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BUTTERFLIES OF KERALA AGRICULTURAL UNIVERSITY (KAU) CAMPUS, THRISSUR, KERALA, INDIA

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Butterflies are sensitive biota, which get severely affected by environmental variations and changes in forest structure (Pollard 1991). They form an important part of the food chain of birds, reptiles, amphibians, spiders and predatory insects. They also respond to disturbances and changes in the quality of habitat, and are thus a good indicator species to evaluate changes in habitat and landscape structure variations (Kremen 1992; Kocher & Williams 2000). Butterflies and their caterpillars are dependent on specific host plants for food, thus the diversity of butterflies indirectly reflects overall plant diversity especially that of shrubs and herbs in the given area (Padhye et al. 2006). Most of them are strictly seasonal and prefer only particular set of habitats (Kunte 1997).

India has around 1,501 species of butterflies, out of which 334 species are reported from the Western Ghats and 37 species are endemic to the Western Ghats (Evans 1932; Kunte 2000). Of the 334 species of butterflies of Western Ghats, 316 species have been reported from Kerala (Palot et al. 2012).

Very little documentation has been done on butterfly fauna in Kerala. Some of the earlier documentation on butterfly fauna from Kerala and adjacent areas include Mathew & Rahamathulla (1993), who had reported 100 species of butterflies from Silent Valley National Park, Sudheendrakumar et al. (2000), who reported 124 species of butterflies from Parambikulam Wildlife Sanctuary, Arun (2003), reported 75 species from Siruvani Reserved Forests, Ambrose & Raj (2005) reported 24 species from Kalakkad-Mundanthurai Tiger reserve, Eswaran & Pramod (2005) reported 75 species from Anaikatty near Coimbatore, Prasad et al. (2010) recorded 52 species from Kerala University campus, Thiruvananthapuram, while Toms et al. (2010) reported 109 species from Mahatma Gandhi University campus, Kottayam. In the present study, an attempt has been made to document the richness of butterflies in Kerala Agricultural University (KAU) campus and the findings are presented in this paper.

Study area: The Kerala Agricultural University (KAU) main campus is located at Vellanikkara, Thrissur District, Kerala (Fig. 1). The area lies between 10°32'–10°33'N and 76°16'–76°17'E and is located very close to the Peechi-Vazhani Wildlife Sanctuary, Western Ghats, the aerial distance of which is not more than 5km. The campus has a total area of 391.44ha. and the major habitats include garden lands, botanical garden, plantations of rubber, coconut, plantain, cocoa and orchards of mango, jackfruit, sapota and guava. KAU campus enjoys a moderate climate. The ten-year mean minimum

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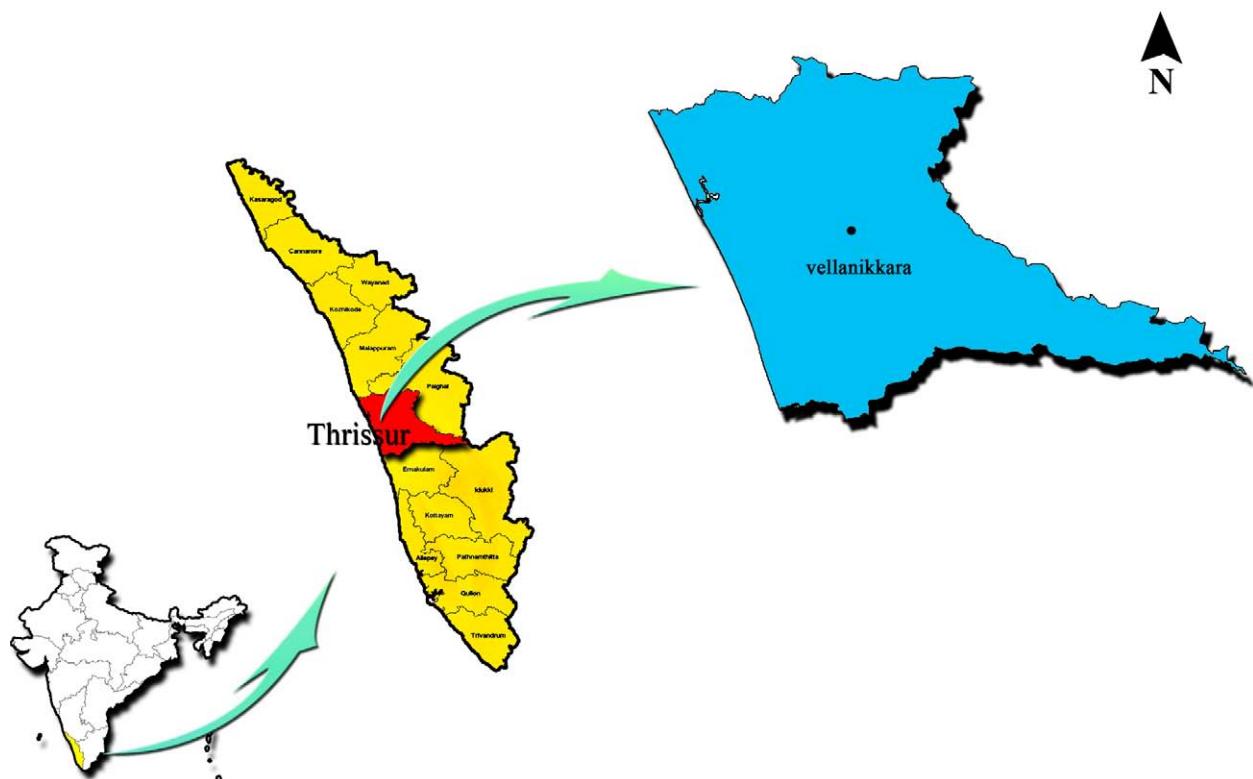


Figure 1. Location map of Kerala Agricultural University campus, Vellanikkara, Thrissur

temperature is 23.3°C and ten-year mean maximum of 31.8°C. The area receives south-west and north-east monsoons, the greater portion of the rainfall, however is received from the south-west monsoon between June and September. The mean annual rainfall is 2763mm. The mean number of rainy days per year is 110 days (KAU weather station, 2010).

Methods: The butterfly fauna of the campus was surveyed from November 2009 to December 2011. The whole campus was divided into two broad habitats such as plantations (rubber, cocoa, banana and fruit orchards) with an area of 89.65ha and natural habitats having an area of 301.79ha. These two habitats were surveyed on foot at least once a week. The butterfly species were also photo-documented during the study period. Species identity was confirmed with the help of the field guides by Kunte (2000) and Kehimkar (2008), taxonomy and nomenclature have been updated after Kunte et al. (2011). Butterflies observed were categorized into five groups based on their abundance during the period of study. Accordingly, those species observed 80–100 % of the survey days were categorized as very common (VC), 60–80 % as common (C), 40–60 % as occasional (O), 20–40% as rare (R) and below 20% as very rare (VR).

Results and Discussion: A total of 139 species of butterflies belonging to six families were identified from the KAU campus, including four species that are endemic to the Western Ghats and nine species protected under various schedules of the Indian Wildlife (Protection) Act, 1972 (Table 1).

The family-wise distribution of butterflies of KAU campus is given in Fig. 2. Family Nymphalidae (brush-footed butterflies) dominated the butterfly fauna of KAU campus with 44 species followed by Lycaenidae (blues) 35 species, Hesperiidae (skippers) 34 species, Pieridae (whites and yellows) 13 species, Papilionidae (swallow-tails) 12 species, and Riodinidae (judies and punches) with a single species.

Among the two broad habitat types at KAU, species richness was found to be more in natural areas with 124 species followed by plantations (98) (Fig. 3). Habitat preferences of butterfly families (Fig. 4) also show that the natural habitats have more number of species when compared to the man-modified habitats.

This observation is quite significant and it emphasizes the importance of University campuses in the conservation of biological diversity of a region.

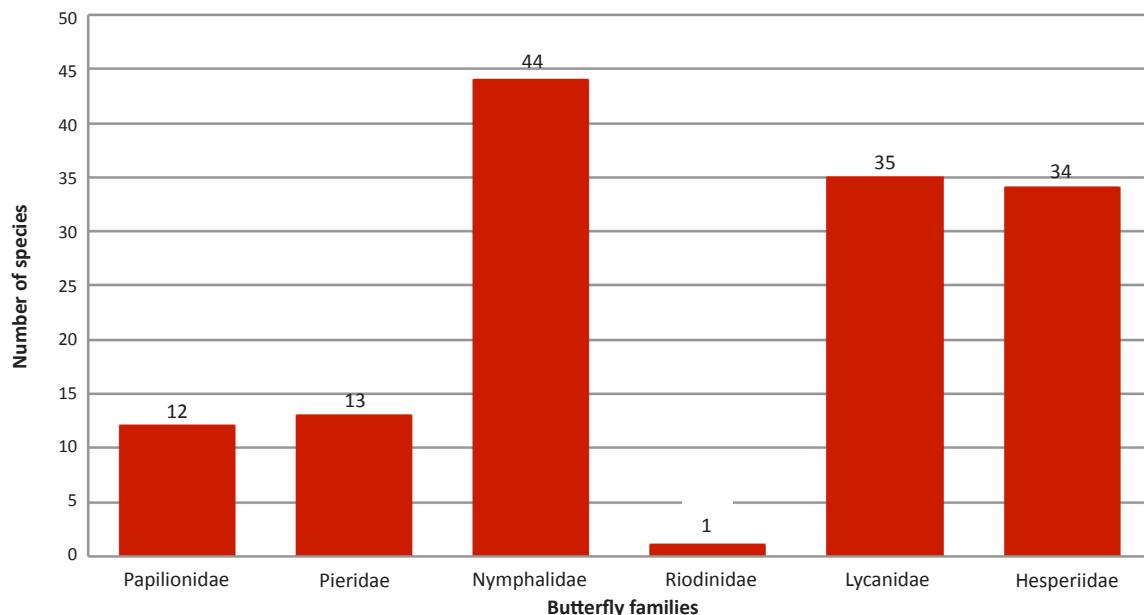


Figure 2. Family wise distribution of butterfly species in Kerala Agricultural University campus

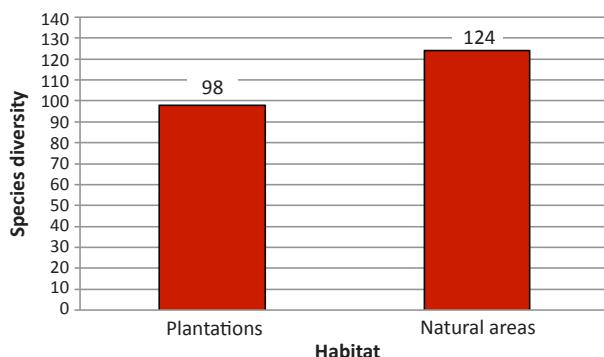


Figure 3. Butterfly species in the different habitats at Kerala Agricultural University campus

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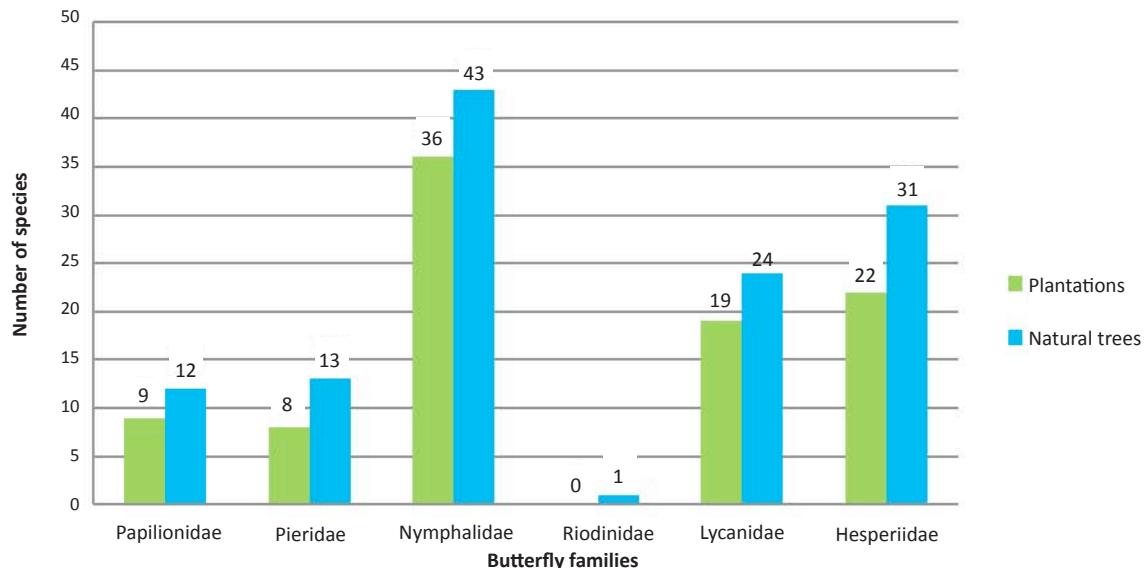


Figure 4. Habitat preference of the butterfly families at Kerala Agricultural University campus

Table 1. Checklist of butterflies of Kerala Agricultural University campus, Thrissur, Kerala

	Scientific name	Common name	Family	Subfamily	Status in IWPA 1972	Relative Abundance
1	<i>Troides minos</i> ** (Image 1)	Southern Birdwing	Papilionidae	Papilioninae		C
2	<i>Pachliopta aristolochiae aristolochiae</i> (Image 112)	Common Rose	Papilionidae	Papilioninae		O
3	<i>Pachliopta hector</i> (Image 2)	Crimson Rose	Papilionidae	Papilioninae	Schedule I	O
4	<i>Graphium sarpedon sarpedon</i> (Image 3)	Common Bluebottle	Papilionidae	Papilioninae		VR
5	<i>Graphium doson eleius</i> (Image 4)	Common Jay	Papilionidae	Papilioninae		R
6	<i>Graphium agamemnon menides</i> (Image 5)	Tailed Jay	Papilionidae	Papilioninae		C
7	<i>Papilio clytia clytia</i> (Image 6)	Common Mime	Papilionidae	Papilioninae		VR
8	<i>Papilio demoleus demoleus</i> (Image 7)	Lime Butterfly	Papilionidae	Papilioninae		C
9	<i>Papilio dravidarum</i> ** (Image 8)	Malabar Raven	Papilionidae	Papilioninae		VR
10	<i>Papilio helenus daksha</i> (Image 9)	Red Helen	Papilionidae	Papilioninae		VR
11	<i>Papilio polytes romulus</i> (Image 11)	Common Mormon	Papilionidae	Papilioninae		C
12	<i>Papilio polymnestor polymnestor</i> (Image 10)	Blue Mormon	Papilionidae	Papilioninae		O
13	<i>Catopsilia pomona pomona</i> (Image 12)	Common Emigrant	Pieridae	Coliadinae		VC
14	<i>Catopsilia pyranthe pyranthe</i>	Mottled Emigrant	Pieridae	Coliadinae		C
15	<i>Eurema hecate hecate</i> (Image 13)	Common Grass Yellow	Pieridae	Coliadinae		VC
16	<i>Eurema brigitta rubella</i> (Image 14)	Small Grass yellow	Pieridae	Coliadinae		O
17	<i>Eurema blanda silhetana</i> (Image 15)	Three-spot Grass Yellow	Pieridae	Coliadinae		O
18	<i>Delias eucharis</i> (Image 16)	Common Jezebel	Pieridae	Pierinae		O
19	<i>Prioneris sita</i> (Image 113)	Painted Sawtooth	Pieridae	Pierinae	Schedule IV	VR
20	<i>Cepora nerissa phryne</i> (Image 17)	Common Gull	Pieridae	Pierinae		R
21	<i>Belenois aurota aurota</i> (Image 18)	Pioneer	Pieridae	Pierinae		O
22	<i>Leptosia nina nina</i> (Image 19)	Psyche	Pieridae	Pierinae		VC
23	<i>Appias lyncida latifasciata</i> (Image 20)	Chocolate Albatross	Pieridae	Pierinae	Schedule II	R
24	<i>Hebomoia glaucippe australis</i> (Image 114)	Great Orange Tip	Pieridae	Pierinae		O

	Scientific name	Common name	Family	Subfamily	Status in IWPA 1972	Relative Abundance
25	<i>Pareronia hippie hippia</i> (Image 21)	Common Wanderer	Pieridae	Pierinae		VR
26	<i>Melanitis leda leda</i> (Image 22)	Common Evening Brown	Nymphalidae	Satyrinae		VC
27	<i>Elymnias hypermnestra undularis</i> (Image 23)	Common Palmfly	Nymphalidae	Satyrinae		C
28	<i>Lethe europa europa</i> (Image 24)	Bamboo Treebrown	Nymphalidae	Satyrinae		O
29	<i>Lethe drypetis todara</i> (Image 25)	Tamil Treebrown	Nymphalidae	Satyrinae		R
30	<i>Mycalesis perseus tabitha</i> (Image 26)	Common Bushbrown	Nymphalidae	Satyrinae		VC
31	<i>Orsotriaena medus mandata</i> (Image 27)	Nigger	Nymphalidae	Satyrinae		C
32	<i>Ypthima huebneri</i> (Image 28)	Common Four-ring	Nymphalidae	Satyrinae		VC
33	<i>Ypthima baldus madrasa</i> (Image 29)	Common Five-ring	Nymphalidae	Satyrinae		O
34	<i>Charaxes athamas athamas</i> (Image 115)	Common Nawab	Nymphalidae	Charaxinae		R
35	<i>Charaxes bernardus</i>	Tawny Rajah	Nymphalidae	Charaxinae		VR
36	<i>Charaxes solon solon</i> (Image 30)	Black Rajah	Nymphalidae	Charaxinae		VR
37	<i>Acraea violae</i> (Image 31)	Tawny Coster	Nymphalidae	Heliconiinae		VC
38	<i>Vindula erota saloma</i>	Cruiser	Nymphalidae	Heliconiinae		R
39	<i>Cupha erymanthis maja</i> (Image 32)	Rustic	Nymphalidae	Heliconiinae		C
40	<i>Phalanta phalantha phalantha</i> (Image 33)	Common Leopard	Nymphalidae	Heliconiinae		O
41	<i>Phalanta alcippe mercea</i> (Image 34)	Small Leopard	Nymphalidae	Heliconiinae		O
42	<i>Cirrochroa thais thais</i> (Image 35)	Tamil Yeoman	Nymphalidae	Heliconiinae		O
43	<i>Neptis jumbah nalanda</i> (Image 36)	Chestnut-Streaked Sailer	Nymphalidae	Limenitidinae		O
44	<i>Neptis hylas varmona</i> (Image 37)	Common Sailer	Nymphalidae	Limenitidinae		VC
45	<i>Pantoporia hordonia hordonia</i> (Image 38)	Common Lascar	Nymphalidae	Limenitidinae		C
46	<i>Athyma ranga karwara</i> (Image 39)	Blackvein Sergeant	Nymphalidae	Limenitidinae	Schedule II	R
47	<i>Limenitis procris</i> (Image 40)	Commander	Nymphalidae	Limenitidinae		O
48	<i>Parthenos sylvia virens</i> (Image 41)	Clipper	Nymphalidae	Limenitidinae	Schedule II	O
49	<i>Tanaecia lepidea miyana</i> (Image 42)	Grey Count	Nymphalidae	Limenitidinae	Schedule II	O
50	<i>Euthalia aconthea meridionalis</i> (Image 43)	Common Baron	Nymphalidae	Limenitidinae		O
51	<i>Ariadne ariadne indica</i> (Image 44)	Angled Castor	Nymphalidae	Biblidinae		VC
52	<i>Ariadne merione merione</i> (Image 45)	Common Castor	Nymphalidae	Biblidinae		VC
53	<i>Junonia hirta hirta</i> (Image 46)	Yellow Pansy	Nymphalidae	Nymphalinae		VR
54	<i>Junonia orithya swinhonis</i> (Image 47)	Blue Pansy	Nymphalidae	Nymphalinae		VR
55	<i>Junonia lemonias lemonias</i> (Image 48)	Lemon Pansy	Nymphalidae	Nymphalinae		C
56	<i>Junonia almanac almana</i> (Image 49)	Peacock Pansy	Nymphalidae	Nymphalinae		C
57	<i>Junonia atlites atlites</i> (Image 50)	Grey Pansy	Nymphalidae	Nymphalinae		VC
58	<i>Junonia iphita iphita</i> (Image 51)	Chocolate Pansy	Nymphalidae	Nymphalinae		VC
59	<i>Hypolimnas misippus</i> (Image 52)	Danaid Eggfly	Nymphalidae	Nymphalinae	Schedule I	C
60	<i>Hypolimnas bolina jacintha</i> (Image 53)	Great Eggfly	Nymphalidae	Nymphalinae		C
61	<i>Kaniska canace viridis</i> (Image 116)	Blue Admiral	Nymphalidae	Nymphalinae		R
62	<i>Parantica aglea aglea</i> (Image 117)	Glossy Blue Tiger	Nymphalidae	Danainae		O
63	<i>Tirumala limniace exotica</i> (Image 54)	Blue Tiger	Nymphalidae	Danainae		O
64	<i>Tirumala septentrionis dravidarum</i> (Image 55)	Dark Blue Tiger	Nymphalidae	Danainae		O
65	<i>Danaus chrysippus chrysippus</i> (Image 56)	Plain Tiger	Nymphalidae	Danainae		C
66	<i>Danaus genutia genutia</i> (Image 57)	Striped Tiger	Nymphalidae	Danainae		C
67	<i>Euploea core core</i> (Image 58)	Common Crow	Nymphalidae	Danainae		VC

	Scientific name	Common name	Family	Subfamily	Status in IWPA 1972	Relative Abundance
68	<i>Euploea sylvester coreta</i>	Double Branded Crow	Nymphalidae	Danainae		O
69	<i>Euploea klugii kollarji</i> (Image 59)	Brown King Crow	Nymphalidae	Danainae		R
70	<i>Abiserae cherius</i> (Image 60)	Plum Judy	Riodinidae	Nemeobiinae		R
71	<i>Spalgis epius epeus</i> (Image 61)	Apefly	Lycaenidae	Miletinae		R
72	<i>Castalius rosimon rosimon</i> (Image 62)	Common Pierrot	Lycaenidae	Polyommatinae		VC
73	<i>Caleta caleta decidia</i> (Image 63)	Angled Pierrot	Lycaenidae	Polyommatinae		R
74	<i>Discolampa ethion ethion</i> (Image 64)	Banded Blue Pierrot	Lycaenidae	Polyommatinae		C
75	<i>Chilades pandava pandava</i> (Image 65)	Plains Cupid	Lycaenidae	Polyommatinae		O
76	<i>Acytolepis puspa felderri</i> (Image 66)	Common Hedge Blue	Lycaenidae	Polyommatinae		C
77	<i>Neopithecops zalmora dharma</i> (Image 67)	Quaker	Lycaenidae	Polyommatinae		C
78	<i>Zizina otis indica</i> (Image 68)	Lesser Grass Blue	Lycaenidae	Polyommatinae		C
79	<i>Zizula hylax hylax</i> (Image 69)	Tiny Grass Blue	Lycaenidae	Polyommatinae		C
80	<i>Pseudozizeeria maha ossa</i> (Image 70)	Pale Grass Blue	Lycaenidae	Polyommatinae		R
81	<i>Zizeeria karsandra</i>	Dark Grass Blue	Lycaenidae	Polyommatinae		R
82	<i>Euchrysops nejus cnejus</i> (Image 71)	Gram Blue	Lycaenidae	Polyommatinae	Schedule II	VC
83	<i>Freyeria putli</i> (Image 72)	Grass Jewel	Lycaenidae	Polyommatinae		C
84	<i>Lampides boeticus</i> (Image 73)	Pea Blue	Lycaenidae	Polyommatinae	Schedule II	VR
85	<i>Jamides celeno celeno</i> (Image 74)	Common Cerulean	Lycaenidae	Polyommatinae		C
86	<i>Jamides bochus bochus</i>	Dark Cerulean	Lycaenidae	Polyommatinae		VR
87	<i>Jamides alecto eurysaces</i>	Metallic Cerulean	Lycaenidae	Polyommatinae		VR
88	<i>Prosotas nora airdates</i> (Image 75)	Common Line-blue	Lycaenidae	Polyommatinae		VR
89	<i>Talicada nyseus nyseus</i> (Image 76)	Red Pierrot	Lycaenidae	Polyommatinae		R
90	<i>Anthene lycaenina lycaenina</i> (Image 77)	Pointed Ciliate blue	Lycaenidae	Polyommatinae		R
91	<i>Azanusu baldus</i>	Bright Babul Blue	Lycaenidae	Polyommatinae		VR
92	<i>Chilades lajus lajus</i> (Image 78)	Lime Blue	Lycaenidae	Polyommatinae		C
93	<i>Leptotes plinius plinius</i> (Image 118)	Zebra Blue	Lycaenidae	Polyommatinae		C
94	<i>Arhopala pseudocentaurus</i> (Image 79)	Western Centaur Oakblue	Lycaenidae	Theclinae		R
95	<i>Surendra querctorum biplagiata</i> (Image 80)	Common Acacia Blue	Lycaenidae	Theclinae		R
96	<i>Spinda sisvulcanus vulcanus</i> (Image 81)	Common Silverline	Lycaenidae	Theclinae		C
97	<i>Spindasis elima</i> (Image 82)	Scarce Shot Silverline	Lycaenidae	Theclinae		R
98	<i>Loxura atymnus atymnus</i> (Image 83)	Yamfly	Lycaenidae	Theclinae		O
99	<i>Rapala manea schistacea</i> (Image 84)	Slate Flash	Lycaenidae	Theclinae		O
100	<i>Cheritra freja butleri</i> (Image 85)	Common Imperial	Lycaenidae	Theclinae		VR
101	<i>Rathinda amor</i> (Image 86)	Monkey Puzzle	Lycaenidae	Theclinae		O
102	<i>Zesius chrysomallus</i> (Image 119)	Red Spot	Lycaenidae	Theclinae		R
103	<i>Virachola isocrates</i> (Image 120)	Common Guava Blue	Lycaenidae	Theclinae		C
104	<i>Rachana jalindra macanita</i> (Image 121)	Banded Royal	Lycaenidae	Theclinae		VR
105	<i>Curetis thetis</i> (Image 122)	Indian Sunbeam	Lycaenidae	Curetinae		R
106	<i>Hasora chromus chromus</i> (Image 123)	Common Banded Awl	Hesperiidae	Coeliadinae		R
107	<i>Hasora badra badra</i>	Common Awl	Hesperiidae	Coeliadinae		R
108	<i>Badamia exclamationis</i> (Image 124)	Brown Awl	Hesperiidae	Coeliadinae		O
109	<i>Aeromachus pygmaeus</i> (Image 87)	Pygmy Scrub Hopper	Hesperiidae	Hesperiinae		O
110	<i>Halpe homo</i>	Indian Ace	Hesperiidae	Hesperiinae		R

	Scientific name	Common name	Family	Subfamily	Status in IWPA 1972	Relative Abundance
111	<i>Thoressa honorei</i> **	Madras Ace	Hesperiidae	Hesperiinae		VR
112	<i>Thoressaa stigmata</i> ** (Image 88)	Unbranded Ace	Hesperiidae	Hesperiinae		VR
113	<i>Halpe porus</i> (Image 89)	Moore's Ace	Hesperiidae	Hesperiinae		VR
114	<i>Ampittia dioscorides dioscorides</i> (Image 90)	Bush Hopper	Hesperiidae	Hesperiinae		VC
115	<i>Iambrix salsala luteipalpis</i> (Image 91)	Chestnut Bob	Hesperiidae	Hesperiinae		VC
116	<i>Psolos fuligo subfasciatus</i> (Image 92)	Coon	Hesperiidae	Hesperiinae		C
117	<i>Notocrypta paralylos mangla</i> (Image 93)	Common Banded Demon	Hesperiidae	Hesperiinae		O
118	<i>Notocrypta curvifascia curvifascia</i> (Image 125)	Restricted Demon	Hesperiidae	Hesperiinae		O
119	<i>Udaspes folus</i> (Image 94)	Grass Demon	Hesperiidae	Hesperiinae		O
120	<i>Suastus gremius gremius</i> (Image 95)	Indian Palm Bob	Hesperiidae	Hesperiinae		C
121	<i>Gangara thyrsis thyrsis</i> (Image 96)	Giant Red-eye	Hesperiidae	Hesperiinae		O
122	<i>Matapa aria</i> (Image 97)	Common Red-eye	Hesperiidae	Hesperiinae		C
123	<i>Taractro ceramaevius</i> (Image 98)	Common Grass Dart	Hesperiidae	Hesperiinae		O
124	<i>Taractro ceraceramas nicevillei</i>	Tamil Grass Dart	Hesperiidae	Hesperiinae		R
125	<i>Telicota colon colon</i> (Image 99)	Pale Palm Dart	Hesperiidae	Hesperiinae		O
126	<i>Telicota ancilla</i> (Image 100)	Dark Palm Dart	Hesperiidae	Hesperiinae		O
127	<i>Borbo bevani</i> (Image 101)	Bevan's Swift	Hesperiidae	Hesperiinae		VR
128	<i>Borbo cinnara</i> (Image 102)	Rice Swift	Hesperiidae	Hesperiinae		VC
129	<i>Pelopidas mathias mathias</i> (Image 103)	Small Branded Swift	Hesperiidae	Hesperiinae		O
130	<i>Pelopidas conjunctanarooa</i>	Conjoined Swift	Hesperiidae	Hesperiinae		O
131	<i>Tagiades gana silvia</i> (Image 104)	Suffused Snow Flat	Hesperiidae	Pyrginae		O
132	<i>Tagiades litigiosa litigiosa</i> (Image 105)	Water Snow Flat	Hesperiidae	Pyrginae		O
133	<i>Gerosis bhagava bhagava</i> (Image 106)	Common Yellow-breasted Flat	Hesperiidae	Pyrginae		R
134	<i>Pseudocoladenia dan dan</i> (Image 107)	Fulvous Pied Flat	Hesperiidae	Pyrginae		O
135	<i>Coladenia indrani indra</i> (Image 108)	Tricoloured Pied Flat	Hesperiidae	Pyrginae		VR
136	<i>Sarangesa dasahara dasahara</i> (Image 109)	Common Small Flat	Hesperiidae	Pyrginae		C
137	<i>Celaenorrhinus leucocera</i>	Common Spotted Flat	Hesperiidae	Pyrginae		O
138	<i>Odontoptilum ransonnetii potiphera</i> (Image 110)	Golden Angle	Hesperiidae	Pyrginae		R
139	<i>Spialia galba</i> (Image 111)	Indian Grizzled Skipper	Hesperiidae	Pyrginae		C

** Endemic to Western Ghats; VC- Very Common; C-Common; O-Occasional; R-Rare; VR- Very Rare

Image 1. *Troides minos* Southern BirdwingImage 2. *Pachliopta hector* Crimson RoseImage 3. *Graphium sarpedon* Common BluebottleImage 4. *Graphium doson* Common JayImage 5. *Graphium agamemnon* Tailed JayImage 6. *Papilio clytia* Common MimeImage 7. *Papilio demoleus* Lime ButterflyImage 8. *Papilio dravidarum* Malabar RavenImage 9. *Papilio helenus* Red HelenImage 10. *Papilio polymnestor* Blue MormonImage 11. *Papilio polytes* Common MormonImage 12. *Catopsilia pomona* Common Emigrant



Image 13. *Eurema hecabe* Common Grass Yellow



Image 14. *Eurema brigitta* Small grass yellow



Image 15. *Eurema blanda* Three-spot Grass Yellow



Image 16. *Delias eucharis* Common Jezebel



Image 17. *Cepora nerissa* Common gull



Image 18. *Belenois aurota* Pioneer



Image 19. *Leptosia nina* Psyche



Image 20. *Appias lyncida* Chocolate Albatross



Image 21. *Pareronia hippie* Common Wanderer



Image 22. *Melanitis leda* Common Evening Brown



Image 23. *Elymnias hypermnestra* Common Palmfly



Image 24. *Lethe europa* Bamboo Tree brown



Image 25. *Lethe drypetis* Tamil Tree Brown



Image 26. *Mycalesis perseus* Common Bushbrown



Image 27. *Orsotriaena medus* Nigger



Image 28. *Ypthima huebneri* Common Four-ring



Image 31. *Acraea violae* Tawny Coster



Image 29. *Ypthima baldus* Common Five-ring



Image 30. *Charaxes solon* Black Rajah



Image 32. *Cupha erymanthis* Rustic



Image 33. *Phalanta phalantha* Common Leopard



Image 34. *Phalanta alcippe mercea* Small leopard



Image 35. *Cirrochroa thais* Tamil Yeoman



Image 36. *Neptis jumbah* Chestnut-streaked Sailer



Image 37. *Neptis hylas* Common Sailer



Image 38. *Pantoporia hordonia* Common Lascar



Image 39. *Athyma ranga* Blackvein Sergeant



Image 40. *Limenitis procris* Commander



Image 41. *Parthenos sylvia* Clipper



Image 42. *Tanaecia lepidea* Grey Count



Image 43. *Euthalia aconthea* Common Baron

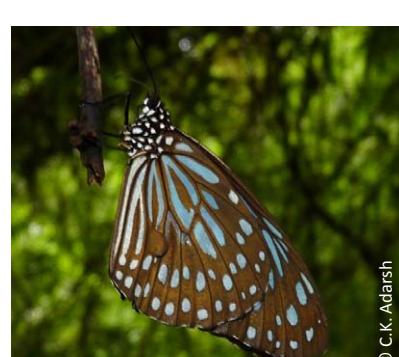
Image 44. *Ariadne ariadne* Angled CastorImage 45. *Ariadne merione* Common CastorImage 46. *Junonia hirta* Yellow PansyImage 47. *Junonia orithya* Blue PansyImage 48. *Junonia lemonias* Lemon PansyImage 49. *Junonia almanac* Peacock PansyImage 50. *Junonia atlites* Grey PansyImage 51. *Junonia iphita* Chocolate PansyImage 52. *Hypolimnas misippus* Danaid EggflyImage 53. *Hypolimnas bolina* Great EggflyImage 54. *Tirumala limniace*-Blue TigerImage 55. *Tirumala septentrionis* Dark Blue Tiger

Image 56. *Danaus chrysippus* Plain TigerImage 57. *Danaus genutia* Striped TigerImage 58. *Euploea core* Common CrowImage 59. *Euploea klugii* Brown King CrowImage 60. *Abisera echerius* Plum JudyImage 61. *Spalgis epius* ApeflyImage 62. *Castalius rosimon* Common PierrotImage 63. *Caleta caleta* Angled PierrotImage 64. *Discolampa ethion* Banded Blue PierrotImage 65. *Chilades pandava* Plains Cupid



Image 66. *Acytolepis puspa* Common Hedge Blue.



Image 67. *Neopithecops zalmora* Quaker



Image 68. *Zizina otis* Lesser Grass Blue



Image 69. *Zizula hylax* Tiny Grass Blue.



Image 70. *Pseudozizeeria maha* Pale grass blue



Image 71. *Euchrysops c nejus* Gram Blue.



Image 72. *Freyeria putli* Grass Jewel



Image 73. *Lampides boeticus* Pea Blue



Image 74. *Jamides celeno* Common Cerulean



Image 75. *Prosotas nora* Common Line-blue



Image 76. *Talicada nyseus* Red Pierrot



Image 77. *Anthene lycaenina* Pointed Ciliate Blue

Image 78. *Chilades lajus* Lime BlueImage 79. *Arhopala pseudocentaurus*
Western Centaur OakblueImage 80. *Surendra querecetorum* Common
Acacia BlueImage 81. *Spindasis vulcanus* Common
SilverlineImage 82. *Spindasis elima* Scarce SilverlineImage 83. *Loxura atymnus* YamflyImage 84. *Rapala manea* Slate FlashImage 85. *Cheritra freja* Common ImperialImage 86. *Rathinda amor* Monkey PuzzleImage 87. *Aeromachus pygmaeus* Pygmy-
scrub HopperImage 88. *Thoressa stigmata* Unbranded
AceImage 89. *Halpe porus* Moore's Ace

Image 90. *Ampittia dioscorides* Bush HopperImage 91. *Iambrix salsa* Chestnut BobImage 92. *Psolos fuligo* CoonImage 93. *Notocrypta paralysos* Common Banded DemonImage 94. *Udaspes folus* Grass Demon.Image 95. *Suastus gremius* Indian Palm BobImage 96. *Gangara thyrsis* Giant Red-eyeImage 97. *Matapa aria* Common Red-eyeImage 98. *Taractro ceramaevius* Common Grass DartImage 99. *Telicota colon* Pale Palm DartImage 100. *Telicota ancilla* Dark Palm DartImage 101. *Borbo bevani* Bevan's Swift

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Image 114. *Hebomoia glaucippe australis*
Great Orange Tip



Image 115. *Charaxes athamas athamas*
Common Nawab



Image 116. *Kaniska canace viridis* Blue
Admiral



Image 117. *Parantica agle aglea* Glassy
Blue Tiger



Image 118. *Leptotes plinius plinius* Zebra
Blue



Image 119. *Zesius chrysomallus* Red Spot



Image 120. *Virachola isocrates* Common
Guava Blue



Image 121. *Rachana jalindra macanita*
Banded Royal



Image 122. *Curetis thetis* Indian Sunbeam



Image 123. *Hasora chromus chromus*
Common Banded Awl



Image 124. *Badamia exclamationis* Brown
Awl



Image 125. *Notocrypta curvifascia*
curvifascia Restricted Demon

