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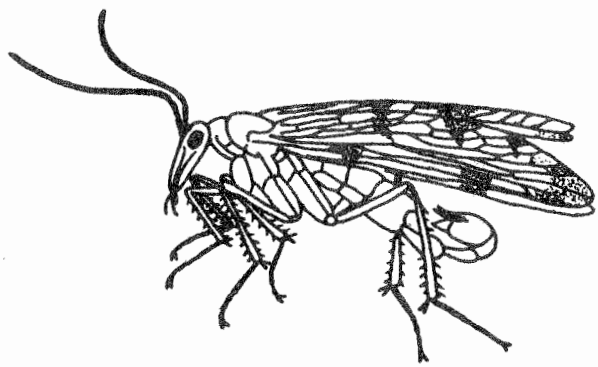

NOTE

A REPORT ON THE BUTTERFILES OF CALICUT UNIVERSITY CAMPUS

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Introduction

Butterflies are the most fascinating group of insects attracted by its diverse forms and colours. There are about 1500 species of butterflies known to occur in India, among them about 310 species are reported from southern India (Wynter Blyth, 1957; Larsen, 1987, 1988). In Kerala, no comprehensive study has been done on the butterfly fauna. Ferguson (1891) recorded 220 butterfly species from Travancore area. In a study in the Silent Valley National Park, Mathew (1990) recorded 96 species, subsequently Jafer (1995) reported 87 species from sacred groves of North Malabar. In a recent study Jafer, Mathew & Zacharia (1997) recorded 119 species of butterflies from Periyar Tiger Reserve. The Calicut University Campus is rich in avifauna (Joseph & Mathew, 1975; Jafer & Pramod, 1998). The campus is also very rich in other fauna. No attempt was made so far on the butterflies of this area and hence, an attempt has been made to list this fauna in the campus during my stay at the campus between January 1994 to June 1996.

Maximum number of species observed in the family Nymphalidae (28 species) followed by Papilionidae (11 species), Hesperiidae (9 species), Pieridae (8 species) and Lycaenidae (7 species). Butterflies observed from the campus are listed below.

Systematic List of the Butterflies of Calicut University Campus (Remark in Paranthesis)

Family / Species	Common Name
Family: Papilionidae	
1. *Chilasa clytia* Linnaeus	Common Mime (UC)
2. *Graphium agamemnon* Felder & Felder	Tailed Jay (C)
3. *Graphium sarpedon* Felder & Felder	Common Blue Bottle (C)
4. *Pachliopta aristolochiae* Fabricius	Common Rose (UC)
5. *Pachliopta hector* Linnaeus	Crimson Rose (C)
6. *Papilio buddha* Westwood	Buddha Peacock (UC)
7. *Papilio demoleus* Linnaeus	Lime Butterfly (UC)
8. *Papilio helenus daksha* Moore	Red Helen (UC)
9. *Papilio polymnestor* Cramer	Blue Mormon (UC)
10. *Papilio polytes* Linnaeus	Common Mormon (C)
11. *Troides minos* Cramer	Southern Birdwing (R)
Family: Pieridae	
12. *Anaphaeis aurota* Fabricius	Caper White (UC)
13. *Catopsilia pomona* Fabricius	Lemon Emigrant (UC)
14. *Catopsilia pyranthe* Linnaeus	Mottled Emigrant (C)
15. *Delias eucharis* Drury	Common Jezebel (C)
16. *Eurema hecabe* Moore	Common Grass Yellow (C)
17. *Hebomoia glaucippe* Butler	Giant Orange Tip (UC)
18. *Leptosia nina* Fabricius	Psyche (C)
19. *Parenonia valeria* Fabricius	Common Wanderer (C)
Family: Lycaenidae	
20. *Caleta caleta* Hewitson	Angled Pierrot (UC)
21. *Castalius rosimon* Fabricius	Common Pierrot (UC)
22. *Chilades lains* Cramer	Lime Blue (UC)
23. *Freyeria trochylus* Kollar	Grass Jewel (C)

24. *Jamides celeno* Fabricius	Common cerulean (C)
25. *Loxura atymnus* Cramer	Yamfly (UC)
26. *Rathinda amor* Fabricius	Monkey Puzzle (UC)
27. *Talicada nyseus* Guerin-Meneville	Red Pierrot (C)
Family: Danaidae	
28. *Danaus chrysippus* Linnaeus	Plain Tiger (C)
29. *Danaus genutia* Cramer	Striped Tiger (UC)
30. *Euploea core* Cramer	Common Crow (C)
31. *Parantica aglea* Cramer	Glassy Blue Tiger (UC)
32. *Tirumala septentrionis* Fruhstorfer	Dark Blue Tiger (UC)
Family: Satyridae	
34. *Elymnias hypermnestra* Butler	Common Palmfly (R)
33. *Melanitis leda* Drury	Common Evening Brown (C)
35. *Mycalesis perseus* Fruhstorfe	Common Bushbrown (UC)
36. *Ursotrioena medus* Moore	Nigger (R)
Family: Nymphalidae	
37. *Ariadne ariadne* Moore	Angled Castor (UC)
38. *Ariadne merione* Cramer	Common Castor (C)
39. *Cirrochora thais* Fabricius	Tamil Yeoman (C)
40. *Cupha erymanthis* Fruhstorfer	Southern Rustic (UC)
41. *Euthalia aconthea* Fruhstorfer	Common Baron (C)
42. *Hypolimnas bolina* Drury	Great Eggfly (UC)
43. *Hypolimnas misippus* Linnaeus	Common / Danaid Eggfly (UC)
44. *Junonia almana* Linnaeus	Peacock Pansy (UC)
45. *Junonia atlites* Linnaeus	Grey Pansy (UC)
46. *Junonia hierta* Fabricius	Yellow Pansy (R)
47. *Junonia lemonias* Linnaeus	Lemon Pansy (UC)
48. *Moduza procris* Fruhstorfer	Commander (UC)
49. *Neptis jumbah* Moore	Chestnut Streaked Sailor (UC)
50. *Neptis hylas* Moore	Common Sailor (C)
51. *Pantoporia hordonia* Stoll	Common Lascar (UC)
52. *Peris iphita* Fruhstorfer	Chocolate Pansy (UC)
53. *Phalanta phalantha* Drury	Leopard Butterfly (UC)
54. *Tanaecia lepidea* Fruhstorfer	Grey Count (R)
55. *Vanessa cardui* Linnaeus	The Painted Lady (R)
Family: Acraeidae	
56. *Acraea terpsicore* Linnaeus	Tawny Coster (C)
Family: Hesperiidae	
57. *Badamia exclamationis* Fabricius	Brown Awl (C)
58. *Celanorrhinus ambareesa* Moore	Malabar Spotted Flat (UC)
59. *Hasora chromus* Cramer	Common Banded Awl (UC)
60. *Matapa aria* Moore	Common Redeye (UC)
61. *Pelopidas* sp.	Branded Swift (UC)
62. *Suastus gremius* Fabricius	Indian Palm Bob (UC)
63. *Tagiades gana* Evans	Immaculated Snow Flat (UC)
64. *Tagiades litigiosa* Moschler	Water Snow Flat (UC)
65. *Udaspes folus* Cramer	Grass Demon (UC)

(R) Rare; (UN) Uncommon; (C) Common.

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NOTE

COMPETITIVE DISPLACEMENT IN FRUIT FLY SPECIES (DIPTERA: TEPHRITIDAE)

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Interspecific competition is an interesting phenomenon in fruit fly species. Various aspects of competition have been reported for food and breeding sites. The latter aspect usually results in diversification of ecological niche or physical displacement of a particular species. Sometimes it is of great help when the displaced species is more harmful than the displacing species. Replacement of Mediterranean fruit fly, *Ceratitis capitata* (Wiedemann) by *Bactrocera zonata* Saunders in India and some other countries is quite well known to the entomologists. The type locality of the Mediterranean fruit fly, *C. capitata* was first given by Wiedemann (1824, Analecta Ent.: 55) as 'Ostindien'. This is considered to be an error as fruit fly has never been reported after Wiedemann's record except Munro (1938) who described a few female specimens of this species bearing the label "On Peaches, 1907, 1908" kept in the collections of Pusa, Bihar, India. Both the Oriental as well as Munro's record seem to be wrong as in the latter's case the source of peaches has not been mentioned. There is every possibility that these fruits might have been from some African country. Even if its presence is taken as correct at that time, its total absence may be attributed to its displacement by *Bactrocera dorsalis* (Hendel) (Bess , 1953). Though various control measures are being adopted to eradicate *B. dorsalis*, it is premature to think whether *capitata* may reappear here when the population of *dorsalis* comes down to a very low level.

Another case of competition has been observed between *Bactrocera zonata* Saunders and *Carpomya vesuviana* Costa on ber fruits, when some fruit fly infested ber fruits were kept in the laboratory, a large number of fruit flies emerged. Surprisingly most of these were of *B. zonata* species while only one or two flies were of *C. vesuviana*. Further information on the relative population of these two species supported the slow replacement of ber fruit fly. One reason of competive displacement of *vesuviana* by *zonata* could be the various measures being applied to various fruit crops to contain serious polyphagus pest *B. zonata*. *C. vesuviana* is a monophagous and its host plant *Zizyphus* sp. is relatively less important commercially and attracts less attention as far as control measures are concerned. Over the years, in the absence of control measures the *B. zonata* might have developed preference for *Zizyphus* spp. (Ber fruit)