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Butterfly diversity in the different habitats of Vazhachal Athirappilly Reserve Forest

Prepared and submitted by

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Introduction

The habitat of an organism is the place where it lives. Habitats of butterflies are strictly terrestrial. All butterflies are associated with plants and therefore their occurrence depends on the presence of plants and distinct vegetation types. The forest vegetation types such as Ever green, Ever green Shola, Semi ever Green, Riparian, Moist Deciduous forests are particularly important to butterflies. Many of the trees in these forests are used by butterflies either as nectar plants or as larval host plants. Destruction, degradation or fragmentation of these forests are the most worrying causes that endanger butterflies. The present paper is on the butterfly diversity in the different habitats of Vazhachal Athirappilly Reserve forest.

Vazhachal Athirappilly Reserve forest

Vazhachal – Athirappilly reserve forest belongs to the southern region of Western Ghats. The forest division comes under Chalakudy river basin and is known for its rich floral and faunal diversity, riparian species diversity and fish diversity. Vazhachal Reserve Forest is lying between 10°15' - 10° 45' N latitude and 76 ° 35' -76 ° 55' E longitude. Vazhachal-Athirappilly Reserve Forests has been reported for a rare abundance of endemic flora and fauna. Vazhachal Division in the Chalakudy river basin is one of the most important in Kerala in terms of biodiversity potential and has a very high conservation value of around 75 %, considering the floristic species richness, floristic and faunal endemic zone, unique eco systems, and mammal density (IFP, 2000). The Vazhachal Division is also identified as an Important Bird Area (IBA - IN 253). Amitabachan (2010) indicated that the low elevation riparian area possess 80 endemic plants and 24 rare and endangered plant species.. Susanth et. al. (2001) records 231 species of birds in this area. Raju (2007) records 234 species of birds of which 185 species were recorded from the 2 km riparian area upstream to the Vazhachal waterfalls. Of this 12 species are endemic to Western Ghats and 5 belong to globally threatened species. The Chalakudy River is richest in the case of fish diversity. The National Bureau of Fish Genetic Resources has recommended the declaration of the upstream areas of Chalakudy River as potential fish sanctuary taking into consideration the endemic and endangered fish populations inhabiting there (NBFG, 2000). Of the 104 species of fish reported from it, 9 are endangered, 22 are vulnerable and 11 are near threatened.

Butterflies of Athirappilly Vazhachal RF

The Athirappilly Vazhachal RF includes large tracts of tropical rain forests, moist deciduous forest, wet evergreen and semi evergreen forests. The area also consists of a continuous stretch of rich riparian wet evergreen forest. All these habitats support a good butterfly population in the area. 223 butterflies are observed in the study from this area. The findings are based on the butterfly surveys carried out from 1995 to 2012 in different seasons.

Riparian forest and butterflies

Riparian forest , the riverside forests have a special significance for butterflies. These are moister than the surrounding patches and remain lush even in the summers. The butterflies concentrate in the riparian patches during the dry months. During summers these forests are teeming with lots of species. The butterflies assemble here because all the mud puddling sites and nectar sources are available only here in the summers.

Out of the 223 species observed from the Athirappilly Vazhachal Reserve Forest from our field trips and studies 161 species were observed from the rich riparian forest patch of the reserve forest.

Large congregation of 1000's of butterflies were observed in the riverside-mud puddling sites. Mottled emigrants, Chocolate Albatross, Common Albatross, Blue tiger, Dark blue tiger, Stripped Tiger, Double Banded

Crow and Common Crow were the important species in the congregation sites of Chalakudy riverside during the dry summer months. Apart from these species 16 different species of butterflies observed engaged in mud puddling on the riverside in many sites from Vazhachal to Athirappilly. These species were observed along with large congregation of butterflies or as small groups. The species observed engaged in mud puddling were Common Blue Bottle, Common Jay, Malabar banded Swallowtail, Southern Birdwing, Great Orange tip, Plain Puffin, Painted Sawtooth, Common Ciliate Blue, Pointed Ciliate Blue, Angled Pierrot, Banded Blue Pierrot, Common Pierrot, common Line Blue, Dark Pierrot, Quaker and Malayan.

Many riparian plant species are the larval host plants for many species of butterflies. Great Orange tip, Chocolate Albatross, Commander, Painted Sawtooth, Common Gull, Pioneer are some of those butterflies which directly depends on riparian vegetation for the larval host plants.

The observations and butterfly congregations in the area depicts the relevance of the habitat for the butterfly survival. Since most of the butterflies here are more or less dependent on the riparian forest the loss of riparian habitats means a great loss of habitat to butterflies along with other animals and plants.

Butterflies in Ever green, Semi Ever green and Deciduous forests

113 species were recorded from the Evergreen patches of the Reserve forest, 83 species were recorded from the Semi Ever green patches and 72 species were recorded from the Deciduous patches of the reserve forest. 71 species were recorded from the forest clearings and openings associated with these forest patches in the Vazhachal Athirappilly reserve forest.

Habitat	Species No.
Riparian	161
Ever green	113
Semi Ever Green	83
Deciduous	72
Forest Clearing & openings	71

Endemic and rare butterflies observed on the area

Vazhachal-Athirappilly Reserve Forests has been reported for rare abundance of endemic flora and fauna. Out of the 37 endemic butterflies of Western Ghats 21 are observed in the study in Athirappilly Vazhachal RF. The list are given below.

Sl No.	Common name	Scientific Name
1	Malabar Rose	<i>Pachliopta pandiyana</i>
2	Malabar Raven	<i>Papilio dravidarum</i>
3	Malabar Banded Swallowtail	<i>Papilio liomedon</i>

4	Malabar Banded Peacock	<i>Papilio Buddha</i>
5	Lesser Albatross	<i>Appias wardi</i>
6	Shivas Sunbeam	<i>Curetis siva</i>
7	Western Centaur Oak blue	<i>Arhopala pseudocentaurus</i>
8	Tamil Oak blue	<i>Arhopala bazaloides</i>
9	Plane	<i>Bindahara phocides</i>
10	Malabar Flash	<i>Rapala lankana</i>
11	Nilgiri Tiger	<i>Parantica nilgirensis</i>
12	Malabar Tree Nymph	<i>Idea malabarica</i>
13	Travancore Evening Brown	<i>Parantirrhoea marshalli</i>
14	Small Long-brand Bushbrown	<i>Mycalesis igilia</i>
15	Tamil Catseye	<i>Zipaetis saitis</i>
16	Nilgiri Fourring	<i>Ypthima chenui</i>
17	Tamil Spotted Flat	<i>Celaenorrhinus ruficornis</i>
18	Bicolour Ace	<i>Sovia hyrtacus</i>
19	Golden Flitter	<i>Quedara basiflava</i>
20	Madras Ace	<i>Halpe honorei</i>
21	Southern Spotted Ace	<i>Thoressa astigmata</i>

14 species of rare butterflies were recorded from the area. Tamil Oak Blue (*Arhopala bazaloides*) and Blue Nawab (*Polyura Schreiber*) were two of the very rare butterflies observed from the reserve forest. Other rare butterflies include Spot Puffin, Common Banded Peacock, Malabar Banded Peacock, Dark Pierrot, Large 4-Line Blue, Scarce shot Silverline, Malabar Flash, Orchid tit, Travancore Evening Brown, Sullid Sailor, Tamil Dartlet and Maculate Lancer

Threatened species

8 species observed in the area are listed under threatened category according to the IUCN Red data list. Species are listed below.

Common Name	Scientific Name
Southern Birdwing	<i>Troides minos</i>
Malabar Rose	<i>Pachliopta pandiyana</i>
Malabar Raven	<i>Papilio dravidarum</i>

Malabar Banded Swallowtail	<i>Papilio liomedon</i>
Malabar Banded Peacock	<i>Papilio Buddha</i>
Nilgiri Tiger	<i>Parantica nilgirensis</i>
Malabar Tree Nymph	<i>Idea malabarica</i>
Travancore Evening Brown	<i>Parantirrhoea marshalli</i>

Schedule under Indian Wildlife Protection Act.

4 among the 5 butterfly species recorded from Kerala listed in the Schedule I of Indian wildlife protection act are observed in this area. They are

Common Name	Scientific Name
Blue Nawab	<i>Polyura Schreiber</i>
Danaid Eggfly	<i>Hypolimnas misippus</i>
Malabar Banded Swallowtail	<i>Papilio liomedon</i>
Crimson Rose	<i>Pachliopta hector</i>

20 among the 22 butterfly species recorded from Kerala listed in the Schedule II of Indian wildlife Protection Act are observed in this area. They are listed below

Common Name	Scientific Name
Southern Duffer	<i>Discophora lepida</i>
Common Beak	<i>Libythea lepita</i>
Small Leopard	<i>Phalanha alcippe</i>
Common Baron	<i>Euthalia aconthea</i>
Grey count	<i>Tanaecia lepidea</i>
Great Evening Brown	<i>Melantis zitenius</i>
White Bar Bush brown	<i>Mycalesis anaxias</i>
Tamil Oak Blue	<i>Arhopala bazaloides</i>
Pea Blue	<i>Lampides boeticus</i>
Indigo Flash	<i>Papala varuna</i>
Scarce Shot Silverline	<i>Spindasis elima</i>
Long banded Silverline	<i>Spindasis lohita</i>
Peacock royal	<i>Tajuria cippus</i>
Many tailed Oak Blue	<i>Thaduka multicaudata</i>
Malabar Banded Peacock	<i>Papilio Buddha</i>
Common Albarross	<i>Appias albina</i>
Chocalate Albatross	<i>Appias lyncida</i>
Lesser Albatross	<i>Appias wardi</i>
Lesser Gull	<i>Cepora nadina</i>
Common Wanderer	<i>Pareronia valeria</i>

Migratory Species

Butterflies move or migrate from one place to another over a considerable distance for several reasons. These migrations are known to take place mainly due o seasonal changes or shortage of food plants. Vazhachal Athirappilly RF is also a migratory path for butterflies. Migrations of butterflies in December-January and in March –April are observed here. Migration of large numbers of Common Crows, Double –banded Crows, Blue Tigers, Dark Blue tigers, Striped Tigers along with few numbers of Brown King Crows and Common Rose were observed in December- January months. Migration of Albatrosses and emigrants are observed in 1000's of numbers in March-April months and their congregation in large numbers (1000-3000) were seen near the riverside near Vazhachal waterfalls. 28 species among the 223 species observed in the area are known to migrate. List of the migrating species observed in this Reserve forest are given below. Check list of butterflies of Vazhachal –Athirappilly Reserve

Forest is given in table 1 below.

	Migratory species
1.	Brown Awl
2.	Small brandd Swift
3	Lime Butterfly
4	Common Rose
5	Crimson rose
6	Small grass Yellow
7	Common Grass yellow
8	Mottled Emigrant
9	Common Emigrant
10	Stripped Albatross
11	Chocolate albatross
12	Common albatross
13	Common gull
14	Pioneer
15	Dark Cerulean
16	Pea Blue
17	Blue Tiger
18	Dark blue Tiger
19	Stripped Tiger
20	Plain Tiger
21	Glassy Tiger
23	Double-branded Crow
24	Brown King Crow
25	Common Crow
26	Yellow Pansy
27	Chocolate Pansy
28	Great Eggfly

Table 1.

Checklist of Butterflies in Vazhachal -Athirapilly Reserve Forest		
	Common Name	Scientific Name
	Family : Papilionidae : Swallowtails	
1	Southern Birdwing	<i>Troides minos</i>
2	Common Rose	<i>Pachliopta aristolochiae</i>
3	Crimson Rose	<i>Atrophaneura hectar</i>
4	Malabar Rose	<i>Pachliopta pandiyana</i>
5	Common Blue Bottle	<i>Graphium sarpedon</i>
6	Common Jay	<i>Graphium doson</i>
7	Tailed Jay	<i>Graphium Agamemnon</i>
8	Spot Swordtail	<i>Graphium nomius</i>
9	Five-bar Swordtail	<i>Graphium antiphates</i>
10	Common Mime	<i>Papilio clytia</i>
11	Common Mormon	<i>Papilio polytes</i>

12	Malabar Raven	<i>Papilio dravidarum</i>
13	Red Helen	<i>Papilio helenus</i>
14	Blue Mormon	<i>Papilio polymnestor</i>
15	Malabar Banded Swallowtail	<i>Papilio liomedon</i>
16	Lime Butterfly	<i>Papilio demoleus</i>
17	Paris Peacock	<i>Papilio paris</i>
18	Common Banded Peacock	<i>Papilio crino</i>
19	Malabar Banded Peacock	<i>Papilio Buddha</i>
Family : Pieridae : Whites and Yellows		
20	One Spot Grass Yellow	<i>Eurema andersoni</i>
21	Three Spot Grass Yellow	<i>Eurema blanda</i>
22	Small Grass Yellow	<i>Eurema brigitta</i>
23	Common Grass Yellow	<i>Eurema hecabe</i>
24	Spotless Grass Yellow	<i>Eurema laeta</i>
25	Common Emigrant	<i>Catopsilia pomona</i>
26	Mottled Emigrant	<i>Catopsilia pyranthe</i>
27	Great Orange Tip	<i>Hebomoia glaucippe</i>
28	Dark Wanderer	<i>Pareronia ceylanica</i>
29	Common Wanderer	<i>Pareronia valeria</i>
30	Striped Albatross	<i>Appias libythea</i>
31	Chocolate Albatross	<i>Appias lyncida</i>
32	Plain Puffin	<i>Appias indra</i>
33	Common Albatross	<i>Appias albina</i>
34	Spot Puffin	<i>Appias lalage</i>
35	Lesser Albatross	<i>Appias wardi</i>
36	Common Gull	<i>Cepora nerissa</i>
37	Lesser Gull	<i>Cepora nadina</i>
38	Painted Sawtooth	<i>Prioneris sita</i>
39	Common Jezebel	<i>Delias eucharis</i>
40	Psyche	<i>Leptosia nina</i>
41	Pioneer	<i>Belenois aurota</i>
Family : Lycaenidae : Blues		
42	Apefly	<i>Spalgis epius</i>
43	Indian Sunbeam	<i>Curetis thetis</i>
44	Shivas Sunbeam	<i>Curetis siva</i>
45	Western Centaur Oak blue	<i>Arhopala pseudocentaurus</i>
46	Large Oak blue	<i>Arhopala amantes</i>
47	Tamil Oak blue	<i>Arhopala bazaloides</i>
48	Aberrant Oakblue	<i>Arhopala abseus</i>
49	Many-tailed Oakblue	<i>Thaduka multicaudata</i>

50	Common Acacia Blue	<i>Surendra quercetorum</i>
51	Red Spot	<i>Zesius chrysomallus</i>
52	Leaf Blue	<i>Amblypodia anita</i>
53	Silverstreak Blue	<i>Iraota timoleon</i>
54	Yamfly	<i>Loxura atymnus</i>
55	Monkey Puzzle	<i>Rathinda amor</i>
56	Common Imperial	<i>Cheritra freja</i>
57	Peacock Royal	<i>Tajuria cippus</i>
58	Fluffy Tit	<i>Zeltus amasa</i>
59	Orchid Tit	<i>Chilaria othona</i>
60	Plane	<i>Bindahara phocides</i>
61	Indian Red Flash	<i>Rpala airbus</i>
62	Slate Flash	<i>Rapala manea</i>
63	Indigo Flash	<i>Papala varuna</i>
64	Malabar Flash	<i>Rapala lankana</i>
65	Long-banded Silverline	<i>Spindasis lohita</i>
66	Common Silverline	<i>Spindasis vulcanus</i>
67	Plumbeous Silverline	<i>Spindasis schistacea</i>
68	Scarce Shot Silverline	<i>Spindasis elima</i>
69	Common Ciliate Blue	<i>Anthene emolus</i>
70	Pointed Ciliate Blue	<i>Anthene lycaenina</i>
71	Angled Pierrot	<i>Caleta caleta</i>
72	Banded Blue Pierrot	<i>Discolampa ethion</i>
73	Common Pierrot	<i>Castalius rosimon</i>
74	Zebra Blue	<i>Leptotes plinius</i>
75	Large 4-Lineblue	<i>Nacaduba pactolus</i>
76	Transparent 6-Lineblue	<i>Nacaduba kurava</i>
77	Opaque 6-Lineblue	<i>Nacaduba beroe</i>
78	Common Line Blue	<i>Prosotas nora</i>
79	Dark Cerulean	<i>Jamides bochus</i>
80	Common Cerulean	<i>Jamides celeno</i>
81	Metallic Cerulean	<i>Jamides alecto</i>
82	Forget-Me-Not	<i>Catochrysops strabo</i>
83	Pea Blue	<i>Lampides boeticus</i>
84	Dark Pierrot	<i>Tarucus ananda</i>
85	Dark Grass Blue	<i>Zizeeria karsandra</i>
86	Pale Grass Blue	<i>Pseudozizeeria maha</i>
87	Grass Jewel	<i>Freyeria trochylus</i>
88	Lesser Grass Blue	<i>Zisina otis</i>
89	Tiny Grass Blue	<i>Zizula hylax</i>

90	Indian Cupid	<i>Everes lacturnus</i>
91	Red Pierrot	<i>Talicauda nyseus</i>
92	Quaker	<i>Neopithecops zalmora</i>
93	Malayan	<i>Megisba Malaya</i>
94	Gram Blue	<i>Euchrysops cnejus</i>
95	Common Hedge Blue	<i>Acytolepis puspa</i>
96	White Hedge Blue	<i>Udara akasa</i>
97	Large Hedge Blue	<i>Celastrina huegelii</i>
98	Plains Cupid	<i>Chilades pandava</i>
99	Lime Blue	<i>Chilades lajus</i>
100	Plum Judy	<i>Abisara echerius</i>
Family : Nymphalidae : Brush-footed Butterflies		
101	Common Beak	<i>Libythea lepita</i>
102	Blue Tiger	<i>Tirumala limniace</i>
103	Dark Blue Tiger	<i>Tirumala septentrionis</i>
104	Striped Tiger	<i>Danaus genutia</i>
105	Plain Tiger	<i>Danaus chrysippus</i>
106	Glassy tiger	<i>Parantica aglea</i>
107	Nilgiri Tiger	<i>Parantica nilgirensis</i>
108	Double-branded Crow	<i>Euploea Sylvester</i>
109	Brown King Crow	<i>Euloea klugii</i>
110	Common Crow	<i>Euploea core</i>
111	Malabar Tree Nymph	<i>Idea malabarica</i>
112	Common Nawab	<i>Polyura athmas</i>
113	Anomalous Nawab	<i>Polyura agrarian</i>
114	Blue Nawab	<i>Polyura Schreiber</i>
115	Tawny Rajah	<i>Charaxes bernadus</i>
116	Black Rajah	<i>Charaxes solon</i>
117	Southern Duffer	<i>Discophora lepida</i>
118	Dark Evening Brown	<i>Melanitis phedima</i>
119	Great Evening Brown	<i>Melantis zitenius</i>
120	Travancore Evening Brown	<i>Parantirrhoea marshalli</i>
121	Bamboo Treebrown	<i>Lethe eruopa</i>
122	Common Treebrown	<i>Lethe rohria</i>
123	Tamil Treebrown	<i>Lethe drypetis</i>
124	Common Palmfly	<i>Elymnias hypermnestra</i>
125	Whitebar Bushbrown	<i>Mycalesis anaxias</i>
126	Common Bush Brown	<i>Mycalesis perseus</i>
127	Dark-brand Bushbrown	<i>Mycalesis mineus</i>
128	Small Long-brand Bushbrown	<i>Mycalesis igilia</i>

129	Gladeye Bushbrown	<i>Mycalesis patina</i>
130	Nigger	<i>Orsotrioena medius</i>
131	Tamil Catseye	<i>Zipaetis saitis</i>
132	Common Fivering	<i>Ypthima baldus</i>
133	White Fourring	<i>Ypthima ceylonica</i>
134	Common Fourring	<i>Ypthima huebneri</i>
135	Nilgiri Fourring	<i>Ypthima chenui</i>
136	Tawny Coster	<i>Acraea violae</i>
137	Tamil Lacewing	<i>Cethosia nietneri</i>
138	Cruiser	<i>Vindula erota</i>
139	Tamil Yeoman	<i>Cirrochroa thais</i>
140	Rustic	<i>Cupha erymanthis</i>
141	Small Leopard	<i>Phalanha alcippe</i>
142	Common Leopard	<i>Phalanta phalantha</i>
143	Commander	<i>Moduza procris</i>
144	Common Sergeant	<i>Athyma perius</i>
145	Blackvein Sergeant	<i>Athyma ranga</i>
146	Staff Sergeant	<i>Athyma selenophora</i>
147	Colour Sergeant	<i>Athyma nefte</i>
148	Common Lascar	<i>Pantoporia hordonia</i>
149	Chestnut-Streaked Sailer	<i>Neptis jumbah</i>
150	Common Sailer	<i>Neptis hylas</i>
151	Sullid Sailer	<i>Neptis soma</i>
152	Clipper	<i>Parthenos Sylvia</i>
153	Grey Count	<i>Tanaecia lepidea</i>
154	Common Baron	<i>Euthalia aconthea</i>
155	Gaudy Baron	<i>Euthalia lubentina</i>
156	Baronet	<i>Euthalia nais</i>
157	Common Map	<i>Cyrestis thyodamas</i>
158	Angled Castor	<i>Ariadne ariadne</i>
159	Common Castor	<i>Ariadne merione</i>
160	Black Prince	<i>Rohana parisatis</i>
161	Painted Lady	<i>Vanessa cardui</i>
162	Blue Admiral	<i>Kaniska canace</i>
163	Indian Red Admiral	<i>Vanessa Indica</i>
164	Blue Pansy	<i>Junonia orithiya</i>
165	Yellow Pansy	<i>Junonia hierta</i>

166	Chocolate Pansy	<i>Junonia iphita</i>
167	Grey Pansy	<i>Junonia atlites</i>
168	Peacock Pansy	<i>Junonia almanac</i>
169	Lemon Pansy	<i>Junonia lemonias</i>
170	Great Eggfly	<i>Hypolimnas bolina</i>
171	Daniad Eggfly	<i>Hypolimnas misippus</i>
172	Blue Oakleaf	<i>Kallima horsfieldi</i>
173	Autumn Leaf	<i>Doleschallia bisaltide</i>
Family : Hesperidae : Skippers		
174	Orange Awlet	<i>Bibasis jaina</i>
175	Orange-Tail-Awl	<i>Bibasis sena</i>
176	Common Banded Awl	<i>Hasora chromus</i>
177	White Banded Awl	<i>Hasora taminatus</i>
178	Common Awl	<i>Hasora badra</i>
179	Brown Awl	<i>Badamia exclamationis</i>
180	Tamil Spotted Flat	<i>Celaenorrhinus ruficornis</i>
181	Malabar Spotted Flat	<i>Celaenorrhinus ambareesa</i>
182	Common Spotted Flat	<i>Celaenorrhinus keycicera</i>
183	Indian Skipper	<i>Spialia galba</i>
184	Angled Flat	<i>Tapena twaithesi</i>
185	Common Small Flat	<i>Satangesa dasahara</i>
186	Spotted Small Flat	<i>Sarngesa purendra</i>
187	Fulvous Pied Flat	<i>Pseudocoladenia dan</i>
188	Tricoloured Pied Flat	<i>Coladenia indrani</i>
189	Suffused Snow Flat	<i>Tagiades gana</i>
190	Common Snow Flat	<i>Taguades haoetys</i>
191	Water Snow Flat	<i>Tadiades litigiosa</i>
192	Chestnut Angle	<i>Odontoptilum angulata</i>
193	Golden Angle	<i>Caprona ransonnetti</i>
194	Tamil Grass Dart	<i>Taractrocera ceramas</i>
195	Common Grass Dart	<i>Taractrocera maevius</i>
196	Common Dartlet	<i>Oriens goloides</i>
197	Tamil Dartlet	<i>Oriens concinna</i>
198	Dark Palm Dart	<i>Telicota ancilla</i>
199	Pale Palm Dart	<i>Telicota colon</i>
200	Straight Swift	<i>Parnara guttatus</i>
201	Rice Swift	<i>Borbo cinnara</i>
202	Bevan's Swift	<i>Pseudoborbo bevani</i>
203	Paint brush Swift	<i>Baoris farri</i>

204	Small Branded Swift	<i>Pelopidas mathias</i>
205	Conjoined Swift	<i>Pelopidas conjuncta</i>
206	Bicolour Ace	<i>Sovia hyrtacus</i>
207	Indian palm Bob	<i>Suastus gremius</i>
208	Tree Flitter	<i>Hyarotis adrastus</i>
209	Golden Flitter	<i>Quedara basiflava</i>
210	Maculate Lancer	<i>Salanoemia sala</i>
211	Giant Redeye	<i>Gangara thyrasis</i>
212	Common Redeye	<i>Matapa aria</i>
213	Chestnut Bob	<i>Iambrix salsala</i>
214	Coon	<i>Sancus fuligo</i>
215	Restricted Demon	<i>Notocrypta curvifascia</i>
216	Common Banded Demon	<i>Notocrypta paralysos</i>
217	Grass Demon	<i>Udaspes folus</i>
218	Pigmy Scrub Hopper	<i>Aeromachus pygmaeus</i>
219	Indian Ace	<i>Halpe homolea</i>
220	Moore's Ace	<i>Halpe porus</i>
221	Madras Ace	<i>Halpe honorei</i>
222	Southern Spotted Ace	<i>Thoressa astigmata</i>
223	Bush Hopper	<i>Ampittia dioscorides</i>

References

1. Checklist of Butterflies of Vazhachal –Athirapilli Reserve Forests compiled and prepared by C.Susanth on the basis of studies and field trips(different seasons) conducted at Vazhachal-Athirapilly Reserve forests during the period from 1995 to 2010.
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