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A PRELIMINARY CHECKLIST OF BUTTERFLIES RECORDED FROM JEYPORE-DEHING FOREST, EASTERN ASSAM, INDIA

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Jeypore Reserve Forest (JRF) is one of the few remaining continuous stretches of woodland left in upper Assam. The forest lies just inside the south bank of the Brahmaputra River Basin, which is the barrier for many dispersal limited Malayan flora and fauna. The reserve forest further lies in the foothills of Patkai-Bum hill ranges of Arunachal Pradesh which is likely to influence the bio-geographic pattern of many Malayan butterflies in northeastern India. Despite the bio-geographic significance of the area, the area remains poorly documented in terms of butterfly community and hence data deficient. Doherty (1889) described Blue Quaker *Pithecopis fulgens* and Yellow-vein Lancer *Pyronura margherita* from nearby Margherita. But, nothing was known of the butterfly community in JRF. The present study was therefore taken with an objective of providing a baseline data of the butterfly community in JRF.

Study area: Jeypore Reserve Forest (JRF) (27°06'–27°16'N & 95°21'–95°29'), with a total area of 10,876km² is located in Dibrugarh District of Upper Assam, adjoining Arunachal Pradesh. The reserve forest falls under the Jeypore-Dehing Landscape of Assam Valley semi-evergreen rainforest (Champion & Seth 1968) and is one of the last remaining large tracts of

lowland tropical forests left in Upper Assam (Image 1). JRF falls under the Eastern Himalayan biodiversity hotspot. The reserve forest lies in the foothills of the Patkai range and the terrain is characterized by the undulating hill ranges of Arunachal Pradesh meeting the plains of the Assam Valley. The reserve has a passage through it, leading to Deomali and Khonsa in Arunachal Pradesh (Image 2). The river Burhi-Dehing flows through the northern boundary of the reserve forest and Dilli River flowing through Namrup lying at an elevation of 124m is the southern boundary of the reserve. The vegetation is characterized by *Dipterocarpus marcocarpus*, *Messua ferrea* and *Vatica lanceafolia* from the top canopy to the middle. The ground floor is dominated by *Saprosma ternatum*, *Livistonia jenkinsiana* and *Calamus erectus* etc. Bamboo species of *Dandrocalamus hamiltonii* and *Pseudostachyum polymorphum* are present in most patches of the forest.

Materials and methods: JRF was surveyed in different seasons, February (2010), May (2010), November (2010) and September–October (2011). The survey was done on different forest trails and hill streams regularly between 10.00–15.00 hr (Image 3). Butterfly species were identified using the identification keys of Evans (1932), Talbot (1947), and photographic guides of Kehimkar (2008) and Haribal (1992).

Notes on selected species:

White Punch *Dodona longicaudata* De Nicéville (Image 4): One individual was encountered in February of around 150m. The species has also been photographed and sighted recently from Namdapha and

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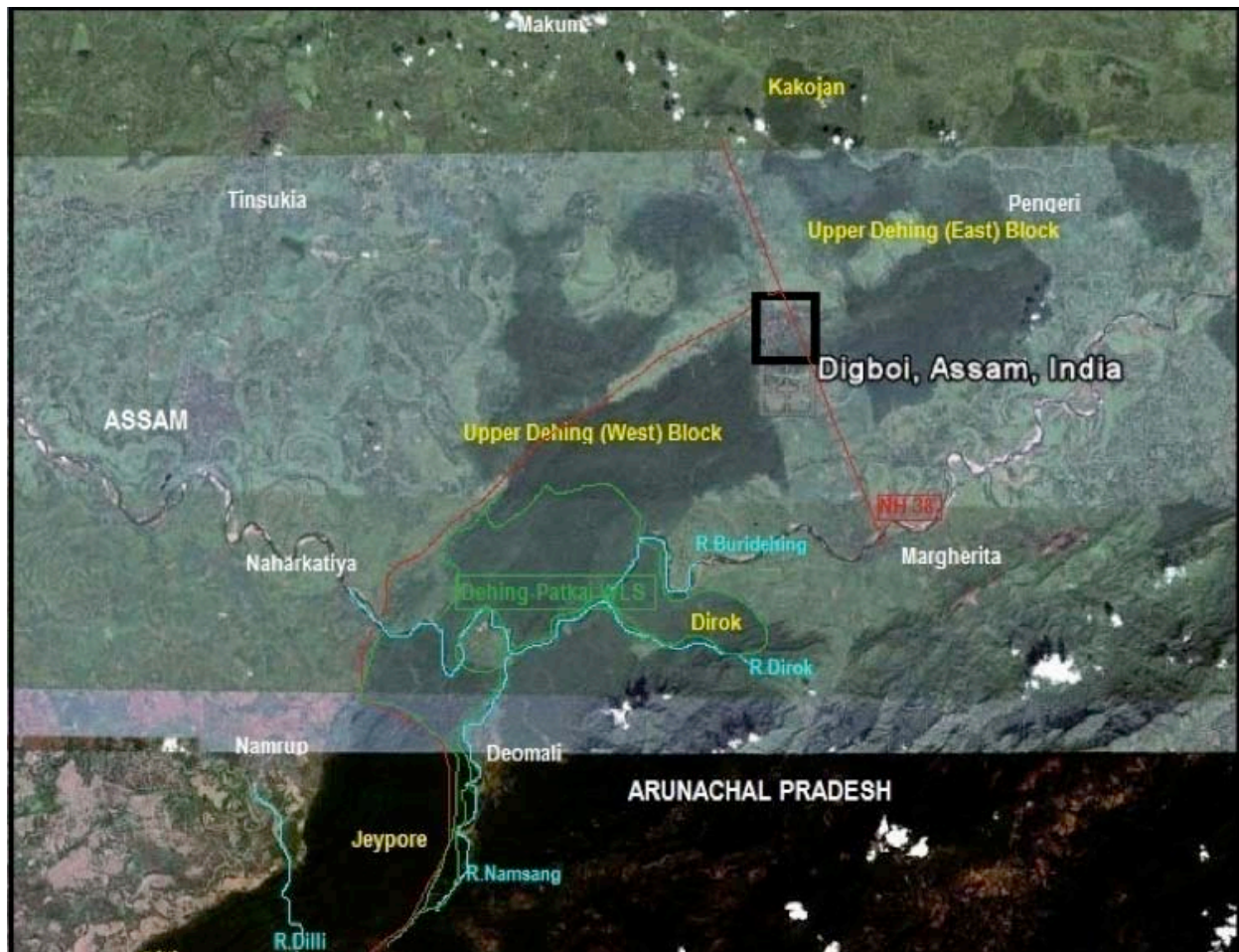


Image 1. Google map of Jeypore-Dehing landscape, Upper Assam, Courtesy: Kashmira Kakati/WII 2002



Image 2. Deomali road passing through Jeypore Reserve Forest



Image 3. A small trail inside Jeypore Reserve Forest

Garo Hills <<http://ifoundbutterflies.org/188-dodona/dodona-longicaudata>>. The species was first described in 1881 from Shillong, Khasia Hills by De Nicéville. A single female individual was sighted at Gaspani, Naga

Hills, at 455m. A male was collected from Cachar Road, Manipur in December and a female from the same place in November (Tytler 1915). The species is treated as very rare in Evans 1932. The species is so far known only

from the south bank of the Brahmaputra and Patkai Hills of northeastern India.

Burmese Bushblue *Arhopala birmana birmana* Moore (Image 5): The species was encountered four times in JRF in January and February. The species has been recorded at Sebong, Manipur (Tytler 1915). The species is treated as not rare and the distribution range is from Assam-Dawnas (Evans 1932). The species is known only from the south bank of the Brahmaputra River Basin of northeastern India. Many specimens were seen in JRF, most of them had the white patches. The specimen photographed lack white patches. The species was confirmed *birmana* on the basis of upper side wing, border being 4mm at apex, 2mm in dorsum and 2.5mm in hindwing (Evans 1957).

Blue Quaker *Pithecopis fulgens* Doherty (Image 6,7): One individual was encountered at Tipam of JRF. The species was first described by Mr. Doherty from Margherita, Upper Assam. Since then, the species was collected in fairly good numbers from Irang and Lengba rivers, western Manipur hills (Tytler 1915). The species is rare as per Evans (1932). The species is similar to Forest Quaker, *P. corvus* from underside but differs from it as the upper side is blue with a brown border in males whereas in the *P. corvus* the upper side is brown. Swinhoe (1912–1913) describes the habitat of the species from Margherita, upper Assam based on Doherty's record. The species probably occurs only in south of Brahmaputra River Basin in the Patkai Bum of northeastern India.

Hooked Oakblue *Arhopala paramuta* DeNicéville (Image 8): The species is not rare and occurs from Sikkim to Karens as per as Evans 1932. The species is rare in Manipur and has been collected from Imphal at low elevations (Tytler 1915). The species occurs from mid-elevation of the eastern Himalaya to the lowest altitude of northeastern India. The insect was common near Kothalguri of JRF. I personally encountered the species a few times at Panbari Forest, Kaziranga, Assam.

Indian Oakblue *Arhopala atrax* (= *alemon*, *hewitsoni*) (Image 9): A female individual was encountered in JRF. The species is reported from Bengal, Niligiris, Poona, Pachmarhi, Orissa, Murre, Mussorie, Simla, Kumaon, Nepal, Sikkim, Assam, Burma-Ataran (Evans 1957). I found the species very common in the Eastern Ghats. The species is not common in northeastern India.

Tytler's Dull Oakblue *Arhopala ace arata* Tytler (Image 10): Two individuals were recorded in Gulmari of JRF in the month of January. Another individual was encountered on the border between Dehing-Patkai WLS. I place the species under it on the basis

of Evan's description 'below dark brown, marking very wide and prominent outlined white'. The specimens I encountered were less prominently outlined white. A male from Lengba River, Western Manipur Hills, and two from Sebong, East Manipur Hills have been reported and described for the first time by Tytler in 1915. The species has been reported as very rare (Evans 1932). The subspecies has so far been reported from Manipur and Ruby Mines, northern Burma (Evans 1957). Another subspecies occurs in Perak, Sumatra and Borneo.

Green Oakblue *Arhopala eumolphus eumolphus* Crammer (Image 11,12): One male and a few females were encountered in JRF during the field study. This subspecies is distributed in Sikkim, Nepal, Assam and is not rare as per Evans (1932).

Sylhet Oakblue *Arhopala silhetensis silhetensis* Hewitson (Image 13): One individual was encountered in September 2011 and appears to be smaller than the one I encountered at Panbari Forest. The race is distributed from Sikkim to northern Burma and is rare (Evans 1932). The species is protected under Schedule 2 of the Wildlife (Protection) Act, 1972.

Saffron *Mota massyla* Hewitson (Image 14): The species was sighted four times in JRF. The species was sighted from February–April. The species has been recorded from Sebong and on the Irang River in Manipur at low elevations and from Kirbari in Naga Hills at a higher elevation (Tytler 1915). The species is distributed from Bhutan-Burma and is rare (Evans 1932). The species has been reported to be locally common (Kehimkar 2008).

Narrow Spark *Sinthusia nasaka amba* Kirby (Image 15): One individual was recorded in September. The subspecies is distributed from Sikkim-Burma and is reportedly rare as per Evans 1932.

Branded Yamfly *Yasoda tripunctata tripunctata* Hewitson (Image 16): The species was encountered four times during my study in JRF. The species is rare as per Evans 1932. The species is protected under Schedule 2 of the Wildlife (Protection) Act, 1972.

Grey Baron *Euthalia anosia anosia* Moore (Image 17): One individual was encountered in Deomali road and another was sighted near Namsai tea estate in JRF in the month of November. It is a rare butterfly and habitat is from Sikkim-Burma.

Kohinoor *Amathuxidia amythaon amythaon* Doubleday (Image 18): One female and a male were sighted near Kothalguri of JRF in November. The male was found visiting bird droppings in a forest trail. After the male was recorded, the nearby forest patches were surveyed and the female was found subsequently. It is a large butterfly with a wing span of 110–130 mm. It occurs



Image 4. *Dodona longicaudata*



Image 5. *Arhopala birmana*



Image 6. *Pithecopis fulgens*



Image 7. *Pithecopis fulgens* (upper side)



Image 8. *Arhopala paramuta*



Image 9. *Arhopala atrax* female



Image 10. *Arhopala ace arata*



Image 11. *Arhopala eumolpus eumolpus*



Image 12. *Arhopala eumolpus eumolpus* (upper side)



Image 13. *Arhopala silhetensis*



Image 14. *Mota massyla*



Image 15. *Sinthusia nasaka amba*

in Sikkim-Arunachal Pradesh and in Bhutan, Bangladesh, and Myanmar. The species is rare in occurrence (Evans 1932).

Blue Nawab *Polyura schreiber assamensis* Rothschild (Image 19): One individual was encountered on Deomali road of JRF in November. The species was first seen mud-puddling with open wings. The species is very rare (Evans 1932). The subspecies was first described in the year 1899, type locality from (Khasi Hills, Jaintia Hills, Shillong, Cherra Punji) Meghalaya, Naga Hills, (Jorehat) Upper Assam and northern Burma (Myanmar). The butterfly also occurs in southern India as subspecies *wardi* Moore (1895).

Watson's Bushbrown *Mycalesis adamsoni* Watson (Image 20): Many individuals were encountered at the end of October 2010 and 2011. The species is rare and occurs in Manipur and northern Myanmar (Evans 1932). The ID key of the species is that the origin of v7 is pushed back before end cell on hindwing.

Lilacine Bushbrown *Mycalesis francisca sanatana* Moore (Image 21): One individual was encountered in October, 2011. The species is not rare and occurs from Kulu-Burma (Evans 1932). However, the habitat of the species is from Sikkim-Burma (Talbot 1947). The v7 origin is at end cell of hind wing which differentiates the species from *M. adamsoni*.

Large Three-ring *Ypthima nareda sarcaposa* Fruhstorfer (Image 22): This subspecies is smaller in size in comparison to the other subspecies *newara* of northeastern India. The species has its distribution from Assam to Shan states and is not rare (Talbot 1947).

Striped Ringlet *Ragadia crisilda crito* De Nicéville (Image 23): The species was sighted twice in JRF. The taxon *crito* is distributed from Bhutan to Naga Hills and Manipur; rare (Talbot 1947). The subspecies *crisilda* occurs in Cachar, Assam.

Peal's Palmfly *Elymnias pealii* Wood-Mason (Image 24): The species was sighted about 10 times during the field study at different sites of JRF. The species is very rare and endemic to Assam (Evans 1932). The species is locally not rare but probably as it is restricted to Greater Assam, Evans treated it as very rare.

Dot-dash Sergeant *Athyma kanwa phorkys* Fruhstorfer (Image 25): The species was encountered three times during the course of the field study in JRF. The species was found locally common in Assam. The species is rare and distributed in Assam-Burma (Evans 1932).

Spotted Sailer *Neptis magadha khasiana* Moore (Image 26): The species was found mud-puddling on a few occasions on the road to Deomali near Tipam of JRF in October. The race is distributed from Bhutan to

northern Burma and is rare (Evans 1932).

Plain Sailer *Neptis cartica cartica* Moore (Image 27): One individual was encountered at Tipam in the month of October. The species was slightly smaller than the specimens I encountered in Mishmi Hills. Another subspecies, *Neptis cartica burmana* also occurs in Assam. I recorded this subspecies once in Dollamora and Panbari Forest (Kaziranga-Karbi Anglong) in 2009.

Perak Lascar *Pantoporia paraka paraka* Butler (Image 28): One individual was encountered puddling on a stone in a small nallah during March. The race is distributed from Assam to Myanmar, Thailand, Laos, Cambodia, Vietnam, Hainan, Malay Peninsular, Sumatra, Borneo, Banka, Batu, Java, Palawan. Another species *Pantoporia assamica* Moore (Assam-northern Bhutan) was also recorded in JRF (Image 29). The species is a race of *Pantoporia paraka* in Global Lepidoptera Names Index (<<http://www.nhm.ac.uk/research-curation/research/projects/lepindex/>>).

Extra Lascar *Pantoporia sandaka davidsoni* Eliot (Image 30): One individual was encountered during March, sitting upon a leaf near a small forest stream. The species was first described in 1892 from Borneo. The race *davidsoni* occurs from India to Myanmar, Thailand, Laos, Cambodia, Vietnam, Hainan and was named by Eliot in 1969 with type specimen from North Kanara, southern India.

Indian Awlking *Choaspes benjaminii benjaminii* Guerin-Meneville (Image 31): The species was common at Tipam nallah of JRF. The species could be found making rapid flight on Deomali road. The species is not rare and distribution is Sri Lanka and southern India (Evans 1932). The species was represented in Kulu, Karens, China, Siam as subspecies *xanthropogon*. However, the taxon *xanthropogon* was later validated as a different species and was considered synonymous to taxon *similis*. The taxon *benjaminii* is actually distributed all over India.

Similar Awlking *Choaspes similis* Evans (= *xanthropogon*) (Image 32): One individual was encountered in October. The species is distributed in Kashmir, Nepal, Sikkim, Assam, Myanmar, Thailand, Laos, Vietnam, China, Formosa. The species can be differentiated from *C. stigmata* from the underside in having tornal area not above V3, while in *C. stigmata* the tornal orange area continues above v3. In *C. benjaminii* the tornal orange area does not even reach V3. Also, the upper side base of *C. stigmata* is dark iridescent green but the upper side colour is uniform in *C. similis*.

Pale Striped Dawnfly *Capilia zennara* Moore (Image 33, 34): The species could be recorded a few times between Kothalguri and Tipam of JRF in November. One



Image 16. *Yasoda tripunctata*



Image 17. *Euthalia anosia anosia*



Image 18. *Amathuxidia amythaon*



Image 19. *Polyura schreiber assamensis*



Image 20. *Mycalesis adamsoni*

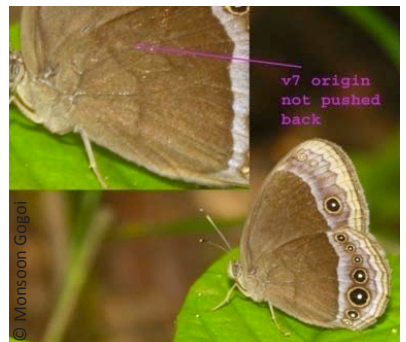


Image 21. *Mycalesis francisca sanatana*



Image 22. *Ypthima nareda sarcaposa*



Image 23. *Ragadia crisilda crito*



Image 24. *Elymnias pealii*



Image 25. *Athyma kanwa*



Image 26. *Neptis magadha khasiana*



Image 27. *Neptis cartica cartica*

male at Kothalguri road, and another just near it were recorded. Another male was found in the hill stream near Kothalguri. One female at Kothalguri, another at Tipam were recorded. The species has been reported from Nichuguard, Naga hills and Sebong, Naga hills (Tytler 1915). The species has been reported from Sikkim, Assam in India and occurs till Thailand. The species is treated very rare (Evans 1932). In recent times it has only been sighted from Buxa Tiger Reserve (Vivek Sarkar pers. comm. 2010) and Nambor RF, Karbi Anglong, upper Assam (Gaurab Nandi Das pers. comm. 2012).

Andaman Yellow-banded Flat *Celaenorhinus andamanicus hanna* Evans (Image 35): The subspecies *hanna* was described by Evans in 1949 from Bhutan. Later it was also recorded from Thailand. The species was photographed in Kothalguri of JRF. This is a new addition to the butterfly fauna of mainland India. The key character of the species *andamanicus* mentioned by Evans (1932) is that the discal spot in 1b is directed exactly to tornus.

Dusky Yellow-breast Flat *Gerosis phisara phisara* Moore (Image 36): A few male individuals were encountered in a river stream at Tipam of JRF. The subspecies is distributed from Sikkim to Burma and further up to Malaya and not rare (Evans 1932). The species is quite common in Assam.

White Yellow-breast Flat *Gerosis sinica indica* Evans (Image 37): One individual was encountered at Tipam at JRF. The subspecies occurs in Assam, another subspecies *narada* is found in Sikkim and subspecies *sinica* is distributed in central and western China and not rare (Evans 1932). The species is rare in Assam.

Sikkim White Flat *Seseria sambara* Moore (Image 38, 39): One individual was encountered in April and few times in October. The species does not appear common in the Naga Hills and Manipur (Tytler 1915).

Grass Bob *Suada swerga swerga* De Nicéville (Image 40): One individual was encountered in October. The species is not rare and the distribution range of the species is from Sikkim-Burma and further up to Malaya, Sumatra (Evans 1932). The species was first described in 1883 from Sikkim. The species is reported common at Sebong, Manipur during cold winters (Tytler 1915).

Malay Forest Bob *Scobura phiditia* Hewitson (= *martini* Elwes and Edwards) (Image 41, 42): The species has been mentioned by Tytler (1915) from Manipur as '*Scobura martini*'. The species has been reported from Manipur to Burma, Malay Peninsula, Sumatra, Borneo and not rare (Evans 1932). The species has been recently sighted in Panbari Forest, Kaziranga, Assam by the author in 2010 (unpublished information of the author in 2001).

Interestingly on the individual recorded at JRF, there was no discal row of black spots on the underside hind wing (Evans description that often a discal row of black spots occurs). It looks a different race from those in the Panbari Forest of Kaziranga.

Large Forest Bob *Scobura cephaloides cephaloides* De Nicéville (Image 43): One individual was encountered near Dilli River. I have recorded the species from Mishmi Hills and Panbari Forest, Assam. The species has been recorded from Naga Hills and Western Manipur Hills (Tytler 1915). The species is rare and distributed from Sikkim - souther Shan States, Tonkin and Hainan (Evans 1932).

Dark-branded Swift *Caltores brunnea* Snellen (Image 44, 45): One individual was encountered in October. The species has a wide range of distribution from Sikkim-Bhutan and further up to Borneo and is not rare (Evans 1932). The species was first described in 1876, type locality is Java. The species could be identified by a narrow grey band mid-vein 1 to lower inner edge of spot 2 in the male.

Tufted Swift *Caltores plebeia* DeNicéville (Image 46): A male specimen was sighted at JRF, in February near Dehing-Patkai WS. The species is distributed from Sikkim to Bhutan and further up to Java, Borneo and Pulo Laut (Evans 1932).

Atkinson's Bob *Arnetta atkinsoni* Moore (Image 47): Four individuals were recorded in Gulmari of JRF. The species is not rare as per Evans 1932. The species is distributed from Sikkim to Tavoy and is not rare (Evans 1932).

Halpe homolea homolea Hewitson (Image 48): The species was common in JRF. The *Halpe* species has a band on the upper wing. The species seems to fit *Halpe homolea homolea* as spots are present on the small upper side and on the underside sub marginal and discal spots are clearly defined. Tytler (1915) mentioned the species to be very common in Manipur and Naga Hills. Evans (1932) described the species as not rare.

Yellow-vein Lancer *Pyronera margherita* Doherty (Images 49, 50): The species was encountered four times near Kothalguri in JRF in summer. The species has been treated as a subspecies of *Iatoia* with locality from Upper Assam and Tenasserim and very rare (Evans 1932). But, the species is not rare in upper Assam. I encountered the species many times in Panbari Forest of Kaziranga. But, the specimens of Jeypore differ from that of Panbari in having conjoined cell spots in the forewing, while in the latter the cell spots are separate.

Northern Spotted Ace *Thoressa cerata* Hewitson (Images 51,52): The species was encountered many times



Image 28. *Pantoporia paraka paraka*



Image 29. *Pantoporia assamica* (race of *paraka*?)



Image 30. *Pantoporia sandaka davidsoni*



Image 31. *Choaspes benjaminii*

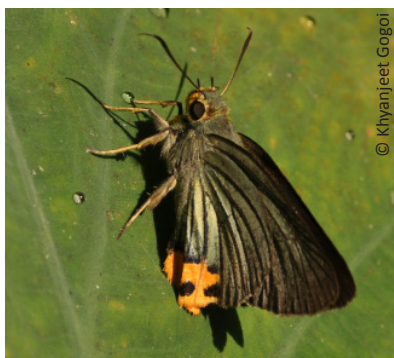


Image 32. *Choaspes similis*



Image 33. *Capilia zennara* (male)



Image 34. *Capilia zennara* (female)



Image 35. *Celaenorrhinus andamanicus hanna*



Image 36. *Gerosis phisara phisara*



Image 37. *Gerosis sinica indica*

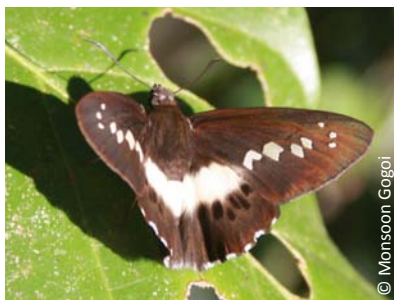


Image 38. *Seseria sambara* (upper side)

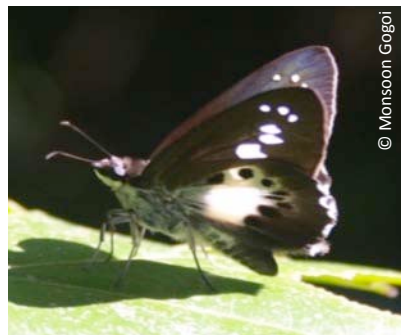


Image 39. *Seseria sambara* (under side)

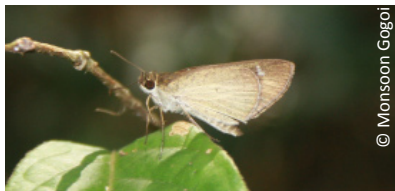


Image 40. *Suada swerga*



Image 41. *Scobura phiditia=martini*



Image 42. *Scobura phiditia=martini* (upper side)



Image 43. *Scobura cephaloides cephaloides*



Image 44. *Caltoris brunnea*



Image 45. *Caltoris brunnea* (upper side)



Image 46. *Caltoris plebeia*



Image 47. *Arnetta atkinsoni*



Image 48. *Halpe homolea homolea*



Image 49. *Pyroneura margherita* (upper side)

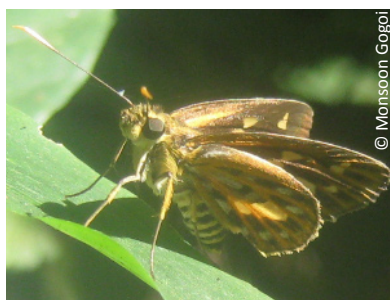


Image 50. *Pyroneura margherita*



Image 51. *Thoressa cerata* (upper side)



Image 52. *Thoressa cerata*



Image 53. *Asticopterus jama*

in JRF. The specimens differ from the higher elevation races of Arunachal Pradesh (Mishmi Hills, Namdapha) in having very small discal and post-discal spots in the underside of hindwing. The specimens of Panbari also had very small spots. The species is distributed from Sikkim to Karens and is not rare (Evans 1932).

Forest Hopper *Asticopterus jama olivascens* Moore (Image 53): One individual was encountered at Gulmari in JRF. The race is distributed from Kumaon to Karens, Siam and not rare (Evans 1932).

Discussions

During the survey many significant butterflies were sighted from the lowland forests of JRF. February and November were found to be best months for butterflies in JRF. Altogether, a total of 292 species of butterflies were recorded as a result of continuous field surveys conducted during 2010–2011 which included two sightings *Darpa pteris* (Karthikeyan & Venkatesh 2011) and *Chersonesia rahira rahrioides* (Vidya Venkatesh & S. Karthikeyan pers. comm. 2011) (Table 1). There are many factors influencing the species richness of JRF. The average elevation of JRF of about 150m, lying in the foothills of the Patkai range of northeastern India, influences the distribution pattern of butterflies. A few of the butterflies of JRF show interesting bio-geographic pattern due to the barrier effect of the Brahmaputra River Basin (BRB). As JRF lies on the South Bank of BRB species such as *Pithecopis fulgens*, *Dodona longicaudata*, *Arhopala birmana*, *Pyronera margherita* occur in JRF. These species were not known from the north bank of the Brahmaputra River Basin as it acts as a barrier of species distribution. Further, JRF is also classified as a rainforest due to its unique precipitation which might be another factor contributing to species richness in the area. Overall, sighting of extremely rare species such as *Dodona longicaudata*, *Capilia zennara*, *Amathuxidia amythaon*, *Pithecopis fulgens* etc. shows the importance of saving the last remaining lowland forests in Assam and northeastern India.

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Table 1. Checklist of butterflies of Jeypore-Dehing Reserve Forest recorded by the author during February 2010–October 2011. The checklist includes sighting of two species-Snowy Angle *Darpa pteris* (S. Karthikeyan & V. Venkatesh 2011) and Wavy Maplet *Chersonesia rahira rahrioides* (Vidya Venkatesh & S. Karthikeyan pers. comm. 2011).

	Common Name	Scientific Name
Papilionidae		
1	Great Windmill	<i>Byasa dasarada ravana</i>
2	Great Mormon	<i>Papilio memnor agenor</i>
3	Common Mormon	<i>Papilio polytes romulus</i>
4	Common Rose	<i>Atrophaneura aristolochiae</i>
5	Redbreast	<i>Papilio alcmenor</i>
6	White Dragontail	<i>Leptocircus curius curius</i>
7	Red Helen	<i>Papilio helenus helenus</i>
8	Yellow Helen	<i>Papilio nephelus</i>
9	Common Ravern	<i>Papilio castor castor</i>
10	Common Bluebottle	<i>Graphium sarpedon sarpedon</i>
11	Common Jay	<i>Graphium dason axion</i>
12	Great Jay	<i>Graphium eurypylus acheron</i>
13	Five-bar Swordtail	<i>Graphium antiphates pompilius</i>
14	Lesser Batwing	<i>Parides aidoneus</i>
15	Common Batwing	<i>Parides varuna astorion</i>
16	Spange	<i>Papilio protenor euprotenor</i>
17	Common Birdwing	<i>Triodes helena cerberus</i>
18	Paris Peacock	<i>Papilio paris paris</i>
19	Common Peacock	<i>Papilio polyctor ganesa</i>
20	Great Zebra	<i>Graphium xenocles xenocles</i>
21	Great Blue Mime	<i>Chilasa paradoxa telearchus</i>
Pieridae		
22	Three Spot Grass Yellow	<i>Eurema blanda silhetana</i>
23	Common Grass Yellow	<i>Eurema hecabe contubernalis</i>
24	Tree Yellow	<i>Gandaca harina assamica</i>
25	Tailed Sulphur	<i>Dercus verhuelli doubeldayi</i>
26	Redbreast Jezabel	<i>Delias thysbe pyramus</i>
27	Redbase Jezabel	<i>Delias aglaia</i>
28	Common Emigrant	<i>Catopsilia pomona (=crocale)</i>
29	Mottled Emigrant	<i>Catopsilia pyranthe minna</i>
30	Yellow Orange Tip	<i>Ixias pyrene satadra</i>
31	Great Orange Tip	<i>Hebomia glaucippe glaucippe</i>
32	Pale Wanderer	<i>Pareronia avatar avatar</i>
33	Greenvein White	<i>Pieris napi montana</i>
34	Spot Puffin	<i>Appias lalage lalage</i>
35	Chocolate Albatross	<i>Appias lycida hippoides</i>
36	Lesser Gull	<i>Cepora nadina nadina</i>
37	Indian Cabbage White	<i>Pieris canidiaindica</i>
38	Psyche	<i>Leptosia nina nina</i>

	Common Name	Scientific Name
Nymphalidae		
39	Chocolate Tiger	<i>Parantica melaneus plateniston</i>
40	Chestnut Tiger	<i>Parantica tytia sita</i>
41	Glassy Tiger	<i>Parantica aglea melanoides</i>
42	Dark Blue Tiger	<i>Tellervo melissa septentrionis</i>
43	Striped Tiger	<i>Danaus genutia=plexippus</i>
44	Plain Tiger	<i>Danaus chrysippus</i>
45	Common Faun	<i>Faunis arecilaus</i>
46	Yellow Rajah	<i>Charaxes marmax</i>
47	Tawny Rajah	<i>Charaxes polyxena hierax</i>
48	Black Rajah	<i>Charaxes fabius sulphureus</i>
49	Variiegated Rajah	<i>Charaxes kahruba</i>
50	Great Nawab	<i>Polyura eudamippus</i>
51	Blue Nawab	<i>Polyura schreiber assamensis</i>
52	Pallid Nawab	<i>Polyura arja</i>
53	Common Nawab	<i>Polyura athamasathamas</i>
54	Short-banded Sailer	<i>Phaedyma columella ophiana</i>
55	Common Sailer	<i>Neptis hylas adara</i>
56	Rich Sailer	<i>Neptis anjana nasnah</i>
57	Dingrest Sailer	<i>Neptis harita</i>
58	Small Yellow Sailer	<i>Neptis miah</i>
59	Yellow Sailer	<i>Neptis namba</i>
60	Sullied Sailer	<i>Neptis soma soma</i>
61	Clear Sailer	<i>Neptis nandina susruta</i>
62	Spotted Sailer	<i>Neptis magadha khasiana</i>
63	Yerbury's Sailer	<i>Neptis yerburyi sikkima</i>
64	Plain Sailer	<i>Neptis cartica cartica</i>
65	Common Lascar	<i>Pantoporia hordon</i>
66	Extra Lascar	<i>Pantoporia sandaka</i>
67	Perak Lascar	<i>Pantoporia peraka</i>
68	Greylined Lascar	<i>Pantoporia dindinga assamica</i>
69	Common Sergeant	<i>Athyma perius</i>
70	Colour Sergeant	<i>Athyma nefte inara</i>
71	Black-veined Sergeant	<i>Athyma ranga ranga</i>
72	Staff Sergeant	<i>Athyma selenophora selenophora</i>
73	Small Staff Sergeant	<i>Athyma zeroca</i>
74	Orange Staff Sergeant	<i>Athyma cama</i>
75	Unbroken Sergeant	<i>Athyma pravara acutipennis</i>
76	Dot-Dash Sergeant	<i>Athyma kanwa phorkys</i>
77	Common Jester	<i>Symbrenthia hippoclus khasiana</i>
78	Banded Treebrown	<i>Lethe confusa gambara</i>
79	Tailed Red Forester	<i>Lethe sinorix</i>
80	Common Red Forester	<i>Lethe mekara zuchara</i>
81	Black Forester	<i>Lethe vindhya</i>
82	Pallid Forester	<i>Lethe satyavati</i>
83	Great Evening Brown	<i>Melanitis zitenius zitenius</i>

	Common Name	Scientific Name
84	Common Evening Brown	<i>Melanitis leda ismene</i>
85	Common Bushbrown	<i>Mycalesis perseus blasius</i>
86	Dark-brand Bushbrown	<i>Mycalesis mineus mineus</i>
87	Long-brand Bushbrown	<i>Mycalesis visala visala</i>
88	Chinese Bushbrown	<i>Mycalesis gotama charaka</i>
89	Lilacine Bushbrown	<i>Mycalesis francisca sanatana</i>
90	Watson's Bushbrown	<i>Mycalesis adamsoni</i>
91	Common Fivering	<i>Ypthima baldus baldus</i>
92	Large Threering	<i>Ypthima nareda sarcaposa</i>
93	Common Fourring	<i>Ypthima hubneri huebneri</i>
94	Striped Ringlet	<i>Ragadia crisilda crito</i>
95	Plain Bushbrown	<i>Mycalesis malsarida</i>
96	Dusky Diadem	<i>Anadebis himachala</i>
97	Autumn Leaf	<i>Doleschallia bisaltide indica</i>
98	Red Caliph	<i>Enispe euthymius</i>
99	Kohinoor	<i>Amathuxidia amythaon</i>
100	Jungle Glory	<i>Thaumantis diores</i>
101	Orange Oakleaf	<i>Kallima inachus</i>
102	Courtesian	<i>Euripus halitherses</i>
103	Circe	<i>Hestina nama</i>
104	Common Map	<i>Cyrestis thyodamas indica</i>
105	Constable	<i>Dichorragia nesimachus</i>
106	Crusier	<i>Vindula erota erota</i>
107	Great Arkduke	<i>Adolia cyanipardus</i>
108	Magpie Crow	<i>Euploea diocletiana ramsayi</i>
109	Striped Blue Crow	<i>Euploea mulciber mulciber</i>
110	Great Eggfly	<i>Hypolimnas bolina</i>
111	Common Earl	<i>Tanaecia julii sedeva</i>
112	Plain Earl	<i>Tanaecia jahnu jahnu</i>
113	Common Baron	<i>Euthalia aconthia garuda</i>
114	Grey Baron	<i>Euthalia anosia anosia</i>
115	Gaudy Baron	<i>Euthalia lubentina indica</i>
116	White-edge Blue Baron	<i>Euthalai phemius</i>
117	Powdered Baron	<i>Euthalia monina kesava</i>
118	Blue Baron	<i>Euthalia telchinia</i>
119	Streaked Baron	<i>Euthalia alpheda jama</i>
120	Chocolate Pansy	<i>Junonia iphita</i>
121	Peacock Pansy	<i>Junonia almana</i>
122	Grey Pansy	<i>Junonia atlites</i>
123	Lemon Pansy	<i>Junonia lemonias</i>
124	Blue Pansy	<i>Junonia orythiya</i>
125	Yellow Pansy	<i>Junonia hierita</i>
126	Red Lacewing	<i>Cethosia biblis tisamena</i>
127	Leopard Lacewing	<i>Cethosia cyane</i>
128	Green Commodore	<i>Limenitis daraxa</i>
129	Blue Admiral	<i>Kaniska canace</i>

	Common Name	Scientific Name
130	Maplet	<i>Chersonesia risa</i>
131	Wavy Maplet	<i>Chersonesia rahira rahrioides</i>
132	Indian Fritillary	<i>Argyreus hyperbius</i>
133	Common Leopard	<i>Phalanta phalantha</i>
134	Common Castor	<i>Ariadne merione assama</i>
135	Angled Castor	<i>Ariadne ariadne</i>
136	Commander	<i>Moduca procris</i>
137	Large Yeoman	<i>Cirrochroa aoris</i>
138	Common Yeoman	<i>Cirrochroa tyche</i>
139	Vagrant	<i>Vagrans egista</i>
140	Nigger	<i>Orsotrioena medus</i>
141	Tiger Palmfly	<i>Elymnias nesoea</i>
142	Peal's Palmfly	<i>Elymnias pealii</i>
143	Common Palmfly	<i>Elymnias hypermnestra</i>
144	Grey Count	<i>Tanaecia lepidea</i>
145	Wizard	<i>Rhynopalpa polynice</i>
146	Knight	<i>Lebade martha</i>
147	Yellow Coster	<i>Acraea issoria</i>
Lycaenidae		
148	Common Gem	<i>Poritia hewitsoni</i>
149	Common Hedge Blue	<i>Acytolepis puspa</i>
150	Metallic Hedge Blue	<i>Lycaenopsis melaena parrishii</i>
151	Margined Hedge Blue	<i>Celastrina marginata</i>
152	White-banded Hedge Blue	<i>Lycaenopsis transpecta</i>
153	Albocaerulean	<i>Udara albocaerulea</i>
154	Plain Hedge Blue	<i>Cyaniris placida</i>
155	Pale Hedge Blue	<i>Celastrina cardia</i>
156	Jyntea Hedge Blue	<i>Celastrina jyntea</i>
157	Swinhoe's Hedge Blue	<i>Celastrina musinoides</i>
158	Hill Hedge Blue	<i>Celasteina argiolus</i>
159	Tiny Hedge Blue	<i>Lycaenopsis minima</i>
160	Blue Quaker	<i>Pithecopis fulgens</i>
161	Quaker	<i>Neopithecopis zalmora</i>
162	Malayan	<i>Megisba malaya sikkima</i>
163	Forget-me-not	<i>Catochrysops strabo</i>
164	Silver-forget-me-not	<i>Catochrysops panormus</i>
165	Transparent 6 Lineblue	<i>Nacaduba kurava</i>
166	Pale 4 Lineblue	<i>Nacaduba hermus nabo</i>
167	Opaque 6 Lineblue	<i>Nacaduba beroe gythion</i>
168	Common Lineblue	<i>Prosotas nora</i>
169	Banded Lineblue	<i>Prosotas aluta coelestis</i>
170	Pointed Lineblue	<i>Ionolyce helicon</i>
171	Tailless Lineblue	<i>Prosotas duboisa indica</i>
172	Dingy Lineblue	<i>Nacaduba dana</i>
173	Common Ciliate Blue	<i>Anthene emolus</i>
174	Pointed Ciliate Blue	<i>Anthene lycaenina</i>

	Common Name	Scientific Name
175	Green Oakblue	<i>Arhopala emolpus emolpus</i>
176	Indian Oakblue	<i>Arhopala atrax</i>
177	Sylhet Oakblue	<i>Arhopala sylhetensis</i>
178	Centaur Oakblue	<i>Arhopala pseudocentaurus</i>
179	Hooked Oakblue	<i>Arhopala paramuta</i>
180	Tytler's Dull Oakblue	<i>Arhopala ace arata</i>
181	Burmese Bushblue	<i>Arhopala birmana</i>
182	Pale Bushblue	<i>Arhopala aberrans</i>
183	Variiegated Plushblue	<i>Flos adriana</i>
184	Metallic Cerulean	<i>Jamides alecto</i>
185	Common Cerulean	<i>Jamides celeno</i>
186	Dark Cerulean	<i>Jamides bochus</i>
187	Common Imperial	<i>Cheritra freja</i>
188	Blue Imperial	<i>Ticherra acte</i>
189	Common Tit	<i>Hypolycaena erylus</i>
190	Fluffy Tit	<i>Zeltus etolus</i>
191	Orchid Tit	<i>Chliaria othona</i>
192	Narrow Spark	
193	Broad Spark	
194	Lime Blue	<i>Chilades laius</i>
195	Pale Grass Blue	<i>Zizeeria maha</i>
196	Dark Grass Blue	<i>Zizeeria karsandra</i>
197	Lesser Grass Blue	<i>Zizeeria otis</i>
198	Common Pierrot	<i>Castalius rosimon</i>
199	Elbowed Pierrot	<i>Pycnophallium elna</i>
200	Dark Pierrot	<i>Tarucus ananda</i>
201	Copper Flash	<i>Rapala rectivitta</i>
202	Malay Red Flash	<i>Rapala damona</i>
203	Slate Flash	<i>Rapala schistacea</i>
204	Common Flash	<i>Rapala rosacea</i>
205	Saffron	<i>Mota massyla</i>
206	Chocolate Royal	<i>Remelana jangala ravata</i>
207	Bi-Spot Royal	<i>Ancema ctesia</i>
208	Long-banded Silverline	<i>Spindasis lohita himalayanus</i>
209	Common Acacia Blue	<i>Surendra quercetorum quercetorum</i>
210	Purple Sapphire	<i>Heliophorus epicles indicus</i>
211	Peablu	<i>Lampides boeticus</i>
212	Zebra Blue	<i>Syntarucus plinius</i>
213	Una	<i>Una usta</i>
214	Angled Sunbeam	<i>Curetis acuta</i>
215	Yamfly	<i>Loxura atymnus</i>
216	Branded Yamfly	<i>Yasoda tripunctata</i>
217	Tailed Judy	<i>Abisara neophron</i>
218	Dark Judy	<i>Abisara fylla</i>
219	Punchinello	<i>Zemeros flegyas indicus</i>
220	Plum Judy	<i>Abisara echerius prunosa</i>

	Common Name	Scientific Name
221	White Punch	<i>Dodona henrici</i>
Hesperiidae		
222	Orange-tail Awl	<i>Bibasis sena</i>
223	Similar Awlking	<i>Chaospes similis</i>
224	Indian Awlking	<i>Chaospes benjaminii</i>
225	Brown Awl	<i>Badamia exclamations</i>
226	Common Awl	<i>Hasora badra</i>
227	White-banded Awl	<i>Hasora taminatus</i>
228	Branded Orange Awlet	<i>Bibasis oedipodea aegina</i>
229	Common Snow Flat	<i>Tagiades japetus ravi</i>
230	Suffused Snow Flat	<i>Tagiades gana</i>
231	Dusky Yellow-breast Flat	<i>Gerosis phisara</i>
232	White Yellow-breast Flat	<i>Gerosis sinica indica</i>
233	Brown Pied Flat	<i>Coladenia agni</i>
234	Pale Striped Dawnfly	<i>Capilia zennara</i>
235		<i>Celaenorrhinus putra(=leucocera?)</i>
236		<i>Celaenorrhinus nigricans</i>
237	Dark-yellow banded Flat	<i>Celaenorrhinus aurivittata</i>
238	Andaman Yellowbanded Flat	<i>Celaenorrhinus andamanicus hanna</i>
239	Sikkim White Flat	<i>Seseria sambara</i>
240	Water Snow Flat	<i>Tagiades litigiosa</i>
241	Fulvous Pied Flat	<i>Pseudocoladenia dan</i>
242	Chestnut Angle	<i>Odontoptilum angulata</i>
243	Snowy Angle	<i>Darpa pteria</i>
244	Common Small Flat	<i>Sarangesa dasahara</i>
245	Indian Skipper	<i>Spialia galba</i>
246	Pygmy Scrub Hopper	<i>Aeromachus pygmaeus</i>
247	Veined Scrub Hopper	<i>Aeromachus stigmata obsoleta</i>
248	Bush Hopper	<i>Ampittia dioscorides</i>
249	Tiger Hopper	<i>Ochus subvittatus</i>
250	Forest Hopper	<i>Asticopterus jama</i>
251	Palm Redeye	<i>Erionota thrax</i>
252	Fringed Red Eye	<i>Matapa cresta</i>
253	Common Redeye	<i>Matapa aria</i>
254	Yellow-vein Lancer	<i>Pyroneura margherita</i>
255	Light Straw Ace	<i>Pithauria stramineipennis</i>
256	Northern Spotted Ace	<i>Thoessa cerata</i>
257	Sikkim Ace	<i>Halpe sikkima</i>
258	Plain Ace	<i>Halpe kumara</i>
259	Indian Ace	<i>Halpe homolea</i>
260	Hill Ace	<i>Halpe kusala</i>
261	Banded Ace	<i>Halpe zema</i>
262	Tufted Ace	<i>Sebastonyma dolopia</i>
263	Common Banded Demon	<i>Notocrypta paralyos</i>
264	Restricted Demon	<i>Notocrypta curvifascia</i>

	Common Name	Scientific Name
265	Chocolate Demon	<i>Ancistroides nigrita</i>
266	Grass Demon	<i>Udaspes folus</i>
267	Dark Velvet Bob	<i>Koruthaialos butleri</i>
268	Chestnut Bob	<i>Iambrix sasala</i>
269	Grass Bob	<i>Suada swerga</i>
270	Khasi Forest Bob	<i>Scobura isota</i>
271	Large Forest Bob	<i>Scobura cephaloides</i>
272	Malay Forest Bob	<i>Scobura phidita</i>
273	Atkinson's Bob	<i>Arnetta atkinsoni</i>
274	Wax Dart	<i>Cupitha purreea purreea</i>
275	Common Dartlet	<i>Oriens gola</i>
276	Common Dart	<i>Potanthus pseudomaesa clio</i>
277	Sumatran Dart	<i>Potanthus ganda</i>
278	Common Palm Dart	<i>Telicota colon</i>
279	Plain Palm Dart	<i>Cephrenes acalle</i>
280	Paintbrush Swift	<i>Baoris penicillata unicolor</i>
281	Paintbrush Swift	<i>Baoris farri</i>
282	Blank Swift	<i>Caltoris kumara</i>
283	Figure of 8 Swift	<i>Caltoris pagana</i>
284	Full-stop Swift	<i>Caltoris cormasa moolata</i>
285	Colon Swift	<i>Caltoris cara</i>
286	Great Swift	<i>Pelopidas assamensis</i>
287	Tufted Swift	<i>Caltoris plebeia</i>
288	Dark-branded Swift	<i>Caltoris brunnea</i>
289	Large Branded Swift	<i>Pelopidas sinensis</i>
290	Small Branded Swift	<i>Pelopidas mathias</i>
291	Straight Swift	<i>Parnara bada</i>
292	Bevan's Swift	<i>Pseudoborbo bevani</i>

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