABAR FLASH—IK 239, WB 362, HE 297, TL 134, HG 244.


†Talicada nyseus* Guérin-Méneville: RED PIERROT—IK 266, 294, WB 257, HE 214, TL 95, E 124, HG 199.


Tarucus nara Kollar: STRIPED PIERROT—IK 260, 293, WB 264, HE 216, TL 55, HG 156.

†Thaduka (multicaudata) kanara* Evans: MANY-TAILED OAKBLUE—IK 220, 285, WB 318, HE 255, TL 109, HG 208. [ KK’s unpublished record from Palni lowlands ]

†Udara (akasa) mavisa Frühstorfer: WHITE HEDGE BLUE—IK 270, WB 275, HE 223, TL 61, E 112, HG 165.


Zesius chrysomallus Hübner: RED SPOT—IK 221, WB 335, HE 279, TL 117, UR 36, HG 227.


NYMPHALIDAE

APATURINAE

Euripus (consimilis) meridionalis Wood-Mason: SAHYADRIS COURTESAN—IK 397, 442, WB 157, HE 147, TL 221, E 33, HG 97.

†Rohana (parisatis) atacinus Frühstorfer: BLACK PRINCE—IK 397, WB 155, HE 147, TL 220, E 32, HG 96.

BIBLIDINAE

†Ariadne (ariadne) indica Linnaeus: ANGLED PLAINS CASTOR—IK 393, WB 231, HE 191, TL 178, E 63, HG 120.

Ariadne merione Cramer: ROUNDED HILL CASTOR—IK 394, WB 232, HE 191, TL 179, E 64, HG 121.

CHARAXINAE

Charaxes (psaphon) imna Butler: TAWNHY RAJAH—IK 313, 417, WB 144, HE 141, TL 225, E 29, HG 86. [ = bernardus Kollar ]


CYRESTINAE


DANAINAE

Danaus chrysippus Linnaeus: PLAIN TIGER—IK 302, 413, WB 69, HE 88, FBI 206, TL 149, E 3, HG 143.

Danaus genutia Cramer: STRIPED TIGER—IK 301, 413, WB 69, HE 88, FBI 207, TL 142, E 2, HG 144.

Euploea core Cramer: INDIAN BLACK CROW—IK 307, 415, WB 73, HE 92, FBI 235c, TL 150, E 10, HG 147.

Euploea (sylvestre) coreta Godart: DOUBLE-BRANDED BLACK CROW—IK 305, 414, WB 73, HE 94, FBI 230b, TL 142, E 8, HG 146.

Euploea (klugii) kollari C & R Felder: BROWN KING CROW—IK 305, 414, WB 73, HE 92, FBI 235c, TL 150, E 10, HG 147.

Idea malabarica Moore: MALABAR TREE NYMPH—IK 309, WB 64, HE 85, FBI 202a, TL 147, E 1, HG 148.

†Parantica aglea Stoll: PALE GLASSY TIGER—IK 303, 413, WB 65, HE 86, FBI 213a, TL 145, E 6, HG 139.

†Parantica nilgiriensis Moore: NILGIRIS TIGER—IK 304, 414, WB 66, HE 87, FBI 219, TL 146, E 7, HG 140.

Tirumala (septentrionalis) draavidarum Frühstorfer: DARK BLUE TIGER—IK 301, WB 68, HE 87, FBI 211b, TL 144, E 4, HG (142).

†Tirumala (linniae) exoticus Gmelin: PALE BLUE TIGER—IK 300, WB 67, HE 87, FBI 210, TL 143, E 5, HG 141.

HELICONIINAE

†Argynnis castetsi Oberholser: PALNIS FRITILLARY—IK 359, 432, WB 220, HE 182, TL 184, E 60, HG 95.

Cethosia mahratta Moore: MARATHA LACEWING—IK 358, 431, WB 229, HE 190, TL 185, UR 39, HG 89.


Vindula (erota) saloma Swinhoe: CRUISER—IK 361, 432, WB 227, HE 188, TL 183, E 57, HG 90.

LIBYTHEINAE

†Libythea (myrrha) carma Frühstorfer: CLUB BEAK—13, IK 299, 4WB 238, HE 194, TL 228, E 67, HG 123.

LIMENITIDINAE


*Dophla (evelina) laudabilis* Swinhoe: RED-SPOT DUKE—IK 388, 440, WB 172, HE 157, TL 218, UR 41, HG 118.


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<td>† <em>Lethe (rohria) neelgheriensis</em></td>
<td>Guérin-Méneville</td>
<td>INDIAN TREEBROWN—IK 324, 422, WB 93, HE 105, FBI 293b, TL 155, E 19, HG 61.</td>
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<td>† <em>Lethe (drypetis) todara</em></td>
<td>Hewitson</td>
<td>TAMIL TREEBROWN—IK 325, 422, WB 93, HE 105, FBI 294b, TL 156, E 18, HG 60.</td>
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<td>Linnaeus</td>
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<td>Moore</td>
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<td><em>Mycalesis (patnia) junonia</em></td>
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<td>Moore</td>
<td>MEDUS BROWN—WB 120, HE 123, FBI 393b, TL 167, E 17, HG 73. (= 'NIGGER')</td>
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<td>† <em>Parantirrhoea marshalli</em></td>
<td>Wood-Mason</td>
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<td><em>Ypthima ceylonica</em></td>
<td>Hewitson</td>
<td>WHITE FOUR-RING—IK 352, 430, WB 115, HE 121, FBI 380a, TL 170, E 24, G 76.</td>
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<td>† <em>Ypthima huebneri</em></td>
<td>Kirby</td>
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<tr>
<td>† <em>Ypthima (baldus) madrasa</em></td>
<td>Evans</td>
<td>HINDOSTAN FIVE-RING—IK 352, 430, WB 117, HE 122, FBI 385b, TL 173, E 20, HG 79.</td>
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<td><em>Ypthima (asterope) mahratta</em></td>
<td>Moore</td>
<td>REGULAR THREE-RING—IK 351, 430, WB 115, HE 120, FBI 376, TL 169, HG 75.</td>
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EHA’s Tailpiece . . .

“But butterfly-hunting is a means, not an end. The end is to know them, to become intimate with them, so that, as you move about the garden, or lie dreaming.

"Modo sub antique ilice,
Modo in tenaci gramine
Labuntur altis interim ripis aquae,
Queruntur in silvis aves,"

Each gay pleasure-hunter that flits by you may be an acquaintance with a character and an individuality of its own. These are just the situations that butterflies revel in, where rippling water runs among shady trees, and Art has let Nature alone. Well-kept gardens are a nuisance in their estimation; for nearly all the operations of the gardener are directly contrary to the interests of the butterfly. He pulls up the weeds on which the caterpillar should feed, or destroys the caterpillar itself; he introduces strange and unknown plants of suspicious flavours, and, above all, he cultivates double flowers, in which all the parts where the sweet drop of nectar should lie are turned into unprofitable petals. Every double flower is an abomination to butterflies. On the other hand, dry plains and fields afford them no sustenance, and wind discomposes them. But seek some retired valley, or hollow among hills, in the month of October, when weed and thorn-bush and waving creeper are in bloom, and the sun is hot, and the air is moist, and you will preside at a durbar. The lordly swallow-tail will sail past, the little whites and yellows will flutter carelessly from flower to flower, the huge orange-tipped white, hurrying by, will yield to temptation, and pause for a moment on a little blossom which looks insignificant, perhaps, but tastes most exquisite to the connoisseur’s palate, diadema and junonia will display their glories, danaïs and euploea will float with easy grace on the air, and perhaps a bold leaf-butterfly will pass with the flight of a strong-winged pigeon, the blue sheen of its wings glancing in the sun, until it plunges into some withered bush, and not an eye can distinguish its motionless form from any of the dead leaves around it. And when the afternoon is drawing on, then many a rich hair-streak will appear, and, taking its station in the middle of a large leaf, will open its wings just a little, and give you a peep of the dazzling blue within. By sunset all these will be sound asleep, and then the richly pencilled brown butterflies of the twilight will come out and dance their fairy dances about the roots of some dark tree.”