ON THE COLLECTIONS OF LEPIDOPTERA FROM THE SILENT VALLEY, KERALA

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INTRODUCTION

The Zoological Survey of India conducted several faunistic surveys in the unexplored areas of Silent Valley. Fairly good collections of lepidoptera have been brought to the Z.S.I. so as to give the authors an opportunity for their taxonomical studies. The paper deals with 27 species in 19 genera under 6 families of Rhopalocera and 2 species in 2 genera under a couple of families of Heterocera. All the species are for the first time recorded from the concerned area. Their original and current references, and also geographical distribution have been given.

SYSTEMATIC ACCOUNT

Family DANAIIDAE

1. Idea lynceus (Drury)

1773. Papilio lynceus Drury, Ill. Exot. Ins., 2 : 12, pl. 7, fig. 1.

Material examined: 1 ex., Kerala; Silent Valley, on the left bank of the river Kunti about 5 kms. away from the Dam site, 24. iv. 1980 (R. S. Pillai Coll.).

Length of forewing 56 mm.

Distribution: India: Sunderbans, Western ghats, Kerala; Sri-Lanka; Burma; Malaya; Sumatra; Borneo.

Remarks: Wynter-Blyth (1957) has referred to this species, popularly called "the Tree Nymph", under the genus Hestia and, erroneously cited Moore & de Niceville as the authors of the species. However, following Talbot (1947), the authors have retained the species under the genus Idea Fabricius.

2. Danaus aglea (Stoll)


Length of forewing: 30 mm.

Distribution: India: Southern to Western Peninsula, the Himalayas east from Kashmir, Assam, West Bengal, the Andaman and Nicobar Islands; South China: Taiwan, Hainan; Vietnam: Tonkin, Annam; Thailand and Malaya.


3. Danaus limniace (Cramer)


Length of forewing 38—46 mm.

Distribution: South China: Taiwan; India; Sri Lanka; Burma; Malaysia; Sula Islands; Java; the Philippines; Luzon; Sulawesi; Moluccus.

Remarks: The species, popularly known as “the Blue Tiger”, is found throughout the plains and hills of India and also the Andaman and Nicobar groups of Islands.

4. Euploea core (Cramer)

1780. Papilio core Cramer, Pap. Exot., 3: 133, pl. 267, figs E-F.

Material examined 1 ex., Kerala, Silent Valley, Kunthi River vicinity near Hydro-Electric Project-site, 16. i. 1980 (S. K. Bhattacharya & Party Coll.).
Length of forewing: 44 mm.

Distribution: India; Sri Lanka; Sumatra; Java and eastwards.

Remarks: The species, popularly known as "the Common India Crow", is very common in India.

Family SATYRIDAE

5. Melanitis leda (Linnaeus)

Length of forewing: 28-40 mm.

Distribution: Southern China; Indo-Australia; Korea; South Japan and Ethiopian region.

Remarks: The species, popularly known as the "Common Evening Brown", is very common in India.

Family NYMPHALIDAE

6. Euthalia lepidea (Butler)

Length of forewing: 30 mm.

Distribution: India: Kumaon, Assam, Orissa, Kerala; Burma; Vietnam: Tonkin; Malaya Peninsula.

Remarks: The species, popularly known as the "the Gray Count", is not common in south India.

7. Pantoporia sp.

Material examined: 1 ex., Kerala, Silent Valley, 4 kms. N. E. of Valiyaparathodu, 940 m., 23. i. 1980 (S. K. Bhattacharya & Party Coll.).
Length of forewing 30 mm.

Remarks: The specimen could not be identified up to species due to the badly damaged condition. However, the genus, popularly known as "the Sergeants", is confined to Asia only.

8. Neptis hylas (Linnaeus)


Length of forewing: 24 mm.

Distribution: India; Sri Lanka; Burma; Malayan subregion including the Lesser Sunda Islands; Palaearctic Asia and Europe.

Remarks: The species, popularly known as "the Common Sailor", is very common in India.

9. Neptis jumbah Moore


Material examined: 1 ex., Kerala, Silent Valley, 8 kms. away from Makkali, 15. i. 1980 (K. R. Rao & Party Coll.).

Length of forewing: 28 mm.

Distribution: India: Eastern (West Bengal) and Southern peninsula, the Andaman Islands; Burma (Rangoon).

Remarks: The species, popularly known as "the Chestnut-streaked Sailor", is common in India.

10. Hypolimnas misippus (Linnaeus)

**Material examined** 1 ex., Kerala, Silent Valley, 8 kms. west of Valiyaparathodu camp, 26. i. 1980 (S. K. Bhattacharya & Party Coll.).

**Length of forewing**: 36 mm.

**Distribution**: China; Pakistan; Baluchistan; India including the Andaman & Car Nicobar Islands; Sri Lanka; Burma; Malayan Subregion; Ethiopian and Neotropical regions.

**Remarks**: The species, popularly known as “the Danaid Eggfly”, is abundant in South India. The female of this species is a very good mimic of “the Plain Tiger”, *Danaus chrysippus* Linn.

11. **Precis bierta** (Fabricius)


**Material examined** 1 ex., Ca. 8 kms. west of Valiyaparathodu camp, 26. i. 1980 (S. K. Bhattacharya Coll.); 1 ex., Kerala, Silent Valley, Valiyaparathodu, 1005 m., 25. i. 1980; 1 ex.; Kummathanthodu area, 890 m., 22. iv. 1980; 2 exs., about 2 kms. from camp site along the road leading to Mukkali, 1000 m., 4. v. 1980 (R. S. Pillai & Party Coll.).

**Length of forewing**: 22—24 mm.

**Distribution**: South China; Pakistan; Baluchistan; India including the Andaman Islands; Sri Lanka; Burma.

**Remarks**: The species, popularly known as “the Yellow Pansy”, is very common in India. It is interesting to note that the colour of the underside of both wings resembles dry grass. This resamblance affords protection to the concerned species.

12. **Precis lemonias** (Linnaeus)


Length of forewing: 14–25 mm.

Distribution: South China; Taiwan; India; Bhutan; Sri Lanka; Burma; the Philippines.

Remarks: The species, popularly known as “the Lemon Pansy”, is common in India.

13. Precis atlites (Linnaeus)


Length of forewing: 31 mm.

Distribution: South China; Vietnam; Annam; Tonkin; India including the Andaman and Central Nicobar Islands; Burma; Sri Lanka; Thailand; Java; Kangean; Lombok; Sulawesi.

Remarks: The species, popularly known as “the Grey Pansy”, is locally common.

14. Precis iphita (Cramer)


Length of forewing: 25 mm.

Distribution: Central and South China (Taiwan); India; Sri Lanka; Burma.

Remarks: The species, popularly known as “the Chocolate Pansy”, is common in India.
15. *Atella phalantha* (Drury)


**Material examined**: 1 ex., Kerala, Silent Valley, 20. i. 1979 (R. S. Pillai & party Coll.); 1 ex., 4 kms. north of Valiyaparamathodu 980 m., 28. i. 1980 (K. R. Rao Coll.).

**Length of forewing**: 24—27 mm.

**Distribution**: China; Pakistan (Baluchistan); India including the central Nicobar Island; Sri Lanka; Burma; Malayan subregion; Japan.

**Remarks**: The species, popularly known as “the Common Leopard”, is widely distributed and common in India.

**Family Lycaenidae**

16. *Zizeeria* sp.

**Material examined**: 1 ex., Kerala, Silent Valley, 5 kms. east of the camp, Valiyaparamathodu, 940 m., 23. i. 1980 (K. R. Rao & party Coll.).

**Length of forewing**: 11 mm.

**Remarks**: The species could not be determined due to the paucity and damaged condition of material.

**Family Papilionidae**

17. *Troides helena* (Linnaeus)


**Material examined**: 1 ex., Kerala, Silent Valley, 30 kms., N. W. of Mukkali, Palghat, 30. i. 1980 (S. K. Bhattacharya & party Coll.).

**Length of forewing**: 79 mm.

**Distribution**: India Sikkim, Assam, Orissa, Kerala, Bombay, the Andaman & South Nicobar Islands; Sri Lanka; Burma.

**Remarks**: The species, popularly known as “the Birdwing” is the largest of all Indian butterflies and not rare in the Indian subregion.
18. **Parides (Atrophoneura) varuna** (White)


*Material examined:* 1 ex., Kerala, Silent Valley, Dam site, Kummathanthodu, 840 m., 22. iv. 1980 (R. S. Pillai & party Coll.).

*Length of forewing:* 52 mm.

*Distribution:* Vietnam: Tonkin; India: Sikkim, Assam, Arunachal Pradesh, Kerala; Burma; Mergui Archipelago; Tavoy; Thailand; Malaya Peninsula.

*Remarks:* The species, popularly known as “the Common Batwing,” is recorded for the first time from Kerala.

19. **Pachliopta aristolochiae** (Fabricius)


*Material examined:* 1 ex., Kerala, Silent Valley, Dam site, 17. i. 1980 (S. K. Bhattacharya Coll.); 1 ex., 4 kms. towards north from camp II, Valiyaparathodu, 980 m., 25. i. 1980 (K. R. Rao & party Coll.).

*Length of forewing:* 47–50 mm.

*Distribution:* West, Central and South China; India; Sri Lanka; Burma; the Philippines; Sundaland; the Lesser Sunda Islands.

*Remarks:* The species, popularly known as “the Common Rose”, is very common almost all over the plains of India.

20. **Papilio clytia** Linnaeus


*Length of forewing:* 42 mm.
Distribution: South China; Vietnam: Tonkin; India: Kangra to Sikkim, Assam, Arunachal Pradesh, Northern (Madhya Pradesh), Southern and Western (Bombay) peninsulas; Sri Lanka; Burma; Sunda land; Timor; the Philippines.

Remarks: The species, popularly known as the "Common Mime", is a good mimic of Danaus limniace (Cramer).

21. Graphium (Graphium) sarpedon (Linn.)


Length of forewing: 34—40 mm.

Distribution: South China; India: Kashmir, West Bengal, Assam, Arunachal Pradesh, Kerala; Burma; Malayan subregion; the Australian region; South Japan.

Remarks: The species, popularly known as "the Common Blue-bottle", is common in India proper.

22. Graphium (Graphium) doson (C. & R. Felder)


Length of forewing: 38 mm.

Distribution: South China; India: North-Western and North-Eastern Himalayas, Kerala; Sri Lanka; Burma; Sunda Islands; South Japan.

Remarks: The species, popularly known as "the Common Jay", is common in India proper.
Family **Pieridae**

23. **Appias indra** (Moore)


*Length of forewing*: 23–27 mm.

*Distribution*: South China: Taiwan, Hainan; Sri Lanka; Burma; Malaya; Borneo; Palawan.

*Remarks*: The species, popularly known as “the Plain Puffin”, is rare in South India and Sri Lanka but common in North India.

24. **Appias albina** (Boisduval)


*Material examined*: 18 exs., Dam site, 17. 1. 1980 (S. K. Bhattacharya & Party Coll.); 2 exs., along Kuntipuzha, 900 m., 17. i. 1980; 1 ex., within 4 kms. from Kumattanthodu, 960 m., 18. i. 1980; 1 ex., Dam site, Kuntipuzha river, 960 m., 19. i. 1980; 1 ex., 5 kms. east from camp II, Valiyaparathodu, 940 m., 23. i. 1980; 3 exs., 1 km. west from the Base Camp, 1040 m., 25. i. 1980 (K. R. Rao & Party Coll.).

*Length of forewing*: 26–30 mm.

*Distribution*: China; India; the Philippines; Papuan region; Moluccas; Australia.

*Remarks*: The species, popularly known as “the Common Albatross”, is common in South India.

25. **Ixias marianne** (Cramer)


Length of forewing: 23—25 mm.

Distribution: India Kumaon, Punjab, Himachal Pradesh, West Bengal, Saurashtra, Southern Peninsula; Sri Lanka.

Remarks: The species, popularly known as “the White Orange Tip”, is common in India proper.

26. Eurema laeta (Boisduval)


Length of forewing: 13—20 mm.

Distribution: U.S S.R. (Amur); North & South China; Vietnam, (Tonkin, Annam); India; Burma; Java; Kei Islands; the Philippines; Timor; Japan.

Remarks: The species, popularly known as “the Spotless Grass yellow”, is very common throughout the plains and hills of India.

27. Eurema hecabe (Linnaeus)


Material examined: 1 ex., Valiyaparathodu, 26. iv. 1980; 1 ex., 8 kms. away from Dam site, 15. i. 1980 (K. R. Rao & Party Coll.)! 1 ex., about 2 kms. away from the camp site along the road leading to Mukkali, 1000 m., 4. v. 1980 (S. K. Bhattacharya & Party Coll.).

Length of forewing: 19—22 mm.
Distribution  Ethiopian; Oriental, Australian and Palaearetic regions as far as upto Korea and Japan.

Remarks  The species, popularly known as “the Common Grass Yellow”, is very common in India proper.

Family ARCTIIDAE

28. Phissama transiens (Walker)


Length of forewing:  21 mm.

Distribution:  China; India; Burma; Borneo; Sulawesi; the Philippines; Moluccus.

Remarks:  The species, is variable in colouration specially of the wings in males and females.

Family SPHINGIDAE

29. Macroglossum sp.

Material examined:  1 ex., Valiyaparathodu, 910 m, 25. iv. 1980 (R. S. Pillai & Party Coll.).

Length of forewing:  22 mm.

Remarks:  Due to the paucity and damaged condition of the material, it is not possible by the authors to identify the specimen upto the specific level.

SUMMARY

The communication highlights an interesting account on the systematics including the biogeography of the lepidopterous material collected during all the seasons between 1979 and 1980 by the parties from the Zoological Survey of India including one of its Southern Regional Station, Tamil Nadu, from the unexplored forests of Silent Valley, Kerala, whence all the elements constitute new locality records. Presently, 29 species in 21 genera of 8 families under both suborders
Rhopalo- and Heterocera of the concerned order have been incorporated. Only two species of the former and one of the latter suborder, which are poorly represented in the available collections on one hand and badly damaged on the other, could not, however, be authentically determined.

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