

ON A COLLECTION OF THE LEPIDOPTERA FROM RAJASTHAN

By

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Among the Lepidoptera occurring in Rajasthan, butterflies have been reported from Jodhpur and Mount Abu by Macpherson (1927), from Pilani by Mathur and Champakavalli (1961), from Udaipur by Kushwaha *et al.* (1963); moths from Udaipur by Kushwaha *et al.* (1964); and moths and butterflies in general from Rajasthan by Pruthi and Bhatia (1952). The present account deals with 36 species and subspecies in 24 genera and 10 families of Lepidoptera, represented in the collection of Desert Regional Station, Zoological Survey of India, Jodhpur. Of these 36 species and subspecies, 19 are new records for Alwar, Bharatpur, Chittorgarh, Durgapur, Jhunjhunu, Jodhpur and Pali. The common name, forewing length, nomenclatural changes (if any) and distribution of each species have been given.

Family PAPILIONIDAE

Subfamily PAPILIONINAE

1. ***Papilio polytes romulus* Cramer**

(The common Morimon)

1775. *Papilio romulus* Cramer, *Pap. Exot.* 1 : 67, pl. 43, fig. A.

1939. *Papilio polytes romulus*, Talbot, *Fauna of British India (Butterflies)*, 1 : 178.

Material examined : Jhunjhunu, Police line, 1 ex., 6.xi.1962. (*Survey party colln.*). *Fore wing length*.—44 mm.

Distribution : India, Burma and Sri Lanka. This subspecies was previously recorded from Jodhpur, Mount Abu, Pilani and Udaipur. It is a new record for Jhunjhunu.

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2. *Papilio demoleus demoleus* Linnaeus

(The Lime Butterfly)

1758. *Papilio demolus* Linnaeus, *Syst. Nat.* (ed. 10), 1 : 464.

1939. *Papilio demoleus demoleus*, Talbot, *Fauna of British India (Butterflies)*, 1 : 189.

Material examined : Udaipur (Udaisagar), 2 exs., 20.iii.1964 ; Jodhpur (Agloi), 1 ex., 2.ix.1965 (*Coll. V. C. Agarwal*). *Fore wing length*.—38-40 mm.

Distribution : Persia, India, North Burma to China, Taiwan, and Sri Lanka. This nominate subspecies was reported earlier from Jodhpur, Mount Abu, Pilani and Udaipur.

3. *Atrophaneura aristolochiae aristolochiae* (Fabricius)

(The common Rose)

1775. *Papilio aristolochiae* Fabricius, *Syst. Ent.*, : 443.

1981. *Atrophaneura aristolochiae aristolochiae*, Varshney *et al.*, *Rec. zool. Surv. India, Occ. Paper* no. 31 : 24-25.

Material examined : Jodhpur (Sardarsamand), 2 exs., 26.ix.1963 (*Coll. Moti Lal*) ; Paota (Patodi House), 3 exs., 27.ix.1966 (*Coll. N. K. Parida*) ; Hemawas Dam (Pali), 1 ex., 12.xi.1975 (*Coll. T. G. Vazirani*). *Fore wing length*.—46-50 mm.

Distribution : India, Burma and Sri Lanka. This nominate subspecies was earlier recorded from Jodhpur, Mount Abu, Pilani and Udaipur. It is a new record for Pali.

4. *Graphium nomius nomius* (Esper)

(The Spot Swordtail)

1785-1798. *Papilio nomius* Esper, *Aust. Schmett.* : 210, pl. 52, fig. 3.

1939. *Graphium nomius nomius*, Talbot, *Fauna of British India (Butterflies)*, 1 : 207.

Material examined : Jodhpur (Mandore), 2 exs., 22.vii.1966 (*Coll. P. D. Gupta*). *Fore wing length*.—42-44 mm.

Distribution : Southern India to Sikkim low lands and Sri Lanka. This nominate subspecies was reported earlier from Mount Abu. It is a new record for Jodhpur.

5. *Graphium agamemnon menides* (Fruhstorfer)

(The Tailed Jay)

1904. *Papilio agamemnon menides* Fruhstorfer, *Insektenk.* 21 (no. 23) : 181.

1939. *Graphium agamemnon menides*, Talbot, *Fauna of British India (Butterflies)*, 1 : 232.

Material examined : Hemawas Dam (Pali), 2 exs., 15.ix.1975 (*Coll. T. G. Vazirani*). *Fore wing length*.—46-48 mm.

Distribution : (Peninsula) India and Sri Lanka. This subspecies was previously recorded from Mount Abu and Udaipur. It is a new record from Pali.

Family PIERIDAE

Subfamily PIERINAE

6. **Delias eucharis** (Drury)
(The Common Jezebel)

1773. *Papilio eucharis* Drury, *Ill. exot. Ent.*, 2 : 16, pl. 10, figs. 5, 6 (♂).

1939. *Delias eucharis*, Talbot, *Fauna of British India (Butterflies)*, 1 : 352.

Material examined : Alwar (Pandoki pole via Sarilesa), 3 exs., 11.xi.1973 (Coll. Y. P. Sinha). *Fore wing length*.—34-42 mm.

Distribution : Lower slopes of the Himalayas, peninsular India and Sri Lanka. This species was previously recorded from Jodhpur, Mount Abu and Udaipur. It is a new record for Alwar.

7. **Colotis danae dulcis** (Butler)
(The Crimson Tip)

1876. *Teracolus dulcis* Butler, *Proc. zool. Soc. Lond.* : 157, pl. 7, fig. 13 (♂ ♀).

1927. *Colotis danae dulcis*, Macpherson, *J. Bombay nat. Hist. Soc.*, 32 (1) : 229.

Material examined : Bharatpur (Uncha Nagala), 4 exs., 15.x.1973 (Coll. Y. P. Sinha). *Fore wing length*.—20-25 mm.

Distribution : Baluchistan and India. This subspecies is earlier known from Jodhpur and Mount Abu. It is a new record for Bharatpur.

8. **Colotis etrida etrida** (Boisduval)
(The Little Orange Tip)

1836. *Anthocharis etrida* Boisduval, *Sp. Gen. Lep.*, 1 : 576.

1939. *Colotis etrida etrida*, Talbot, *Fauna of British India (Butterflies)*, 1 : 465.

Material examined : Jodhpur (Chandel Village tank ca 40 kms. South of Jodhpur), 1 ex, 18.xi.1965 (Coll. V. C. Agarwal); Balasmand, 1 ex., 5.x.1962 (Coll. K. C. Kansal). *Fore wing length*.—13-22 mm.

Distribution : India (Kathiawar), Sind to Baluchistan. This nominate subspecies was previously reported from Jodhpur, Mount Abu, Udaipur and Pilani.

9. **Colotis fausta faustina** (Felder & Felder)
(The Large Salmon Arab)

1865. *Idmais faustina* Felder & Felder, *Reise novara*, 2 : 190.

1939. *Colotis fausta faustina*, Talbot, *Fauna of British India (Butterflies)*, 1 : 460.

Material examined : Jodhpur, Sangaria Kuri Village, 5 exs., 29.x.1963 (Coll. Moti Lal). *Fore wing length*.—20-30 mm.

Distribution : Pakistan (Sind) and India (Old Punjab, Karwar). This subspecies was previously reported from Jodhpur and Mount Abu.

10. **Colotis calais amata** (Fabricius)
(The Small Salmon Arab)

1775. *Papilio amata* Fabricius, *Syst. Ent.* : 476.

1939. *Colotis calais amata*, Talbot, *Fauna of British India (Butterflies)*, 1 : 454.

Material examined : Jodhpur, Paota (Patodi House), 2 exs., 24.x.1966 (Coll. N. K. Parida), Salawas village ; 3 exs., 21.xii.1962, (Coll. Moti Lal). *Fore wing length*.—18-20 mm.

Distribution : India (except North-East India) and Sri Lanka. This subspecies was earlier recorded from Jodhpur and Udaipur.

11. **Colotis phisadia protractus** (Butler)
(The Blue Spotted Arab)

1876. *Tetracolus protractus* Butler, *Proc. zool. Soc. Lond.* : 137.

1939. *Colotis phisadia protractus*, Talbot, *Fauna of British India (Butterflies)*, 1 : 456.

Material examined : Jodhpur, Paota, 12 exs., 18. viii. 1961 (Coll. Ramneet Singh). *Fore wing length*.—20-22 mm.

Distribution : Baluchistan, Persia, Pakistan and India. This subspecies was earlier known from Jodhpur.

12. **Ixias marianne** (Cramer)
(The white Orange Tip)

1782. *Papilio marianne* Cramer, *Pap. Exot.* 3 : pl. 217, figs. C-E.

1939. *Ixias marianne*, Talbot, *Fauna of British India (Butterflies)*, 1 : 440.

Material examined : Alwar, 4 exs., 11.x.1973 (Coll. Y. P. Sinha). *Fore wing length*.—25-27 mm.

Distribution : India and Sri Lanka. This species was previously recorded from Mount Abu and Udaipur. It is a new record for Alwar.

13. **Anaphaeis aurota aurota** (Fabricius)
(The Pioneer)

1793. *Papilio aurota* Fabricius, *Ent. Syst.* 3 (1) : 197.

1939. *Anaphaeis aurota aurota*, Talbot, *Fauna of British India (Butterflies)*, 1 : 380.

Material examined : Jodhpur, Lombia talab, 1 ex., 23.xi.1963, Luni, 1 ex., 8.vii.1963 (Coll. K. C. Kansal) ; Beriganga village, 3 exs., 21.ix.1963 (Coll. Moti Lal) ; Mandore, 1 ex., 9. ix. 1964 (Coll. V. C. Agarwal) ; Patodi House, 14.xii.1966 (Coll. N. K. Parida). *Fore wing length*.—20-27 mm.

Distribution : India (except Assam) and extends to Palestine and Africa. This nominate subspecies was earlier reported from Jodhpur, Mount Abu and Pilani.

Subfamily COLIADINAE

14. *Eurema hecabe simulata* (Linnaeus)

(The Common Grass Yellow)

1758. *Terias simulata* Moore, *Lep. Ceylon*, 1 : 119.

1939. *Eurema hecabe simulata*, Talbot, *Fauna of British India (Butterflies)*, 1 : 52.

Material examined : Jodhpur, Public garden, 4 exs., 17.viii.1962 (Coll. Moti Lal); Nalah near Abu Road, Railway Station, 2 exs., 6.iii.1964 (Coll. V. C. Agarwal); Durgapur, Surpur Ki Nadi, 4 exs., 20.iii.1964 (Coll. R. N. Bhargava); Jodhpur Paota, (Patodi House), 9 exs., 25.x.1966 (Coll. N. K. Parida); Hemawas Dam (Pali) 2 exs., 15.ix.1975 (Coll. T. G. Vazirani). *Fore wing length*.—20-25 mm.

Distribution : India, Burma and Sri Lanka. This subspecies was previously recorded from Jodhpur, Mount Abu and Pilani. It is a new record for Durgapur and Pali.

15. *Eurema brigitta rubella* (Wallace)

(The Small Grass Yellow)

1867. *Terias rubella* Wallace, *Trans. ent. Soc. Lond.* (3) 4 : 323.

1939. *Eurema brigitta rubella*, Talbot, *Fauna of British India (Butterflies)*, 1 : 515.

Material examined : Alwar (Pando Ki Pole via Sariska), 7 exs., 11.x.1973. (Coll. Y. P. Sinha). *Fore wing length*.—16-19 mm.

Distribution : South China, India (including Nicobar Islands); Burma and Sri Lanka. This subspecies earlier known from Jodhpur, is a new record for Alwar.

16. *Catopsilia crocale crocale* (Cramer)

(The Common Emigrant)

1775. *Papilio crocale* Cramer, *Pap. Exot.*, 1 : 87, pl. 55. Figs. C, D, ♀.

1939. *Catopsilia crocale crocale*, Talbot, *Fauna of British India (Butterflies)*, 1 : 492.

Material examined : Jodhpur, Public Garden, 6 exs., 14.viii.1962; Salawas, 3 exs., 21.xii.1962; Beriganga village, 3 exs., 21.ix.1963 (Coll. Moti Lal); Luni, 1 ex., 8.vii.1963 (Coll. K. C. Kansal); Paota, Patodi House, 1 ex., 14.xii.1966 (Coll. N. K. Parida). *Fore wing length*.—27-37 mm.

Distribution : India, Burma and Sri Lanka. This nominate subspecies was previously reported from Jodhpur, Mount Abu, Udaipur and Pilani.

17. *Catopsilia florella gnoma* (Fabricius)

(The African Emigrant)

1775. *Papilio gnoma* Fabricius, *Syst. Ent. App.* : 828.

1939. *Catopsilia florella gnoma*, Talbot, *Fauna of British India (Butterflies)*, 1 : 500-501.

Material examined ; Jodhpur, Paota (Patodi House), 25 exs. 4.x.1966 (Coll. N. K. Parida). *Fore wing length*.—25-34 mm.

Distribution : India, Burma and Sri Lanka. This subspecies was earlier recorded from Mount Abu, Jodhpur, Udaipur and Pilani.

Family DANAIIDAE

18. *Danaus chrysippus chrysippus* (Linnaeus)

(The Plain Tiger)

1758. *Papilio chrysippus* Linnaeus, *Syst. Nat.* (ed. 10), 1 : 471.

1917. *Danaus chrysippus chrysippus*, Talbot, *Fauna of British India (Butterflies)*, 2 : 19-23.

Material examined : Jodhpur, Balamand, 2 exs., 5.ix.1962 (Coll. K. C. Kansal); Kuri village, 1 ex., 26.vi.1964; Agloi, 1 ex., 18.ix.1964; Bharatpur, Naoh village, 3 exs., 18.x.1973, Hemawas Dam (Pali) 2 exs., 17.x.1978 (Coll. J. C. Tripathi). *Fore wing length*.—35-40 mm.

Distribution : India, Burma and Sri Lanka. This nominate subspecies was earlier known from Jodhpur, Mount Abu, Pilani and Udaipur. Donahue (1962) reported *D. chrysippus* form *dorippus* Klug erroneously referred to by Donahue as Cramer) from Pali. It is a new record for Bharatpur.

19. *Danaus genutia* (Cramer)

(The Common Tiger)

1779. *Papilio genutia* Cramer, *Pap. exot.*, 3 : 23, pl. 203.

1981. *Danaus genutia*, Varshney et al., *Rec. zool. Surv. India, Occ. Paper*, No. 31 : 13.

Material examined : Jodhpur, Kailara, 1 ex., 18.iv.1962 (Coll. Survey party), 1 ex., 20.iii.1963, Chittorgarh, 2 exs., 13.iii.1964, Udaipur, Fatehsagar, 2 exs., 18.iii.1964, Yakhat Sagar, 1 ex., 15.iv.1965 (Coll. V. C. Agarwal); Kailana, 1 ex., 17.ix.1963. (Coll. R. C. Sharma); Durgapur, Gope Nagar, Gope Sagar, 2 exs., 23.iii.1964, Jodhpur, Bijolai, 1 ex.,

24.iv.1965 (Coll. R. N. Bhargava) ; Bharatpur, Noah Village, 2 exs., 18.x.1973 (Coll. Y. P. Sinha) ; Hemawas Dam (Pali) 1 ex., 17.x.1978 (Coll. J. C. Tripathi). *Fore wing length.*—37-42 mm.

Distribution : Indo-Malayan Subregion, Sulawesi and Key Islands. This subspecies was previously reported from Jodhpur, Mount Abu, Pilani and Udaipur. It is a new record for Bharatpur, Chittorgarh, Durgapur and Pali.

20. *Euploea core core* (Cramer)

(The Common Indian Crow)

1780. *Papilio core* Cramer, *Pap. exot.* 3 : pl. 266, figs. E, F, ♂.

1947. *Euploea core core*, Talbot, *Fauna of British India (Butterflies)* 2 : 66-67.

Material examined : Raghunath, Sikar, 1 ex., 27.ix.1973. (Coll. Y. P. Sinha) ; Jodhpur, Kuchaman Road, 23.viii.1974 (Coll. T. G. Vazirani) ; Hemawas Dam (Pali) 3 exs., 17.x.1978 (Coll. J. G. Tripathi). *Fore wing length.*—40-45 mm.

Distribution : India and Burma. This nominate subspecies was earlier recorded from Jodhpur, Mount Abu, Udaipur and Pilani. It is a new record for Pali.

Family SATYRIDAE

21. *Melanitis leda ismene* (Cramer)

(The Common Evening Brown)

1775. *Papilio ismene* Cramer, *Pap. Exot.*, 1 : 40, pl. 26, Figs. A, B.

1947. *Melanitis leda ismene*, Talbot, *Fauna of British India (Butterflies)*, 2 : 366-369.

Material examined : Jodhpur (Agricultural Field Ca 14 Kms. North of Jodhpur), 6 exs., 10.ix.1964 (Coll. R. N. Bhargava). *Fore wing length.*—30-40 mm.

Distribution : Japan, South China (Taiwan), India, Burma, Sri Lanka, Malaya, Sumatra and Borneo. This subspecies was previously reported from Jodhpur, Mount Abu, Udaipur and Pilani.

Family NYMPHALIDAE

22. *Phalanta phalantha phalantha* (Drury)

(The Common Leopard)

1770. *Papilio phalantha* Drury, *Exot. Ins.*, 1 : 41, pl. 21, figs. 1, 2.

1980. *Phalanta phalantha phalantha*, Varshney et al., *Rec. zool. Surv. India, Occ. Paper No. 31* : 18-19.

Material examined : Jodhpur, Mandore Garden, 1 ex., 22.xii.1966 (Coll. P. D. Gupta). *Fore wing length.*—26-30 mm.

Distribution : Baluchistan, India, Burma and Sri Lanka. This nominate subspecies is previously recorded from Jodhpur, Mount Abu and Udaipur.

23. ***Precis almana almana* (Linnaeus)**
(The Peacock Pansy)

1758. *Papilio almana* Linnaeus, *Syst. Nat.* (ed. 10) : 472.

1932. *Precis almana almana*, Evans, *Identification of Indian Butterflies* : 176.

Material examined : Jodhpur, Salawas village, 3 exs., 21.xii.1962 (Coll. Moti Lal). *Fore wing length*.—30-32 mm.

Distribution India, Burma and Sri Lanka. This nominate subspecies is earlier known from Jodhpur, Mount Abu and Udaipur.

24. ***Precis hierta hierta* (Fabricius)**
(The Yellow Pansy)

1798. *Papilio hierta* Fabricius, *Ent. Syst. Suppl.* : 424.

1932. *Precis hierta hierta*, Evans, *Identification of Indian Butterflies* : 176.

Material examined : Jodhpur, Public Garden, 2 exs., 17.viii.1962, 4 exs., 20.ix.1963 (Coll. Moti Lal.) ; Paota (Patodi House), 3 exs., 12.ii.1964 (Coll. V. C. Agarwal) ; Alwar, Siliserta Bund, 3 exs., 10.x.1973 (Coll. Y. P. Sinha). *Fore wing length*.—20-30 mm.

Distribution : Baluchistan, India and Sri Lanka. This nominate subspecies was previously reported from Jodhpur, Mount Abu, Udaipur Palani. It is a new record for Alwar.

25. ***Precis lemonias vaisya* Fruhstorfer**
(The Lemon Pansy)

1912. *Precis vaisya* Fruhstorfer, In Seitz : *The Macrolepidoptera of the world*, 9 : 520.

1932. *Precis lemonias vaisya*, Evans, *Identification of Indian Butterflies* : 176.

Material examined : Jodhpur, Paota (Patodi House), 3 exs., 19.ix.1966 (Coll. N. K. Parida). *Fore wing length*.—22-30 mm.

Distribution : India and Sri Lanka. This subspecies is earlier known from Jodhpur, Mount Abu and Udaipur.

26. ***Precis orithya swinhoei* (Butler)**
(The Blue Pansy)

1885. *Junonia orithya swinhoei* Butler, *Ann. Mag. nat. Hist. London*, (5) 16 : 309.

1932. *Precis orithya swinhoei*, Evans, *Identification of Indian Butterflies* : 176.

Material examined : Jodhpur, Paota (Patodi House), 6 exs., 19.xii.1966 (Coll. N. K. Parida). *Fore wing length*.—20-30 mm.

Distribution : Baluchistan, India and Sri Lanka. This subspecies was earlier reported from Jodhpur, Mount Abu, Udaipur and Pilani. However, Pruthi and Bhatia (1952) referred to its common occurrence in Rajasthan.

Family LYCAENIDAE

27. **Tarucus callinara** Butler
(The Spotted Pierrot)

1886. *Tarucus callinara* Butler, *Ann. Mag. nat. Hist. Lond.*, (5) 18 : 185.

1927. *Tarucus theophrastus*, Macpherson, *J. Bombay nat. Hist. Soc.* 32 (1) : 230.

1962. *Tarucus callinara*, Cantlie, *The Lycaenidae portion (except the Arhopala Group) of Brigadier Evans' the Identification of Indian Butterflies* : 33.

Material examined : Jodhpur, Paota (Patodi House), 7 exs., 21.ix.1966 (Coll. N. K. Parida). *Fore wing length*.—12-13 mm.

Distribution : Pakistan (Peshwar) to India ; and North Burma. This species was earlier known from Jodhpur and Mount Abu.

Family SPHINGIDAE

Subfamily ACHERONTIINAE

28. **Acherontia styx styx** (Westwood)
(The Til Leaf Caterpillar)

1848. *Sphinx (Acherontia) styx* Westwood, *Cab. Or. Ent.* : 88, pl. 42, Fig. 3.

1937. *Acherontia styx styx*, Bell and Scott, *Fauna of British India (Moths)*, 5 : 58.

Material examined : Jodhpur, Paota, 3 exs., 15.ix.1961 (Coll. K. C. Kansal), Bijolai, 2 exs., 12.ix.1979 (Coll. K. V. Rama Rao). *Fore wing length*.—45-60 mm.

Distribution : India, Burma and Sri Lanka.

29. **Psilogramma menephton menephton** (Cramer)
(The Stout Grey Moth)

1780. *Sphinx menephton* Cramer, *Pap. Exot.*, 3 : 164.

1937. *Psilogramma menephton menephton*, Bell and Scott, *Fauna of British India (Moths)*, 5 : 77.

Material examined : Jodhpur, Paota, 1 ex., 18.vii.1963. (Coll. V. C. Agarwal). *Fore wing length*.—50 mm.

Distribution : India, China and eastwards to Solomon Islands. This nominate subspecies previously recorded from Udaipur is a new record for Jodhpur.

Subfamily CHEROCAMPINAE

30. *Celerio euphorbiae nervosa* Rothschild & Jordan.

1903. *Celerio euphorbiae nervosa* Rothschild & Jordan, *Revis. Sphing.* : 721.

Material examined : Jodhpur, Mandore, 1 ex., 9.ix.1964 (Coll. V. C. Agarwal), Paota ; 2 exs., 10.ix.1964 (Coll. R. N. Bhargava). *Fore wing length.*—36-38 mm.

Distribution : Western Himalayas (Ladakh, foot of the Zolila pass, Kashmir, Changla Gali and Sabathu). This subspecies is a new record for Jodhpur.

31. *Hippotion boerhaviae* (Fabricius)

1775. *Sphinx boerhaviae*, Fabricius, *Syst. Ent.* : 542.

1937. *Hippotion boerhaviae*, Bell & Scott, *Fauna of British India (Moths)*, 5 : 424.

Material examined : Bharatpur, 3 exs., 15.x.1973. (Coll. Y. P. Sinha). *Fore wing length.*—32 mm.

Distribution : Southern China, Western and Eastern Himalayas, Southern India, Sri Lanka, Malaya and Philippines.

Family AGANAIDAE

32. *Aganais ficus* (Fabricius)

1794. *Noctua ficus* Fabricius, *Ent. Syst.* 3 (2) : 27, 62.

1964. *Aganais ficus*, Kushwaha *et al.*, *Univ. Udaipur Res. Studies*, 2 : 113.

Material examined : Bharatpur, Uchara village, 6 exs., 17.x.1973 (Coll. Y. P. Sinha). *Fore wing length.*—29-32 mm.

Distribution : India and Sri Lanka. The species is a new record for Bharatpur.

Family AGARISTIDAE

33. *Aegocera venulia* (Cramer)

(The Orange Yellow Moth)

1777. *Phalaena venulia* Cramer, *Pap. Exot.*, 2 : pl. 165, Fig. C, D.

1894. *Aegocera venulia*, Hampson, *Fauna of British India (Moths)*, 2 : 158.

Material examined : Jodhpur, Mandore, 4 exs., 8.xi.1963 (Coll. Moti Lal) ; Hemawas Dam (Pali) 12 exs., 29.xi.1971. (Coll. P. D. Gupta). *Fore wing length*—32-34 mm.

Distribution : Sub-Himalayan tracts of Kashmir and Sikkim, plains of India, Burma and Sri Lanka. The species is a new record for Jodhpur.

Family ARCTIIDAE

34. *Utetheisa pulchella* (Linnaeus)

(The White Moth)

1767. *Tinea pulchella* Linnaeus, *Syst. Nat.*, 1 (2) : 884.1961. *Utetheisa pulchella*, Kundu *et al.*, *Proc. Rajasthan Acad. Sci.* 8 (1-2) : 81.

Material examined : Jodhpur, 12 exs., 10.iv.1975. (*Coll. T. G. Vazirani*); Kailana Lake, 5 exs., 7.ii.1976 (*Coll. N. S. Rathore*). *Fore wing length*.—20-23 mm.

Distribution : Africa, Europe, India, Sri Lanka, Malaya Archipelago, New Guinea, Australia and the Pacific groups. The species was earlier known from Pilani and Udaipur and is now recorded from Jodhpur. However, Pruthi and Bhatia (1952) referred to this moth being common in Rajasthan.

35. *Grammodes stolidia* (Fabricius)

(The Linseed Caterpillar)

1781. *Noctua stolidia* Fabricius, *Sp. Ins.*, 2 : 218, No. 54.1894. *Grammodes stolidia*, Hampson, *Fauna of British India (Moths)*, 2 : 532.

Material examined : Jodhpur, Paota (Patodi House), 11 exs., 4-5, viii.1975 (*Light Trap Colln.*). *Fore wing length*.—15-20 mm.

Distribution : Africa, Europe, India and Aden. This species previously recorded from Udaipur, is a new record for Jodhpur.

Family : PYRALIDAE

Subfamily : PYRAUSTINAE

36. *Diaphania indica* (Saunders)1851. *Eudiottes indica* Saunders, *Trans. ent. Soc. Lond.*, 1 (2) : 163, pl. 12, figs. 5-7.1980. *Diaphania indica*, Mandal and Bhattacharya, *Rec. zool. Surv. India*, 77 : 325.

Material examined : Jodhpur, Paota (Patodi House), 6 exs., 4-5.viii.1975 (*Light Trap Colln.*). *Fore wing length*.—12-13 mm.

Distribution : Ethiopia, Pakistan, China, India, Burma, Sri Lanka, Taiwan, Sulawesi, Java and Australia. The species is a new record for Jodhpur.

SUMMARY

Butterflies and Moths were previously mainly known from Jodhpur, Mount Abu, Pilani and Udaipur. Of the 36 species and subspecies presently dealt with, 19 constitute new records for Alwar, Bharatpur, Chittorgarh, Durgapur, Jhunjhunu, Jodhpur and Pali,

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REFERENCES

- DONAHUE, JULIAN P. 1962. *Danaus chrysippus* form *dorippus* in Rajasthan. *J. Bombay nat. Hist. Soc.*, **59** (1) : 312.
- KUNDU, M. L., DATTA GUPTA, A. K. AND GUPTA, B. B. 1961. A study of the abundance of certain insects of Pilani with the help of a light trap. —*Proc. Rajasthan Acad. Sci.*, **8** (1-2) : 79-87.
- KUSHWAHA, K. S., SHARMA, J. C. AND SHARMA, L. S. 1963. Common Lepidopteran fauna of Udaipur Rajasthan Part I, Butterflies. — *Indian J. Ent.*, **25** (2) : 141-146.
- KUSHWAHA, K. S., SHARMA, L. S. AND BHARDWAJ, S. C. 1964. Common Lepidopteran fauna of Udaipur (Rajasthan) Part 2, (Moths). *Univ. Res. Studies, Udaipur*, **2** : 109-127, 4 pls.
- MACPHERSON, A. D. 1927. Notes on a collection of butterflies made in Jodhpur and Mount Abu during year 1924, 1925 and 1926. *J. Bombay nat. Hist. Soc.* **32** (1) : 228-230.
- MATHUR, S. N. AND CHEMPAKAVALLI, K. R. 1961. Butterflies of Pilani. —*Proc. Rajasthan Acad. Sci.*, **8** (1-2) : 135-139.
- PRUTHI, H. S. AND BHATIA, D. R. 1952. Peculiarities of the Insect fauna of the Rajasthan Desert and the share of Insects in the maintenance of the Desert. —*Bull. nation. Inst. Sci. India*, **1** : 241-246.