

AN INVENTORY OF THE MOTH FAUNA (LEPIDOPTERA) OF JATINGA, ASSAM, INDIA

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Abstract

An inventory of the moth fauna of a tiny North Eastern locality, Jatinga in North Cachar Hills (Haflong: Assam: latitude 24° to 28° 18' N, longitude 89° 46' E to 97° 4' E) is prepared for the first time. It includes 81 species referable to the genera *Aetholix* Lederer, *Agathodes* Guenée, *Agrotera* Schrank, *Arthroschista* Hampson, *Bocchoris* Moore, *Botyodes* Guenée, *Chalcidoptera* Butler, *Diaphania* Hübner, *Dichocrocis* Lederer, *Glyphodes* Guenée, *Hemopsis* Kirti and Rose, *Herpetogramma* Lederer, *Heterocnephes* Lederer, *Hymenia* Hübner, *Indogrammodes* Kirti and Rose, *Ischnurges* Lederer, *Lamprosema* Hübner, *Limbototys* Munroe, *Lygropia* Lederer, *Maruca* Walker, *Merocetena* Lederer, *Nagiella* Munroe, *Nausinoe* Hübner, *Nevrina* Guenée, *Notarcha* Meyrick, *Pagyda* Walker, *Palpita* Hübner, *Patania* Moore, *Phostria* Hübner, *Pionea* Guenée, *Polythlipta* Lederer, *Pramadea* Moore, *Prophantis* Warren, *Prorodes* Swinhoe, *Pycnarmon* Lederer, *Rhagoba* Moore, *Samea* Guenée, *Satanastra* Meyrick, *Sisyrophora* Lederer, *Syllepte* Hübner, *Synclera* Lederer, *Tangla* Swinhoe, *Tetridia* Warren and *Toxobotys* Munroe and Mutuura of the subfamily Pyraustinae; 39 species belonging to the genera *Achaea* Hübner, *Alamis* Guenée, *Anisoneura* Guenée, *Anua* Walker, *Artena* Walker, *Caranilla* Moore, *Chalciope* Hübner, *Cocytodes* Guenée, *Dysgonia* Hübner, *Entomogramma* Guenée, *Ercheia* Walker, *Eupatala* Ragonot, *Grammodes* Guenée, *Hypopyra* Guenée, *Lagoptera* Guenée, *Lygniodes* Guenée, *Mocis* Hübner, *Ophisma* Ochsenheimer, *Parallelia* Hübner, *Pericyma* Herrich-Schaffer, *Phyllodes* Boisduval, *Pindara* Moore, *Thyas* Hübner and *Trigonodes* Guenée of the subfamily Catocalinae; 44 species pertaining to the genera *Aedia* Hübner, *Amphigonia* Guenée, *Anereuthina* Hübner, *Anomis* Hübner, *Asta* Walker, *Bamra* Moore, *Calyptra* Ochsenheimer, *Chrysopera* Hampson, *Delgamma*

Moore, *Episparina* Berio, *Episparis* Walker, *Ericcia* Walker, *Eudocima* Billberg, *Fodina* Guenée, *Hamodes* Guenée, *Hulodes* Guenée, *Hypocala* Guenée, *Hyospila* Guenée, *Ischyja* Hübner, *Koptoplax* Hampson, *Lacera* Guenée, *Ommatophora* Guenée, *Oraesia* Guenée, *Othreis* Hübner, *Oxyodes* Guenée, *Platyja* Hübner, *Ramadasa* Moore, *Rhytia* Hübner, *Serrododes* Guenée, *Speiredonia* Hübner, *Sympis* Guenée and *Trichopolydesma* Berio of the subfamily Ophiderinae; and 16 species belonging to the genera *Acronicta* Oschsenheimer, *Apsarasa* Moore, *Athetis* Hübner, *Callopietria* Hübner, *Callyna* Guenée, *Chasmina* Walker, *Craniophora* Snellen, *Dipterygina* Sugi, *Eutamsia* Fletcher, *Prospalta* Walker, *Spodoptera* Guenée and *Yepcalphis* Nye of the subfamily Acronictinae. In all, 180 species have been recorded from this locality, which is situated in one of the biodiversity hot spots in India. It has been made out that the spot be given due attention both by the Entomologists and Ornithologists. The fruit piercing for juice sucking and skin piercing for blood sucking behaviour of certain Ophiderinae taxa have been quoted to attract the attention of Lepidopterists in India. It has also been emphasized that the life history studies and location of the larval host plants of non-pest species are essential from the conservation point of view.

Keywords

Pyraustinae, Catocalinae, Ophiderinae, Acronictinae, Lepidoptera, moth, biodiversity, inventory, hotspot, Jatinga, Assam.

Introduction

The census and conservation of biodiversity and its appropriate use are vital global issues. India is one of the twelve mega diversity countries having two hotspots viz., Eastern Himalaya and Western Ghats. The inventorization of the biota of these two hot spots is necessary for drawing various inferences, meant

for conservation and habitat management. In this regard, the author has ventured to compile an inventory of certain Lepidopteran species referable to the subfamilies Pyraustinae, Catocalinae, Ophiderinae and Acronictinae from one locality -- Jatinga (24° to 28° 18' N, 89° 46' E to 97° 04' E) in northeastern India. Jatinga, a tiny village (820m) is about 9km away from Haflong in North Cachar Hills. It is connected by three roads, one from Lamatinga, the second from Silcher and the third from Haflong. Survey work was undertaken in the months of April, August and September mainly between 1982-1986 under the UGC and CSIR projects in some northeastern Indian localities. Upon scrutiny of these collections, Jatinga was found to be quite rich in moth diversity. The present inventory will be useful in devising suitable conservation and economic measures.

Material and Methods

The entire material during the studies were collected from the lights fitted at the bird watching tower at Jatinga. Sometimes a portable light trap or a petromax lamp (during failure of electricity) was also used. The adults were immediately killed after their collection with ethyl-acetate vapours in insect killing bottles of different sizes, depending upon the size of the specimen. In order to keep the scales intact on the body of the moths, they were removed from the bottles as soon as they were killed. Each of the killed specimens was pinned through the middle line of the thorax and the top of the pin was so adjusted in order to handle the specimens without the fingers touching it. This was proceeded by spreading of both the wings on the insect stretching board, followed by their drying in the improvised drying chambers fitted with electric bulbs or mild heaters. Each specimen was provided with a slip indicating the locality and date of collection. The specimens were preserved in airtight insect boxes, having naphthalene balls as fumigant. It may also be added that the setting of some specimens done in humid environment of Jatinga warranted their re-setting in the laboratory, as the wings tend to loose their original position. Such specimens were relaxed in the laboratory, reset and dried in an oven set at 40°C. Various morphological characters such as head appendages, wing maculation, wing venation and genitalia were examined to identify different species.

Observations

Before the enlisting of different species is done, it seems appropriate to mention here that the works by Hampson (1896, 1899, 1908, 1912), Mehta (1933), Klima (1939), Munroe (1950, 1952, 1954, 1957, 1959, 1960), Nazmi (1963), Wang (1963), Pajni and Rose (1972, 1977, 1978), Bhattacharjee (1973, 1980) Rose and Pajni (1979), Rose (1982a, b), Rose and Dhillon (1980, 1982), Fletcher and Nye (1984), Rose and Singh (1985, 1989), Rose and Kirti (1986, 1987, 1989), Kirti and Rose (1987, 1989, 1990, 1992), Robinson *et al.* (1994), and Gupta (2000) have mainly been referred to for the identification of 81 species referable to 44 genera of the subfamily Pyraustinae. Thirty-nine species

belonging to 24 genera of the subfamily Catocalinae have been identified from Hampson (1894, 1913a, b), Sevastopulo (1956), Shull and Nadkerny (1961), Kapur and Arora (1971), Nye (1975), Pajni *et al.* (1985), Holloway (1977), Edwards (1978), Banziger (1982) and, Rose and Kaur (1990). The identification of 44 species pertaining to 32 genera of the subfamily Ophiderinae (Butler, 1879, 1892; Moore, 1881; Hampson, 1894, 1912, 1924; Pierce, 1909, 1942; Wileman, 1922; Barnes & Benjamin, 1926; Wileman & West, 1928, 1929; Mehta, 1933; Ogata, 1954; Sugi, 1961; Nye, 1975; Bänziger, 1982, 1983, 1985; Pelletier, 1982; Kitching, 1984; Srivastava & Rose, 1987, 1989, 1990, 1993a, b; Rose & Srivastava, 1988, 1989a, b, 1994; Srivastava, 1992) and 16 species belonging to 12 genera of the subfamily Acronictinae (Moore, 1867, 1878; Butler, 1879; Swinhoe, 1889, 1895; Hampson, 1894, 1895, 1897, 1902, 1912, 1913a, b; Fletcher, 1957; Bayer, 1960; Chatterjee, 1967; Brown & Dewhurst, 1975; Nye, 1975) has been affected by referring to the respective literature sources. As such, the list of 180 species compiled on the basis of collections housed in the Lepidoptera Laboratory in the Department of Zoology, Punjabi University, Patiala is as follows:

Subfamily: Pyraustinae

1. *Aetholix flavibasalis* (Guenée)
Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 8: 193 (Male) (*Aediodes*) (Bombay).
Material examined: One female, 10.ix.1982; one female, 6.ix.1983.
Wing expanse: Half: Female: 10mm.
2. *Agathodes ostentalis* (Geyer)
Geyer, 1837, in Hübner, *Zuträge Samml. exot. Schmett.* 5: 11, pl [143], figs.833, 834 (*Perinephla*) (Java).
Material examined: One male, one female, 21.v.1986-22.v.1986.
Wing expanse: Half: Male: 15.50; Female: 16mm.
3. *Agrotera discinotata* Swinhoe
Swinhoe, 1894, *Ann. Mag. nat. Hist.* 14 (6): 207 (Male) (*Agrotera*) (Cheerapunjee).
Material examined: Two females, 14.ix.1985-16.ix.1985; 1female, 18.ix.1986.
Wing expanse: Half: Female: 11mm.
4. *Arthroschista hilaris* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 532 (*Margaronia*) (Ceylon).
Material examined: Four males, three females, 14.ix.1985-15.ix.1985.
Wing expanse: Half: Male: 28.50-29.50mm; Female: 24-27.50mm.
5. *Bocchoris adipalis* (Lederer)
Lederer, 1863, *Wien. ent. Monatschr.* 7: 376 (*abipalis*), 475, pl.11, fig.16 (*Botys*) (Amboina).
Material examined: One male, 12.ix, 1983.
Wing expanse: Half: Female: 11.50mm.
6. *Botyodes asialis* (Guenée)
Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insectis* (Spec.

- gén. Lépid.), 8: 321 (Female) (*Botyodes*) (India).
Material examined: Two males, one female, 19.ix.1986.
Wing expanse: Half: Male: 44mm; Female: 40mm.
7. *Chalcidoptera appensalis* (Snellen)
 Snellen, 1884, *Tijdschr. Ent.* 27: 41, pl.3, fig.12, 12a (*Entephria*) (Celebes, Java).
Material examined: One male, 8.viii.1982: one male, two females, 3.ix.1983-5.ix.1983.
Wing expanse: Half: Male: 11mm; Female: 11mm.
8. *Diaphania actorionalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 498 (Male) (*Glyphodes*) (India, Ceylon).
Material examined: Three males, 22.ix.1986.
Wing expanse: Half: Male: 14mm.
9. *Diaphania canthusalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 505 (Male) (*Glyphodes*) (Sarawak).
Material examined: Two males, 15.ix.1985.
Wing expanse: Half: Male: 16mm.
10. *Diaphania negatalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 458 (Female) (*Phalangiodes*?) (Ceylon).
Material examined: Two males, 21.v.1986-26.v.1986.
Wing expanse: Half: Male: 12mm.
11. *Diaphania zelleri* (Lederer)
 Lederer, 1863, *Wien. ent. Monatschr.* 7: 402, 478, pl.14, fig.3. (Male) (*Glyphodes*) (Amboina).
Material examined: Two males, two females, 22.v.1986.
Wing expanse: Half: Male: 19mm; Female: 19mm.
12. *Dichocrocis bistrigalis* (Walker)
 Walker, [1866] 1865, *List Specimens lepid. Insects Colln. Br. Mus.* 34: 1348 (Male) (*Zebroonia*) (Darjeeling).
Material examined: Two males, one female, 17.v.1986-27.v.1986.
Wing expanse: Half: Male: 15mm; Female: 15mm.
13. *Dichocrocis definita* (Butler)
 Butler, 1889, *Illust. typical Specimens lepid. Heterocara Colln. Br. Mus.* 7: 97, pl.133, fig. 9 (*Haritala*).
Material examined: One male, one female, 20.v.1986-29.v.1986.
Wing expanse: Half: Male: 14.50mm; Female: 14.50mm.
14. *Dichocrocis evaxalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 19: 995 (Male) (*Botys*) (India).
Material examined: One male, two females, 21.v.1986-25.v.1986.
Wing expanse: Half: Male: 12mm; Female: 14mm.
15. *Dichocrocis nilusalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 18: 695 (Male) (*Botys*) (Borneo).
Material examined: Three females, 8.ix.1983.
Wing expanse: Half: Female: 13-14mm.
16. *Dichocrocis plutusalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 478 (*Zebroonia*) (India).
Material examined: One male, 17.ix.1985; two males, 15.ix.1986.
Wing expanse: Half: Male: 14mm.
17. *Dichocrocis pyrrhalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 483 (Male) (*Zebroonia*) (Sarawak).
Material examined: Two males, one female, 17.ix.1985.
Wing expanse: Half: Male: 13mm; Female: 13mm.
18. *Dichocrocis rigidalis* (Snellen)
 Snellen, 1890, *Trans. ent. Soc. Lond.* 1890:631 (Female) (*Zebroonia*) (Sikkim).
Material examined: One male, one female, 14.ix.1986-19.ix.1986.
Wing expanse: Half: Male: 13; Female: 13mm.
19. *Dichocrocis semifascialis* (Walker)
 Walker, [1866] 1865, *List Specimens lepid. Insects Colln. Br. Mus.* 34: 1381 (Female) (*Astura*) (Moreton-Bai).
Material examined: Two males, 25.v.1986-27.v.1986; one male, three females, 15.ix.1986-21.ix.1986.
Wing expanse: Half: Male: 12mm; Female: 12mm.
20. *Glyphodes caesalis* Walker
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 499 (Male) (*Glyphodes*) (Ceylon, India).
Material examined: Six males, two females, 3.ix.1983-12.ix.1983.
Wing expanse: Half: Male: 15mm; Female: 15mm.
21. *Glyphodes multilinealis* Kenrick
 Kenrick, 1907, *Proc. Zool. Soc. Lond.* 1907:83, pl.4, fig.173 (*Glyphodes*).
Material examined: Three males, two females, 20.v.1985-21.v.1985; one male, one female, 15.ix.1986.
Wing expanse: Half: Male: mm; Female: mm.
22. *Glyphodes pulverulentalis* Hampson
 Hampson 1896, *Fauna Br. India* (Moths), 4: 353 (Male) (*Glyphodes*) (Nagas, Tenasserim).
Material examined: Six males, one female, 3.ix.1983-9.ix.1983.
Wing expanse: Half: Male: 14mm; Female: 14.50mm.
23. *Glyphodes stolalis* Guenée
 Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insects* (Spec. gén Lépid.) 8: 293, pl.3, fig.11 (Male) (*Glyphodes*) (India?).
Material examined: Four males, three females, 4.ix.1983-7.ix.1983.
Wing expanse: Half: Male: 17-19mm; Female: 17-19mm.
24. *Hemopsis dissipatalis* (Lederer)
 Lederer, 1863, *Wien. Ent. Monatschr.* 7: 376, 474 (Female), pl.11, fig.13 (*Botys*) (Amboina).
Material examined: Three males, one female, 8.ix.1983-12.ix.1983.
Wing expanse: Half: Male: 14mm; Female: 14mm.
25. *Herpetogramma cynaralis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 18:

- 672 (*Botys*).
Material examined: Three males, 13.ix.1986-17.ix.1986.
Wing expanse: Half: Male: 11mm.
26. *Heterocnephys lymphatalis* (Swinhoe)
 Swinhoe, 1889, *Proc. zool. Soc. Lond.* 1889; 420, pl. 44, fig. 7 (*Nosophora*).
Material examined: One male, one female, 16.ix.1985.
Wing expanse: Half: Male: 14.50mm; Female: 14.50-15.50mm.
27. *Hymenia perspectalis* (Hübner)
 Hübner, 1796, *Samml. eur. Schmett.* 6: 18, pl. 16, fig. 101 (*Pyralis*).
Material examined: Two males, two females, 25.v.1986-28.v.1986.
Wing expanse: Half: Male: 9mm; Female: 9mm.
28. *Indogrammodes pectinicornalis* (Guenée)
 Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 8:326 (*Botys*) (India).
Material examined: Three males, two females, 10.ix.1985-13.ix.1985; 1?, ??, 15.ix.1986.
Wing expanse: Half: Male: 14mm; Female 16mm.
29. *Ischnurges angustalis* Hampson
 Hampson, 1893, *Illust. typical Specimens lepid. Heterocera Colln Br. Mus.* 9: 173, pl. 172, fig. 20 (*Ischnurges*).
Material examined: Two males, one female, 12.ix.1985-13.ix.1985; 1?, 2??, 17.ix.1986.
Wing expanse: Half: Male: 10mm; Female: 10mm.
30. *Ischnurges graciosalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 17: 357 (Male) (*Samea*) (Ceylon).
Material examined: One male, one female, 8.ix.1982.
Wing expanse: Half: Male: 11mm; Female: 12mm.
31. *Lamprosema commixta* (Butler)
 Butler, 1879, *Ann. Mag. nat. Hist.* (5) 4: 453 (*Samea*) (Japan).
Material examined: One male, two females, 22.iv.1982-27.iv.1982.
Wing expanse: Half: Male: 8mm; Female: 9mm.
32. *Lamprosema cuprealis* (Moore)
 Moore, 1877, *Proc. zool. Soc. Lond.* 1877: 616, pl. 60, fig. 13 (Female) (*Coptobasis*).
Material examined: Two males, two females, 8.ix.1982-10.ix.1982
Wing expanse: Half: Male: 13mm; Female: 13mm.
33. *Limbobotys ptyophora* (Hampson)
 Hampson, 1896, *Fauna Br. India* (Moths) 4: 389, fig. 210 (Male) (*Crochidophora*). (Sikkim, Tenasserim).
Material examined: Two males, one female, 12.ix.1985.
Wing expanse: Half: Male: 14mm; Female: 15mm.
34. *Lygropia amplificata* (Warren)
 Warren, 1896, *Ann. Mag. nat. Hist.* 17 (6): 145 (Male) (*Metoea*).
Material examined: Two males, one female, 26.v.1986; two males, two females, 12.ix.1986.
Wing expanse: Half: Male: 11mm; Female: 11mm.
35. *Lygropia distorta* (Moore)
 Moore, 1885, *Lepid. Ceylon* 3:270, pl.150, fig. 7 (*Pelecynthis*) (Ceylon).
Material examined: Four males, 16.ix.1985.
Wing expanse: Half: Male: 18-25mm.
36. *Maruca amboinalis* (Felder & Rogenhofer)
 Felder & Rogenhofer, 1875, *Reise öst. Fregatte Novara* (Zool.) 2 (Abt.2): 18, pl. 135, fig. 24 (Male) (*Siriocauta?*) (Amboina).
Material examined: One female, 7.ix.1983.
Wing expanse: Half: Female: 15mm.
37. *Meroctena tullalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln. Br. Mus.* 18: 649 (*Botys*) (N. India).
Material examined: One male, two female, 13.ix.1985
Wing expanse: Half: Male: 19mm; Female: 20mm
38. *Nagiella quadrimaculalis* (Kollar)
 Kollar, 1848, in C. F. von Hugel, *Kaschmir und das Reich der Siek, Stuttgart* 4 (2): 492 (*Scopula*).
Material examined: Two males, 29.v.1986.
Wing expanse: Half: Male: 14-17mm
39. *Nausinoe perspectata* (Fabricius)
 Fabricius, 1775, *Syst. Ent.* 1775: 640 (*Phalaena*).
Material examined: One male, two females, 24.v.1986-25.v.1986; two males, 12.ix.1986-13.ix.1986.
Wing expanse: Half: Male: 13mm; Female: 12.50mm.
40. *Nevrina procopia* (Stoll)
 Stoll, 1781, in Cramer, *Uitlandsche Kapellen (Papillons exot.)* 4: 152, pl.368, fig E (*Phalaena*).
Material examined: One male, two females, 22.v.1986.
Wing expanse: Half: Male: 19mm; Female: 19mm.
41. *Notarcha derogata* (Fabricius)
 Fabricius, 1775, *Syst. Ent.* 1775: 641 (*Phalaena*) (India).
Material examined: One male, two females, 21.ix.1985.
Wing expanse: Half: Male: 13mm; Female: 14mm.
42. *Pagyda salvalis* Walker
 Walker, 1859, *List specimens lepid. Insects Colln Br. Mus.* 17: 487 (*Pagyda*) (Ceylon).
Material examined: One male, two females, 15.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 9mm; Female: 11mm.
43. *Palpita pajnii* Kirti & Rose
 Kirti & Rose, 1992, *J. Ent. Res.* 16 (1): 72, figs 20, 21, 22 (Male gen.), 23 (Female gen.).
Material examined: One female, 10.ix.1983.
Wing expanse: Half: Female: 18mm
44. *Palpita palpifurvata* Kirti & Rose
 Kirti & Rose, 1992, *J. Ent. Res.* 16 (1): 72, figs 8,9,10 (Male gen.), 11 (Female gen.).
Material examined: One female, 4.ix.1983.
Wing expanse: Half: Female: 11.50 mm
45. *Patania aurantiacalis* (Fischer von Röslerstamm)

- Fischer von Röslerstamm, [1840] 1838, *Abbildungen Schmettkde (15): 213*, pl. 75, fig.3 (*Botys*).
Material examined: Two males, two females, 23.v.1986-25.v.1986.
Wing expanse: Half: Male: 14-15mm: Female: 14-15mm.
46. *Patania caletoralis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 651 (*Botys*) (N. India).
Material examined: One male, one female, 26.v.1986.
Wing expanse: Half: Male: 17mm: Female: 16.50mm
47. *Patania concatenalis* (Walker)
 Walker, [1866] 1865, *List Specimens lepid. Insects Colln Br. Mus.* 34: 1408 (Female) (*Botys*) (Darjiling).
Material examined: Two males, two females, 21.v.1986-26.v.1986.
Wing expanse: Half: Male: 13mm: Female: 13mm.
48. *Patania jatingaensis* Rose & Singh
 Rose & Singh, 1989, *Entomon* 14 (1 & 2): 39-43, figs. 6.
Material examined: Three males, 3.ix.1983-14.ix.1983; 1?, 23.ix.1983; ???, 13.ix.1985-15.ix.1985.
Wing expanse: Half: Male: 42mm.
49. *Patania mysialis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 634 (Female) (*Botys*) (Sierra Leone).
Material examined: One male, three females, 25.v.1986-26.v.1986.
Wing expanse: Half: Male: 13mm: Female: 14mm.
50. *Patania verecunda* (Warren)
 Warren, 1896, *Ann. Mag. nat. Hist.* 18 (6): 167, (*Loxoscia*) (Khasis).
Material examined: One male, two females, 25.v.1986-26.v.1986.
Wing expanse: Half: Male: 15mm: Female: 14mm.
51. *Phostria noctescens* (Moore)
 Moore, 1888, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr. W.S. Atkinson* (3): 218 (*Charema*) (Darjiling).
Material examined: One female, 6.ix.1983.
Wing expanse: Half: Female: 18mm
52. *Phostria unitalis* (Guenée)
 Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 8: 349 (Male) (*Botys*) (India).
Material examined: Two males, 5.ix.1983.
Wing expanse: Half: Male: 11mm
53. *Pionea ablactalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 660 (*Pionea*).
Material examined: Two males, 22.v.1986.
Wing expanse: Half: Male: 14mm.
54. *Pionea aureolalis* (Lederer)
 Lederer, 1863, *Wien. ent. Monatschr.* 7: 423 (*Pionea*).
Material examined: One female, 4.ix.1983.
Wing expanse: Half: Female: 11mm
55. *Polythlipta euroalis* (Swinhoe)
 Swinhoe, 1889, *Proc. zool. Soc. Lond.* 1889: 420, pl. 44, fig. 12 (*Nausinoe*) (India).
Material examined: One male, 12.ix.1986.
Wing expanse: Half: Male: 16mm: Female: 16mm.
56. *Polythlipta inconspicua* (Moore)
 Moore, 1888, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr. Atkinson* (3): 220 (*Botyodes*) (Darjiling).
Material examined: One male, one female, 16.ix.1985; two males, 12.ix.1986.
Wing expanse: Half: Male: 19mm: Female: 19mm.
57. *Polythlipta macralis* Lederer
 Lederer, 1863, *Wien. ent. Monatschr.* 7: 389, 477, pl. 12, fig. 14 (Male) (*Polythlipta*) (Amboina).
Material examined: Two males, one female 15.ix.1985-16.ix.1985; one male, 12.ix.1986.
Wing expanse: Half: Male: 18mm: Female: 18mm.
58. *Polythlipta ossealis* Lederer
 Lederer, 1863, *Wien. ent. Monatschr.* 7: 389, pl. 12, fig. 18 (*Polythlipta*) (Amboina).
Material examined: Two males, 12.ix.1985; 2males, 15.ix.1986.
Wing expanse: Half: Male: 18mm.
59. *Pramadea lunalis* (Guenée)
 Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 8: 352 (*Botys*) (Coromandel).
Material examined: Two males, 8.iv.1982.
Wing expanse: Half: Male: 14mm.
60. *Pramadea ovalis* (Walker)
 Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 636 (*Botys*) (Congo).
Material examined: One male, 7.viii.1982.
Wing expanse: Half: Male: 13.50mm.
61. *Prophantis octoguttalis* (Felder & Rogenhofer)
 Felder & Rogenhofer, 1875, *Reise öst. Fregatte Novara* (Zool.) 2 (Abt.2): pl. 135, fig. 38 (Male) (*Botys*) (Ambonia).
Material examined: Two males, 16.ix.1985; Two males, two females, 27.v.1986-29.v.1986; 1 male, 1 female, 12.ix.1986.
Wing expanse: Half: Male: 11mm: Female: 11mm.
62. *Prorodes mimica* Swinhoe
 Swinhoe, 1894, *Ann. Mag. nat. Hist.* (6) 14:205 (*Prorodes*) (India).
Material examined: Four males, three females, 10.ix.1985-13.ix.1985; 2 males, 2 females, 15.ix.1986.
Wing expanse: Half: Male: 17mm: Female: 17mm.
63. *Pycnarmon alboflavalis* (Moore)
 Moore, 1888, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr. W.S. Atkinson* (3): 220 (Male) (*Conogethes*) (Darjiling).
Material examined: One male, 15.ix.1985.
Wing expanse: Half: Male: 10mm.

64. *Rhagoba octomaculalis* (Moore)
Moore, 1867, *Proc. zool. Soc. Lond.* 1867: 95 (Female) (*Filodes*) (Darjiling).
Material examined: Four males, two females, 25.v.1986-26.v.1986; two males, one female, 14.ix.1986-16.ix.1986.
Wing expanse: Half: Male: 20mm: Female: 20-22mm.
65. *Samea castoralis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 693 (Female) (*Botys*) (Sarawak).
Material examined: One male, 21.v.1986; one male, one female, 10.ix.1986.
Wing expanse: Half: Male: 11mm: Female: 11mm.
66. *Satanastra aeriferalis* (Moore)
Moore, 1877, *Proc. zool. Soc. Lond.* 1877: 618 (*Conchylodes*).
Material examined: One male, one female, 12.ix.1983.
Wing expanse: Half: Male: 11mm: Female: 11mm.
67. *Satanastra meritalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 17: 479 (Female) (*Zebronia?*) (Ceylon.).
Material examined: One female, 5.ix.1983.
Wing expanse: Half: Female: 9mm.
68. *Satanastra virgitalis* (Moore)
Moore, 1867, *Proc. zool. Soc. Lond.* 1867: 92, pl. 7, fig. 9 (*Pycnarmon*).
Material examined: Two males, 8.viii.1982; one male, 12.ix.1983.
Wing expanse: Half: Male: 10.50mm.
69. *Sisyrophora pfeifferae* Lederer
Lederer, 1863, *Wien. ent. Monatschr.* 7: 399, pl.3, fig.7; pl.5, fig.8; pl. 13, fig. 13 (*Sisyrophora*) (Singapore).
Material examined: One male, one female, 13.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 18mm: Female: 18mm.
70. *Syllepte chromalis* (Walker)
Walker, [1866]1865, *List Specimens lepid. Insects Colln Br. Mus.* 34: 1453 (Male) (*Botys*) (Java).
Material examined: Three females, 16.ix.1986.
Wing expanse: Half: Female: 15mm.
71. *Syllepte iopasalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18: 652 (Male) (*Botys*) (Burma).
Material examined: Four females, 12.ix.1986-16.ix.1986.
Wing expanse: Half: Female: 13mm.
72. *Syllepte plagiatalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 18:673 (*Botys*).
Material examined: Two males, 10.ix.1985; two males, 15.ix.1986.
Wing expanse: Half: Male: 13.50mm.
73. *Syllepte sellalis* (Guenée)
Guenée, 1854, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 8: 330 (Female) (*Botys*) (Silhet).
Material examined: Five males, 16.ix.1985-20.ix.1985.
Wing expanse: Half: Male: 20mm.
74. *Synclera traducalis* (Zeller)
Zeller, 1852, *Lepid. Microptera* 54 (*Eudiotis*) (Limpop, Gariep).
Material examined: One male, two females, 18.ix.1985.
Wing expanse: Half: Male: 19mm: Female: 20mm.
75. *Tangla eurytusalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 17: 503, (Female) (*Glyphodes*) (Sarawak).
Material examined: Three males, two females, 4.v.1986-26.v.1986; one male, one female, 13.ix.1986.
Wing expanse: Half: Male: 16mm: Female: 16mm.
76. *Tangla itysalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 17: 501, (Male) (*Glyphodes*) (Sarawak).
Material examined: Two males, two females, 8.ix.1985-14.ix.1985.
Wing expanse: Half: Male: 15mm: Female: 15mm.
77. *Tangla naralis* (Felder & Rogenhofer)
Felder & Rogenhofer, 1875, *Reise öst. Fregatte Novara* (Zool.) 2 (Abt.2): 10, pl. 136, fig. 38 (*Glyphodes*) (Sarawak).
Material examined: Two males, one female, 14.ix.1985-15.ix.1985.
Wing expanse: Half: Male: 16mm: Female: 16mm.
78. *Tangla zangisalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 17: 504 (Male) (*Glyphodes*) (Sarawak).
Material examined: One male, 16.ix.1985; two males, 10.ix.1986-12.ix.1986.
Wing expanse: Half: Male: 14mm: Female: 14mm.
79. *Tangla zelimalis* (Walker)
Walker, 1859, *List Specimens lepid. Insects Colln Br. Mus.* 17: 502, (Female) (*Glyphodes*) (Sarawak).
Material examined: Three males, two females, 15.ix.1985-16.ix.1985; 1?, 2.ix.1986.
Wing expanse: Half: Male: 15mm: Female: 15mm.
80. *Tetridia vinacealis* (Moore)
Moore, 1877, *Proc. zool. Soc. Lond.* 1877: 619 (*Botys*) (Port Blair).
Material examined: One male, one female, 4.ix.1983-6.ix.1983.
Wing expanse: Half: Male: 17mm: Female: 16mm.
81. *Toxobotys aureans* Rose & Kirti
Rose & Kirti, 1989, *J. Insect Sci.* 2 (1): 10. figs.1-7.
Material examined: Two males, one female, 9.ix.1983.
Wing expanse: Half: Male: 15-16mm: Female: 15mm.
- Subfamily: Catocalinae**
82. *Achaea janata* (Linnaeus)
Linnaeus, 1758, *Syst. Nat.* (Edn. 10) 1 : 527 (*Phalaena*).
Material examined: One male, one female, 14.v.1986- 21.v.1986; one male, three females, 11.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 31mm, Female: 31mm.

83. *Achaea mercatoria* (Fabricius)

Fabricius, 1775, *Syst. Ent.*: 604 (*Noctua*).

Material examined: Three males, 21.v.1986- 28.v.1986; two females, 12.ix.1986.

Wing expanse: Half: Male: 33 mm, Female: 31mm.

84. *Alamis umbrina* Guenée

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.) 7: 4 (*Alamis*).

Material examined: One male, one female, 27.v.1986- 28.v.1986; one female, 14.ix.1986.

Wing expanse: Half: Male: 16-23 mm, Female: 17-29 mm.

85. *Anisoneura hypocyanea* Guenée

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.) 7: 162 (*Anisoneura*).

Material examined: Five males, 15.ix.1985- 19.ix.1985; one male, 22.v.1985; three males, one female, 11.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 55mm, Female: 62mm.

86. *Anua coronata* (Fabricius)

Fabricius, 1775, *Syst. Ent.*: 596 (*Noctua*).

Material examined: Four males, three females, 15.ix.1985; two males, three females, 21.v.1986; 18??, 5 ??, 10.ix.1986- 20.ix.1986.

Wing expanse: Half: Male: 40-48mm, Female: 38-45mm.

87. *Artena dotata* (Fabricius)

Fabricius, 1794, *Syst. Ent.* 3(2): 55 (*Noctua*).

Material examined: One female, 15.ix.1985; seven males, one female, 14.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 40mm, Female: 39mm.

88. *Caranilla onelia* (Guenée)

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.) 7: 256 (*Naxia*).

Material examined: Six males, 25.v.1986- 28.v.1986; two males, two females, 11.ix.1986- 12.ix.1986.

Wing expanse: Half: Male: 21mm, Female: 24mm.

89. *Caranilla umbrosa* (Walker)

Walker, 1865, *List Specimens lepid. Insects Colln Br. Mus.* 33: 968 (*Ophiusa*).

Material examined: One males, two females, 25.v.1986- 28.v.1986; two males, 10.ix.1986- 12.ix.1986.

Wing expanse: Half: Male: 21.50mm, Female: 22mm.

90. *Chalciope mygdon* (Cramer)

Cramer, 1777, *Utilandsche Kapellen* 2: 94, pl.156, fig.G., (*Phalaena*).

Material examined: One female, 3.ix.1985; 4 males, 13.ix.1985; six males, three females, 25.v.1986- 28.v.1986; one male, 12.ix.1986.

Wing expanse: Half: Male: 20mm, Female: 17mm.

91. *Cocytodes coerulea* Guenée

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.) 7: 41, pl.13, fig.10 (*Cocytodes*).

Material examined: One female, 27.v.1986; one female, 14.ix.1986.

Wing expanse: Half: Female: 37-39 mm.

92. *Dysgonia algira* (Linnaeus)

Linnaeus, 1767, *Syst. Nat.* (Edn 12) 1: 836 (*Phalaena*).

Material examined: Five males, 26.v.1986- 28.v.1986.

Wing expanse: Half: Male: 25 mm.

93. *Dysgonia properata* (Walker)

Walker, 1858, *List Specimens lepid. Insects Colln Br. Mus.* 14: 1433 (*Ophiusa*).

Material examined: One male, 13.ix.1986.

Wing expanse: Half: Male: 26 mm.

94. *Dysgonia* sp.

Material examined: Three females, 25.ix.1986.

Wing expanse: Half: Female: 25-27 mm.

95. *Entomogramma torsa* Guenée

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.) 7: 204 (*Entomogramma*).

Material examined: Two males, 24.v.1986- 25.v.1986.

Wing expanse: Half: Male: 27mm.

96. *Ercheia cyllaria* (Cramer)

Cramer, 1779, *Utilandsche Kapellen* 3:100, pl.251, fig.C, D (*Noctua*).

Material examined: Three males, two females, 13.ix.1985- 19.ix.1985; 7??, 4??, 10.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 24-26mm, Female: 27-29 mm.

97. *Eupatula macrops* (Linnaeus)

Linnaeus, 1768, *Syst. nat.* (Edn 12) 3: 225 (*Phalaena*).

Material examined: One male, 11.ix.1986.

Wing expanse: Half: Male: 73mm.

98. *Grammodes geometrica* (Fabricius)

Fabricius, 1775, *Syst. Ent.*: 599 (*Noctua*).

Material examined: Two males, two females, 23.v.1986- 28..1986.

Wing expanse: Half: Male: 24mm, Female: 21mm.

99. *Hypopyra vespertilio* (Fabricius)

Fabricius, 1787, *Mantissa Insect.* 2: 136 (*Noctua*).

Material examined: One male, 29.v.1986.

Wing expanse: Half: Male: 39mm.

100. *Hypopyra* sp.

Material examined: Two females, 21.v.1986.

Wing expanse: Half: Female: 39mm.

101. *Lagoptera junio* Dalman

Dalman, 1823, *Analecta Ent.* 52 (*Noctua*).

Material examined: One female, 15.ix.1985; one male, one female, 16.v.1986; two males, one female, 16.ix.1986.

Wing expanse: Half: Male: 45-47mm, Female: 50-54 mm.

102. *Lygniodes ciliata* Moore

Moore, 1867, *Proc. zool. Soc. Lond.* 1867: 69 (*Lygniodes*).

Material examined: One female, 17.ix.1985.

Wing expanse: Half: Female: 46mm.

103. *Lygniodes hypoleuca* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.)
7: 125, pl.16. fig. 5(*Lygniodes*).

Material examined: Ten males, four females, 17.ix.1985.

Wing expanse: Half: Male: 48mm, Female: 50mm.

104. *Mocis frugalis* (Fabricius)
Fabricius, 1775, *Syst. Ent.*: 601 (*Noctua*).

Material examined: One female, 17.ix.1985; two males, 22.v.1986-
27.v.1986; three females, 16.ix.1986.

Wing expanse: Half: Male: 20mm, Female: 19mm.

105. *Mocis undata* (Fabricius)
Fabricius, 1775, *Syst. Ent.*: 600 (*Noctua*).

Material examined: Three males, two females, 13.ix.1985-
19.ix.1985; three males, one female, 28.v.1986; twenty-two males,
10.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 28mm, Female: 25mm.

106. *Ophisma gravata* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.)
7: 237 (*Ophisma*).

Material examined: Five males, three females, 11.ix.1986-
19.ix.1986.

Wing expanse: Half: Male: 33mm, Female: 30mm.

107. *Parallelia amygdalis* (Moore)
Moore, 1887, *Lepid. Ceylon* 3: 551, pl. 2214, fig.3 (*Dysgonia*).
Material examined: Three males, 19.v.1985- 22.v.1985; two males,
27.v.1986- 28.v.1986.

Wing expanse: Half: Male: 23mm.

108. *Parallelia analis* (Guenée)
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.)
7: 271 (*Ophiusa*).

Material examined: One male, 29.v.1986.

Wing expanse: Half: Male: 24mm.

109. *Parallelia arcuata* (Moore)
Moore, 1877, *Proc. zool. Soc. Lond.* 1877: 609 (*Ophiusa*).
Material examined: One female, 10.ix.1985; 2 males, 24.v.1986-
28.v.1986; 2 ??, 1?, 14.ix.198-16.ix.1986.

Wing expanse: Half: Male: 26mm, Female: 25mm.

110. *Parallelia crameri* (Moore)
Moore, 1885, *Lépid. Ceylon* 3: 177, pl. 171, fig.2 (*Dysgonia*).
Material examined: One male, one female, 28.v.1986; 2 males,
11.ix.1986.

Wing expanse: Half: Male: 25mm, Female: 24mm.

111. *Parallelia joviana* (Stoll)
Stoll, 1782, *Pap. Exot.* IV: 273, p.399, fig. B. (*Noctua*).
Material examined: Two males, one female, 13.ix.1985- 15.ix.1985;
female, 19.v.1986- 28.v.1986; four males, five females, 10.ix.1986-
13.ix.1986.

Wing expanse: Half: Male: 25mm, Female: 27mm.

112. *Parallelia maturescens* (Walker)
Walker, 1858, *List Specimens lepid. Insects Colln Br. Mus.* 5 :
1382 (*Ophisma*).

Material examined: One male, one female, 28.v.1986; two males,
11.ix.1986.

Wing expanse: Half: Male: 25mm, Female: 24mm.

113. *Parallelia* sp. 1
Material examined: One male, 10.ix.1986.

Wing expanse: Half: Male: 25mm.

114. *Parallelia* sp. 2
Material examined: Two males, 28.v.1986.

Wing expanse: Half: Male: 22.50mm.

115. *Parallelia* sp.3
Material examined: Two males, three females, 11.ix.1986-17.ix.1986.

Wing expanse: Half: Male: 31mm, Female: 32-33mm.

116. *Pericyma* sp.
Material examined: Eight males, three females, 13.ix.1985-
28.ix.1985; three males, two females, 20.v.1986-28.v.1986; fifteen
males, eight females, 10.ix.1986- 211.ix.1986.

Wing expanse: Half: Male: 21-22mm, Female: 21-24mm.

117. *Phyllodes eyndhovi* Vollerhoeven
Vollerhoeven, 1858, *Tijdschr. Ent.* 2: 86, pl. 61 (*Phyllodes*).
Material examined: One male, female, 29.v.1986.

Wing expanse: Half: Male: 61mm, Female: 64mm.

118. *Pindara illibata* (Fabricius)
Fabricius, 1775, *Syst. Ent.*: 592 (*Noctua*).
Material examined: One female, 13.ix.1985; one male, 21.v.1986;
one male, five females, 10.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 36mm, Female: 34mm.

119. *Thyas honesta* Hübner
Hübner, [1824], *Samml. exot. Schmett.* 2: pl. [203], figs. 1, 2 (*Thyas*).
Material examined: Eight males, one female, 21.v.1986- 27.v.1986;
four males, 10.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 52mm, Female: 46mm.

120. *Trigonodes hyppasia* (Cramer)
Cramer, 1779, *Uitlandsche Kapellan* 3: 99, pl.250, fig E
(*Phalaena*).

Material examined: Three females, 26.v.1986- 28.v.1986.

Wing expanse: Half: Female: 22mm

Subfamily: Ophiderinae

121. *Aedia acronyctoides* (Guenée)
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Lépid.)
7: 47 (*Catephia*).

Material examined: Three males, 11.ix.1986- 14.ix.1986.

Wing expanse: Half: Male: 16mm.

122. *Aedia discistriga* (Walker)
Walker, [1858]1857, *List. Specimens lepid. Insects Colln Br. Mus.*
13: 1128 (*Anophia*).

- Material examined: Six males, 22.v.1986.
Wing expanse: Half: Male: 17mm.
123. *Aedia lecucomelas* (Linnaeus)
Linnaeus sensu Hübner [1803], *Samml. eur. Schmett.* 4: pl.62, fig. 304 (*Noctua*).
Material examined: Seven males, 21.v.1986- 28.v.1986.
Wing expanse: Half: Male: 17mm.
124. *Amphigonia hepaticans* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7: 338 (*Amphigonia*).
Material examined: Two males, 11.ix.1986-15.ix.1986.
Wing expanse: Half: Male: 29mm.
125. *Anereuthina lilach* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7: 260 (*Anereuthina*).
Material examined: One male, 12.ix.1985.
Wing expanse: Half: Male: 21mm.
126. *Anomis banzigeri* Srivastava & Rose
Srivastava & Rose, 1989, *Entomon* 14(3 & 4): 238, figs. 4-7.
Material examined: One male, 17.ix.1985.
Wing expanse: Half: Male: 19mm.
127. *Anomis fulvida* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 6: 397 (*Anomis*).
Material examined: One male, 17.ix.1985; one female, 11.ix.1986.
Wing expanse: Half: Male: 23mm, Female 21mm.
128. *Anomis lineosa* (Walker)
Walker, 1865, *List Specimens lepid. Insects Colln Br. Mus.* 33: 862 (*Cosmophila*).
Material examined: Two males, 17.ix.1985; two females, 25.v.1986.
Wing expanse: Half: Male: 23 mm, Female 25mm.
129. *Asta quadrilinea* Walker
Walker, [1863] 1864, *J. Proc. Linn. Soc. (Zool.)* 7:170 (*Asta*).
Material examined: Four males, 31.viii.1986- 11.ix.1986.
Wing expanse: Half: Male: 24mm.
130. *Bamra albicola* (Walker)
Walker, 1858, *List Specimens lepid. Insects Colln Br. Mus.* 14 : 1010 (*Felinia*).
Material examined: Four males, 21.v.1986- 25.v.1986.
Wing expanse: Half: Male: 25mm.
131. *Bamra* sp.
Material examined: Three males, 21.v.1986.
Wing expanse: Half: Male: 27 mm.
132. *Calyptra minuticornis* (Guenée)
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 6 :674 (*Calpe*).
Material examined: One male, 19.ix.1986.
Wing expanse: Half: Male: 24 mm.
133. *Chrysopera combinans* (Walker)
Walker, 1858, *List Specimens lepid. Insects Colln Br. Mus.* 14:1399 (*Achaea*).
Material examined: Six males, 15.ix.1985; one female, 10.ix.1986.
Wing expanse: Half: Male: 24mm, Female 25mm.
134. *Delgamma ampullonia* Srivastava & Rose
Srivastava & Rose, 1990, *Ad. Bios.* 1990: 85,86, figs. 1-5.
Material examined: Fourteen males, three females, 13.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 23mm, Female 25mm.
135. *Delgamma pangonia* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7:214 (*Delgamma*).
Material examined: Twelve males, six females, 13.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 25mm, Female 26mm.
136. *Episparina tortuosalis* (Moore)
Moore, 1867, *Proc. zool. Soc. Lond.* 1867: 81, pl.7, fig.5.
Material examined: Three males, seven females, 21.v.1986-29.ix.1986.
Wing expanse: Half: Male: 28mm, Female 30mm.
137. *Episparis exprimens* Walker
Walker, 1862, *Trans. ent. Soc. Lond.* (3)1: 106.
Material examined: One male, 29.v.1986.
Wing expanse: Half: Male: 25mm.
138. *Episparis liturata* (Fabricius)
Fabricius, 1787, *Mantissa Insect.* 2: 197 (*Phalaena*).]
Material examined: Two males, three females, 28.v.1986.
Wing expanse: Half: Male: 23mm, Female 26mm.
139. *Ericcia inangulata* (Guenée)
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec.gén. Lépid.) 7: 210 (*Hulodes*).
Material examined: Two females, 27.v.1986.
Wing expanse: Half: Female 27mm.
140. *Eudocima salaminia* (Cramer)
Cramer, 1777, *Uitlandsche Kapellen* 2:177, pl.174, fig.A (*Phalaena*).
Material examined: Six males, 15.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 47mm.
141. *Fodina stola* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7: 275 (*Fodina*).
Material examined: One female, 24.v.1986.
Wing expanse: Half: Female 23mm.
142. *Hamodes aurantiaca* (Guenée)
Guenée, (1852), in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7:203 (*Hamodes*).
Material examined: Three males, one female, 12.ix.1986- 14.ix.1986.
Wing expanse: Half: Male: 33 mm, Female 34 mm.

143. *Hulodes caranea* (Cramer)
Cramer, 1780, *Uitlandsche Kapellen* 3:140, 174, pl.269, figs. E, F (*Phalaena*).
Material examined: Two males, 17.ix.1985; three females, 10.ix.1986.
Wing expanse: Half: Male: 42mm, Female 40mm.
144. *Hulodes* sp.
Material examined: One female, 13.ix.1985.
Wing expanse: Half: Female 34 mm.
145. *Hypocala deflorata* (Fabricius)
Fabricius, 1794, *Ent. Syst.* 3 (2): 127 (*Hyblaea*).
Material examined: Two males, 27.v.1986.
Wing expanse: Half: Male: 19mm.
146. *Hypocala moorei* Butler
Butler, 1892, *Ann. Mag. nat. Hist.* 6: 21 (*Hypocala*).
Material examined: Eleven males, 21.v.1986; seven females, 15.ix.1986.
Wing expanse: Half: Male: 25mm, Female 24mm.
147. *Hypocala subsatura* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7: 75 (*Hypocala*).
Material examined: Twenty males, seven females, 13.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 22mm, Female 23mm.
148. *Hypocala violacea* Butler
Butler, 1879, *Trans. ent. Soc. Lond.* 1879: 6 (*Hypocala*).
Material examined: Forty-six males, fourteen females, 13.ix.1985-16.ix.1985.
Wing expanse: Half: Male: 24mm, Female 23mm.
149. *Hyospila bolinoides* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7:358 (*Hyospila*).
Material examined: One male, 16.ix.1986.
Wing expanse: Half: Male: 21mm.
150. *Ischyja manlia* (Cramer)
Cramer, 1776, *Uitlandsche Kapellen* 1: 144, pl.92, fig.A (*Phalaena*).
Material examined: Three males, 15.ix.1985; two females, 12.ix.1986.
Wing expanse: Half: Male: 50mm, Female 48mm.
151. *Koptoplax lindsayi* Hampson
Hampson, 1891, *Illust. typical specimens Lepid. Heterocera Colln Br. Mus.* 8: 33, 127, pl.154, fig.17 (*Koptoplax*).
Material examined: One male, 12.ix.1986.
Wing expanse: Half: Male: 24mm.
152. *Lacera alope* (Cramer)
Cramer, 1780, *Uitlandsche Kapellen* 3: 168, pl.286, figs. E,F (*Phalaena*).
Material examined: One male, one female, 11.ix.1986- 17.ix.1986.
Wing expanse: Half: Male: 28mm, Female 27mm.
153. *Ommatophora luminosa* (Cramer)
Cramer, 1780, *Uitlandsche Kapellen* 3: 147, pl.274, fig. D (*Phalaena*).
Material examined: Two males, 15.ix.1985; two males, 15.ix.1986.
Wing expanse: Half: Male: 31mm.
154. *Oraesia emarginata* (Fabricius)
Fabricius, 1794, *Ent. Syst.* 3 (2): 82 (*Noctua*).
Material examined: Three males, 20.v.1986; two females, 11.ix.1986.
Wing expanse: Half: Male: 22mm, Female 21mm.
155. *Othreis cajeta* (Cramer)
Cramer, 1779, *Pap. Exot.* 1: 48, pl.30, figs. A,B,O, C, ? (*Phalaena*).
Material examined: One male, one female, 16.ix.1986- 17.ix.1986.
Wing expanse: Half: Male: 47mm, Female 45mm.
156. *Othreis fullonia* (Clerck)
Clerck, 1764, *Icones Insect. rariorum* 2: 40 (*Phalaena*).
Material examined: Fourteen males, three females, 10.ix.1986-16.ix.1986.
Wing expanse: Half: Male: 48mm, Female 51mm.
157. *Oxyodes scrobiculata* (Fabricius)
Fabricius, 1775, *Syst. Ent.* 1775: 592 (*Noctua*).
Material examined: Twelve males, 10.v.1986; two females, 10.ix.1986.
Wing expanse: Half: Male: 30mm, Female 29mm.
158. *Platyja umminia* (Cramer)
Cramer, 1780, *Uitlandsche Kapellen* 3: 137, pl.267, fig. F. (*Phalaena*).
Material examined: Two males, 15.ix.1985; three females, 16.ix.1986.
Wing expanse: Half: Male: 30mm, Female 33mm.
159. *Ramadasa pavo* (Walker)
Walker, 1856, *List Specimens lepid. Insects Colln Br. Mus.* 9: 147 (*Chasmina*).
Material examined: Seven males, three females, 10.ix.1986-21.ix.1986.
Wing expanse: Half: Male: 24mm, Female 25mm.
160. *Rhytia hypermnestra* (Stoll)
Stoll, 1780, *Papillons exot.* 4:69, index pl. 233, figs. A,B (*Phalaena*).
Material examined: Six males, 15.ix.1985.
Wing expanse: Half: Male: 44mm.
161. *Serrododes campana* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec. gén. Lépid.) 7: 252 (*Serrododes*).
Material examined: Two males, 16.ix.1986.
Wing expanse: Half: Male: 34mm.
162. *Speiredonia alix* Guenée
Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes*

(Spec.gén.Lépid.) 7: 171 (*Speiredonia*).

Material examined: Four males, 24.v.1986- 28.v.1986.

Wing expanse: Half: Male: 31mm.

163. *Sympis rufibarbaris* Guenée

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec.gén Lépid.) 7: 343 (*Sympis*).

Material examined: Two males, 13.ix.1985; 11?, 27.v.1986.

Wing expanse: Half: Male: 22mm, Female 23mm.

164. *Trichopolydesma* sp. Material examined: 3??, 21.v.1986.

Wing expanse: Half: Male: 23mm.

Subfamily: Acronictinae

165. *Acronicta maxima* (Moore)

Moore, 1881, *Proc. zool. Soc. Lond.* 1881: 333 (*Triaena*).

Material examined: Five males, two females, 21.v.1986- 27.v.1986; two males, 11.ix.1986.

Wing expanse: Half: Male: 35mm, Female: 37mm.

166. *Apsarasa radians* (Westwood)

Westwood, 1848, *Cabinet Oriental Ent.*: 58, pl. 28, Fig. 4 (*Noctua*).

Material examined: Five males, 22.v.1986- 28.v.1986; four males, 10.ix.1986-12.ix.1986.

Wing expanse: Half: Male: 24mm.

167. *Athetis cognata* (Moore)

Moore, 1882, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln late Mr. W.S. Atkinson* (2): 119 (*Graphiophora*).

Material examined: Three males, 20.v.1986- 27.v.1986.

Wing expanse: Half: Male: 12mm.

168. *Athetis reclusa* (Walker)

Walker, 1862, *J. Proc. Linn. Soc. (Zool.)* 6: 185 (*Prodenia*).

Material examined: Two males, 22.v.1986.

Wing expanse: Half: Male: 18mm.

169. *Callopietria exotica* (Guenée)

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec.gén. Lépid.), 7: 294 (*Eriopus*).

Material examined: Four males, two females, 11.ix.1986- 12.ix.1986.

Wing expanse: Half: Male: 16mm, Female: 15mm.

170. *Callopietria recurvata* Moore

Moore, 1882, in Hewitson & Moore, *Descr. new Indian lepid. Insects Colln. Late Mr. W.S. Atkinson* (2): 44 (*Callopietria*).

Material examined: Five males, two females, 27.v.1986; 8??, 10.ix.1986- 12.ix.1986.

Wing expanse: Half: Male: 17mm, Female: 15mm.

171. *Callyna monoleuca* Walker

Walker, 1858, *List Specimens lepid. Insects Colln. Br. Mus.* 15: 1667 (*Callyna*).

Material examined: Three males, two females, 21.v.1986- 25.v.1986; one male, one female, 11.ix.1986.

Wing expanse: Half: Male: 21mm, Female: 23mm.

172. *Chasmina tibialis* (Fabricius)

Fabricius, 1775, *Syst. Ent.*: 578 (*Bombyx*).

Material examined: Three males, 21.v.1986- 22.v.1986; two males, three females, 11.ix.1986- 12.ix.1986.

Wing expanse: Half: Male: 25mm, Female: 24mm.

173. *Craniophora fasciata* Moore

Moore, [1885] 1887, *Lepid. Ceylon* 3: 5, pl.144, Fig. 4 (*Acronycta*).

Material examined: Seven males, 10.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 20mm.

174. *Dipterygina indica* (Moore)

Moore, 1867, *Proc. zool. Soc. Lond.* 1867: 78, pl. 51 (*Dipterygia*).

Material examined: One male, 27.v.1986; two males, 14.ix.1986- 19.ix.1986.

Wing expanse: Half: Male: 20mm.

175. *Eutamiasia indistans* (Guenée)

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec.gén. Lépid.) 6: 87 (*Hadena*).

Material examined: One female, 26.v.1986; one male, 16.ix.1986.

Wing expanse: Half: Male: 18mm, Female: 20mm.

176. *Prospalta* sp.

Material examined: One male, 26.v.1986; three males, 26.ix.1986- 28.ix.1986.

Wing expanse: Half: Male: 14-17mm.

177. *Spodoptera littoralis* (Boisduval)

Boisduval, 1853, *Nouv. Annl. Mus. Hist. nat. Paris* 2: 239, pl. 13, Fig.8. (*Hadena*).

Material examined: Three males, one female, 14.ix.1986- 16.ix.1986.

Wing expanse: Half: Male: 22-23mm, Female: 21mm.

178. *Spodoptera pecten* Guenée

Guenée, 1852, in Boisduval & Guenée, *Hist. nat. Insectes* (Spec.gén. Lépid.), 7:155 (*Spodoptera*).

Material examined: Two females, 27.v.1986.

Wing expanse: Half: Female: 16mm.

179. *Spodoptera quadripunctata* (Fabricius)

Fabricius, 1775, *Syst. Ent.* : 594 (*Caradrina*).

Material examined: Two males, 21.v.1986- 27.v.1986.

Wing expanse: Half: Male: 14.50mm.

180. *Yepcalphis dilectissima* (Walker)

Walker, 1858, *List Specimens lepid. Insects Colln Br. Mus.* 15: 1751 (*Ariola*).

Material examined: One female, 25.v.1986.

Wing expanse: Half: Female: 13mm.

Remarks

Out of 180 species listed above, the species *Dichrocrocis bistrigalis*, *D. pyrrhalis*, *Heterogramma cynaralis*, *Lygropia distorta*, *Pagyda salvalis*, *Pionea ablactalis*, *Pycnarmon alboflavalis*, *Syllepte chromalis* (Pyraustinae); *Achaea mercatoria*, *Dysgonia algira*, *Parallelia analis* (Catocalinae); *Amphigonia hepatizana*, *Chrysopera combinans*, *Delgamma*

pangoina, *Hypocala deflorata* (Ophiderinae) and *Athetis reclusa*, *Craniophora fasciata*, *Dipterygina indica*, *Yepcalphis dilectissima* (Acronictinae) of the respective subfamilies are new records from northeastern India. Further, besides furnishing additional collection data for the species *Dichocrocis definita*, *Heterocnephys lymphatalis*, *Indogrammodes pectinicornalis*, *Limbototys ptyophora*, *Merocтена tuttalis*, *Nagiella quadrimaculalis*, *Nevrina procopia*, *Patania caletoralis*, *P. concatenalis*, *P. mysisalis*, *Polythlipta euroalis*, *P. inconspicua*, *P. ossealis*, *Prophantis octoguttalis*, *Samea castoralis*, *Tangla naralis*, *T. zangisalis*, *T. zelimalis*, the species *Polythlipta macralis*, *Tangla itysalis*, *Diaphania canthusalis*, *D. zelleri*, *Sisrophora pfeifferae*, *Dichocrocis rigidalis*, *Hymenia perspectalis*, *Patania verecunda*, *P. auranticalis*, *Notarcha derogata* and *Prorodes mimica* are recorded from Jatinga for the first time (Kirti & Sodhi, 2001). Besides, the species at serial numbers 125, 129 (Ophiderinae) and 169 (Acronictinae) are new records from India. Similarly the Pyraustinae species mentioned at Sr. nos. 1, 2, 4, 6, 23, 24, 27, 28, 40, 42, 47, 57, 61, 62, 64, 69, 74, 78, and 80 (Fletcher & Nye, 1984); those of Catocalinae listed at serial 84, 88, 90, 91, 92, 97, 98, 99, 106, 118, 119, 120; those of Ophiderinae at 123, 124, 129, 133, 140, 143, 145, 149, 150, 151, 152, 153, 154, 157, 158, 159; and those of Acronictinae at 166 and 175 (Nye, 1975) which are the type species of an equal number of valid genera are also available in this very locality. However, it may be clarified that Jatinga be cautiously taken as a toptype locality for these species.

Further, like other species, though all the *Ophiderin* species have been collected from light yet it seems appropriate to add for information sake that the species such as *Eudocima salaminia* (papaya, guava), *Ischyja manlia* (guava), *Oraesia emarginata* (guava), *Othreis fullonia* (mainly citrus, also guava and peach), *Platyja umminia* (guava, peach, rose apple) and *Rhytia hypermnestra* (mainly grapes, also guava) infest and damage the respective fruits, mentioned in parentheses. Species such as *Anomis lineosa*, *Ericieia inangulata*, *Othreis cajeta* and *Oxyodes scrobiculata* are polyphagous, as they suck the juices from a variety of fruit sources (Hargreaves, 1936; Ayyar, 1944; Pruthi, 1969; Atwal, 1986; Nayar *et al.*, 1983). Further, Bänziger (1979) while reporting *Calyptra minuticornis* near tropical monsoon forests in the hilly regions of northern Thailand and tropical evergreen and semi-evergreen rain forests of southern Thailand and northwestern Malaysia noticed this species attacking the elephant, water buffalo, zebu and tapir. The species has also been suspected to be fruit piercing moth in Indonesia (Kalshoven, 1951) and lachryphagous in Cambodia (Büttiker, 1962). Interestingly and dangerously, the same species are being reported from Jatinga as well.

On the basis of present inventory comprising 180 species referable to 112 genera from such a small locality should not only evoke interest in taxonomic and behavioral studies on the

adults but also on other biological and life history aspects. The role of non-pest species in the conservation of a habitat need hardly be emphasized. The larval hosts of such species need to be located, as we do not have much knowledge about the immature stages of moths in India. The information on flowers being visited by different species for nectar sucking and incidental pollination is another gap area that needs to be plugged.

As such, Jatinga in North Cachar Hills (Assam) is an area rich in insect biodiversity and due attention need to be given to this particular habitat while framing/handling National Biodiversity Strategy and Action Plan (Khoshoo, 1995; Gadgil, 1996; MoEF, 1998; Kothari, 2001). It is being suggested through this communication that Jatinga be taken as a serious hotspot in northeastern India.

Should it also be mentioned that Jatinga is erroneously known as place where birds commit suicide? It presents unique foggy weather conditions during the month of September. Besides having an experience of bird watching during these foggy weather conditions, the author has seen enormous insect diversity in different stages of their development. The months of May, October and September are comparatively better for making insect collections for scientific purposes. It may also be added that the local people exploit and hunt the beautiful bird diversity during these foggy environmental conditions at night. It is a pathetic scene to watch the birds being killed by them. In fact, during these confusing weather conditions, the birds leave their nests and strike against electric lights at night. Perhaps on the basis of this very notion, the observation stands that the birds come to this locality for committing suicide. The local people also erect artificial light sources such as petromax lamps to obstruct the flying birds to exploit these environmental conditions. To the best of my knowledge, the phenomenon though occurs at a few other places as well, needs more studies/observations, particularly the scientific one. Besides entomologists, Jatinga is a spot, which warrants attention of ornithologists as well.

Acknowledgements

The author is grateful to the University Grants Commission, New Delhi for funding the project on Pyraustinae besides sanctioning a special museum grant to identify this fauna from NHM, London (formerly BMNH). Similarly, the financial assistance provided by CSIR, New Delhi is acknowledged gratefully for sanctioning the project on noctuid moths. The cooperation extended by the authorities of Zoological Survey of India, Calcutta; Forest Research Institute, Dehradun and Indian Agricultural Research Institute, New Delhi is acknowledged gratefully. The much-needed assistance offered by the then staff of the two above mentioned projects also deserves appreciation for undertaking surveys. Thanks are due

to my teacher, Professor (Retd.) H.R. Pajni, Department of Zoology, Punjab University, Chandigarh, who introduced me to the fascinating world of moths and also supported my idea of publishing this inventory and above all, going through the final draft of this manuscript. Thanks are due to Dr. J.D. Holloway (London) for his comments on the identification of certain noctuid species and Dr. Bänziger (Thailand) for sending reprints. The recognition of the Lepidoptera Laboratory as a Coordinating Centre for undertaking research on Microlepidoptera under the All India Coordinating Project on Taxonomy (AICOPTAX) and funding of the project by the Ministry of Environment & Forests, New Delhi is acknowledged gratefully. For typing and setting the matter, the author would like to thank his son, Mr. Onkarpreet Singh.

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