

LEPIDOPTEROUS FAUNA OF GUJARAT, INDIA

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Butterflies have been reported earlier from Gujarat State by Nurse (1899), Aldrich (1946), Shull (1963, 1964), Shull and Nadkerny (1967), Nadkerny and Shull (1968), moths by Shull and Nadkerny (1964) and both butterflies and moths by Mosse (1929). Presently, 30 species and subspecies in 26 genera belonging to 11 families of butterflies and moths are dealt with from this area along with their common name, measurement of fore wing and geographical distribution. Of these, 11 species and subspecies constitute new locality records from seven Districts namely, Banas Kantha, Bharuch, Dangs, Mahesna, Panch Mahal, Rajkot and Sabar Kantha.

Family PAPILIONIDAE

1. *Atrophaneura aristolochiae aristolochiae* (Fabricius)

1775. *Papilio aristolochiae* Fabricius, *Syst. Ent.*, : 433.

1929. *Byasa aristolochiae*, Mosse, *J. Bombay nat. Hist. Soc.*, 33 (4) : 888.

1939. *Polydorus aristolochiae aristolochiae*, Talbot, *Fauna of British India (Butterflies)*, 1 : 86.

1946. *Tros aristolochiae aristolochiae*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 375.

1963. *Polydorus aristolochiae aristolochiae*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 593.

1981. *Pachliopta aristolochiae aristolochiae*, Arora and Mandal, *Rec. zool. Surv. India*, Occ. paper, No. 29 : 54-58.

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

1983. *Pachliopta aristolochiae aristolochiae*, Mandal and Nandi, *Rec. zool. Surv. India*, 81 : 367-368.

Material examined : Sabar Kantha District, Himatnagar, 1 ex., 5.xi.1964 (R. N. Bhargava leg.); Bharuch District, Rajpipla, 1 ex., 31.i.1975, Dangs District, Ahwa, 1 ex., 5.ii.1975 (T. G. Vazirani leg.); Dangs District, Ahwa, 4 exs., 28.ix.1976 (Y. P. Sinha leg.). *Fore wing length.* - 42-53 mm.

Distribution : India.

Remarks : The butterfly, popularly called 'The Common Rose' was recorded from

Kathiawar (Mosse, 1929), as fairly common from Kheda District (Aldrich, 1946) and common throughout the year in South Gujarat (Shull, 1963). It is a new record for Sabar Kantha District.

2. *Graphium agamemnon menides* (Fruhstorfer)

1904. *Papilio agamemnon menides* Fruhstorfer, *Insektenk.* 21(no. 23) : 181.
 1929. *Zetides agamemnon*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 888.
 1939. *Graphium agamemnon menides*, Talbot, *Fauna of British India (Butterflies)*, 1 : 232.
 1945. *Zetides agammemnon menides* (Sic), Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 375.
 1963. *Graphium agamemnon agamemnon*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 594.

Material examined : Bharuch District, 1 ex., 16.ix.1976 (Y P. Sinha leg.). *Fore wing length.* - 46 mm.

Distribution : Peninsular India and Sri Lanka.

Remarks : The butterfly, popularly known as 'The Tailed Jay' was reported from Kathiawar (Mosse, 1929), as rare from Kheda District (Aldrich, 1946) and as very common throughout the year in South Gujarat (Shull, 1963).

Family PIERIDAE

Subfamily PIERINAE

3. *Delias eucharis* (Drury)

1773. *Papilio eucharis* Drury, *Ill. exot. Ent.*, 2 : 16, pl. 10, figs. 5, 6, (♂).
 1929. *Delias eucharis*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 889.

Material examined : Bharuch District, 9 exs., 10.ix.1976; Dangs District, Ahwa, 1 ex., 28.ix.1976 (Y P. Sinha leg.). *Fore wing length.* - 36-40 mm.

Distribution : India (Lower slopes of the Himalayas, Peninsular belts) and Sri Lanka.

Remarks : The butterfly, commonly known as 'The Common Jezebel' occurs in Kathiawar (Mosse, 1929), as fairly common in Kheda District (Aldrich, 1946) and common throughout the year (abundant from November to February) in South Gujarat (Shull, 1963).

4. *Cepora nerissa phryne* (Fabricius)

1775. *Papilio phryne* Fabricius, *Syst. Ent.*, : 473.
 1929. *Huphina nerissa*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 889.
 1939. *Cepora nerissa phryne*, Talbot, *Fauna of British India (Butterflies)*, 1 : 362.
 1946. *Huphina nerissa evagete*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 375.
 1967. *Huphina (Cepora) nerissa*, Shull and Nadkerny, *J. Bombay nat. Hist. Soc.*, 64(2) : 264.

Material examined : Bharuch District, Rajpipla, 1 ex., 31.i.1975; Dangs District, Ahwa, 1 ex., 5.ii.1975 (T G. Vazirani leg.). *Fore wing length.* - 24-26 mm.

Distribution : India, Nepal and Sri Lanka.

Remarks : The butterfly, popularly called 'The Common Gull', occurs in Kathiawar (Mosse, 1929). This subspecies is common in Kheda District during October, November and December (Aldrich, 1946) and throughout the year in South Gujarat (Shull, 1963). Shull and nadkerny (1967) reported it from Surat and Dangs Districts.

5. *Ixias marianne* (Cramer)

1779. *Papilio marianne* Cramer, *Pap. Exot.*, 3 : 41, pl. 217, figs. C-E.

1929. *Ixias marianne*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 889.

Material examined : Bharuch District, 1 ex., 10.ix.1976 (Y P Sinha leg.). *Fore wing length.* - 26 mm.

Distribution : India and Sri Lanka.

Remarks : The butterfly, commonly known as 'The White Orange Tip' was reported from Kathiawar (Mosse, 1929), as common in Kheda District (Aldrich, 1946) and fairly common in south Gujarat (Shull, 1963).

6. *Colotis danae dulcis* (Butler)

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

1929. *Colotis danae*, Mosse, *J. Bombay nat. Hist. Soc.* 33(4) : 889.

1939. *Colotis danae dulcis*, Talbot, *Fauna of British India*(Butterflies), 1 : 472.

1946. *Colotis danae danae*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 375.

1963. *Colotis danae danae*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 595.

Material examined : Bharuch District, Rajpipla, 1 ex., 31.i.1975 (T G. Vazirani leg.). *Fore wing length.* - 23 mm.

Distribution : Pakistan (Sind to Baluchistan) and India (Kathiawar).

Remarks : The butterfly, commonly known as 'The Crimson Tip', was recorded from Kathiawar by Mosse (1929) and its common occurrence in Kheda District by Aldrich (1946). According to Talbot (1939) the nominate subspecies occurs in Peninsular India and Sril Lanka whereas *C. danae dulcis* (Butler) is distributed from Kathiawar and Sind to Baluchistan. Shull (1963) referred to this subspecies being uncommon in the Dangs District but common elsewhere in South Gujarat from October to April.

7. *Catopsilia crocale crocale* (Cramer)

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

1929. *Catopsilia crocale*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 889.

1939. *Catopsilia crocale crocale*, Talbot, *J. Bombay nat. Hist. Soc.*, 60(3) : 596.

Material examined : Dangs District, Ahwa, 2 exs., 28.ix. 1976 (Y P. Sinha leg.).
Fore wing length. - 28-30 mm.

Distribution : South China, India, Burma, Sri Lanka, the Philippines, Borneo, Sumatra and Java.

Remarks : The butterfly, popularly known as 'The Common Emigrant', was recorded from Kathiawar (Mosse, 1929), Surat and Dangs Districts (Shull and Nadkerny, 1967). The nominate subspecies is common in Kheda District (Aldrich, 1946) and abundant throughout the year having two distinct female forms, one white and the other yellow (Shull, 1963).

8. *Catopsilia florella gnoma* (Fabricius)

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

1929. *Catopsilia florella*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(2).

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

1946. *Catopsilia florella gnoma*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 375.

1963. *Catopsilia florella gnoma*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 596.

Material examined : Banas Kantha District, 3 kms. west of Disa, Palanpur, 1 ex., 15.x.1964 (V. C. Agarwal leg.). *Fore wing length.* - 31 mm.

Distribution : India, Burma and Sri Lanka.

Remarks : The butterfly, popularly known as 'The African Emigrant' occurs in Kathiawar (Mosse, 1929), as common in Kheda District (Aldrich, 1946) and South Gujarat (Shull, 1963). Now, it is a new record for Banas Kantha District.

9. *Eurema hecabe simulata* (Moore)

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

1899. *Terias hecabe*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 511.

1929. *Terias hecabe*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 889.

1939. *Eurema hecabe simulata*, Talbot, *Fauna of British India (Butterflies)*, 1 : 530.

1946. *Terias hecabe simulata*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 375.

Material examined : Banas Kantha District, Palanpur, Mansarovar tank, 4 exs., 10.x.1964, Disa, Palanpur, 1 ex., 14.ix. 1964, Kachchh District, Bhuj, Jakhawara tank, 1 ex., 15.x.1964; Mahesna District, Anwar Talab, Patan, 3 exs., 30.x.1964; Sabar Kantha District, Himatnagar, 6 exs., 6.xi.1964 (V C. Agarwal leg.). Dangs District, Ahwa, 1 ex., 5.vii. 1975 (T G. Vazirani leg.). Bháruch District, 1 ex., 16.ix.1976 (Y. P. Sinha leg.). *Fore wing length.* 21-24 mm.

Distribution : India, Burma and Sri Lanka.

Remarks : The butterfly, popularly known as 'The Common Grass Yellow', was reported from Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929) and as very common from Kheda District (Aldrich, 1946). Shull (1963) referred that it is abundant throughout

the year sometimes crepuscular and occasionally captured at mercury vapour lamp in Ahwa. Shull and Nadkerny (1967) also collected it by mercury vapour lamp from Surat and Dangs Districts. This subspecies is a new record for Districts of Banas Kantha, Sabar Kantha and Mahesna.

Family DANAIIDAE

10. *Danaus chrysippus chrysippus* (Linnaeus)

1758. *Papilio chrysippus* Linnaeus, *Syst. Nat.*, (ed. 10), 1 : 471.
 1899. *Danais chrysippus*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 511.
 1929. *Danais chrysippus*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 890.
 1946. *Danais chrysippus*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 376.
 1947. *Danaus chrysippus chrysippus*, Talbot, *Fauna of British India (Butterflies)*, 2 : 19-23.
 1963. *Danaus chrysippus*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 586.

Material examined : Dangs District, Ahwa, 2 exs., 7.ii.1975 (T G. Vazirani leg.); Bharuch District, Rajpipla, 7 exs., 10.ix.1976 (Y P. Sinha leg.). *Fore wing length.* - 33-35 mm.

Distribution : Extreme south-east Europe eastwards to India, Burma, Sri Lanka, Malaya, Sumatra, Borneo, the Philippines, Japan, China to Asia Minor.

Remarks : The butterfly is popularly known as 'The Plain Tiger' This nominate subspecies occurs in Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929), as very common in Kheda District (Aldrich, 1946) and South Gujarat (Shull, 1963).

11. *Danaus genutia* (Cramer)

1779. *Papilio genutia* Cramer, *Pap. Exot.*, 3 : 23, pl. 203.
 1899. *Danais genutia*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 511.
 1929. *Danais plexippus*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 890.
 1946. *Danais plexippus*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 376.
 1947. *Danaus plexippus*, Talbot, *Fauna of British India (Butterflies)*, 2 : 25.
 1960. *Danaus genutia*, Editors, *J. Bombay nat. Hist. Soc.*, 57(1) : 230-231.
 1963. *Danaus genutia*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 586.
 1981. *Danaus genutia*, Varshney *et al.*, *Rec. zool. Surv. India Occ. Paper*, No. 31 : 13.

Material examined : Bharuch District, Rajpipla, 1 ex., 30.i.1975; Dangs District, Ahwa, 1 ex., 5.ii.1975 (T G. Vazirani leg.), Dangs District, Ahwa, 6 exs., 28.ix.1976 (Y P. Sinha leg.). *Fore wing length.* - 38-43 mm.

Distribution : Afghanistan, Pakistan (Baluchistan), India, Burma, Yunnan to South China and the Riu-Kiu Islands, Tongkong, Annam, Thailand, Wetar, Timor and Australia.

Remarks : The butterfly, commonly known as 'The Common Tiger' was recorded

from Kachchh (Nurse, 1899) , Kathiawar (Mosse, 1929), as rare in Kheda District (Aldrich, 1946) and common throughout the year in South Gujarat (Shull, 1963).

12. *Danaus limniace leopardus* Butler

1866. *Danaus leopardus* Butler, *Proc. zool. Soc., Lond.*, : 52.
 1899. *Danaus limniace* (Sic), Nurse, *J. Bombay nat. Hist. Soc.*, **12** : 511.
 1929. *Danaus limniace*, Mosse, *J. Bombay nat. Hist. Soc.*, **33(4)** : 890.
 1946. *Danaus limniace mutina*, Aldrich, *J. Bombay nat. Hist. Soc.*, **46(2)** : 376.
 1947. *Danaus limniace leopardus*, Talbot, *Fauna of British India (Butterflies)*, **2** : 31.
 1963. *Danaus limniace mutina*, Shull, *J. Bombay nat. Hist. Soc.*, **60(3)** : 585.

Material examined : Bharuch District, 4 exs., 31.i.1975 (T G. Vazirani leg.). *Fore wing length.* - 46-48 mm.

Distribution : South China, Pakistan (Chitral), India, Burma, Sri Lanka, and Thailand.

Remarks : The butterfly, popularly called 'The Blue Tiger', occurs in Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929), Kheda District (Aldrich, 1946) and is common throughout the year in South Gujarat (Shull, 1963).

13. *Euploea core core* (Cramer)

1780. *Papilio core* Cramer, *Pap. exot.*, **3** : pl. 266, figs. E,F, ♂
 1899. *Euploea core*, Nurse, *J. Bombay nat. Hist. Soc.*, **12** : 511.
 1929. *Euploea core*, Mosse, *J. Bombay nat. Hist. Soc.*, **33(4)** : 890.
 1946. *Euploea core core*, Aldrich, *J. Bombay nat. Hist. Soc.*, **46(2)** : 376.

Material examined : Dangs District, Ahwa, II exs., 28.ix.1976 (Y P. Sinha leg.). *Fore wing length.* - 43-46 mm.

Distribution : India.

Remarks : The butterfly, popularly known as 'The Common Indian Crow', was recorded from Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929), Kheda District (Aldrich, 1946) and as very common throughout the year in South Gujarat (Shull, 1963).

Family ACRAEIDAE

14. *Acraea violae* (Fabricius)

1775. *Papilio violae* Fabricius, *Syst. Ent.*, : 460.
 1929. *Telchinia violae*, Mosse, *J. Bombay nat. Hist. Soc.*, **33(4)** : 890.
 1946. *Telchinia violae*, Aldrich, *J. Bombay nat. Hist. Soc.*, **46(2)** : 376.
 1947. *Acraea violae*, Talbot, *Fauna of British India (Butterflies)*, **2** : 466-469.
 1963. *Telchinia violae*, Shull, *J. Bombay nat. Hist. Soc.*, **60(3)** : 589.

Material examined : Sabar Kantha District, Himatnagar, 1 ex., 6.xi.1964 (R. N.

Bhargava leg.); Panch Mahal District, Godhra, 1 ex., 25.i.1975 (*T G. Vazirani leg.*).
Fore wing length - 18-20 mm.

Distribution : Peninsular India and Indo-gangetic plains upto the lower hills of Himalaya, and Sri Lanka.

Remarks : The butterfly, popularly known as 'The Tawny Coster', was recorded from Kathiawar by Mosse (1929), and from Kheda District by Aldrich (1946). Both of them included this species in the family Nymphalidae. Aldrich (*loc. cit.*) remarked that this species listed to the south-west and south of Kheda, but not to the west or north. The Kheda record may, therefore, represent its north-western costal limit. Shull (1963) referred to this species being common throughout the year in the Surat and Dangs Districts and fairly common at Bharuch. This species is a new record for the Districts of Sabar Kantha and Panch Mahal.

Family NYMPHALIDAE

15. *Euthalia nais* (Forster)

1771. *Papilio nais* Forster, *Nov. Spec. Ins. Cent.*, 1 : 73.

1929. *Euthalia nais*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 590.

Material examined : Dangs District, Ahwa, 1 ex., 8.ii.1975 (*T G. Vazirani leg.*).
Fore wing length. - 32 mm.

Distribution : India and Sri Lanka.

Remarks : The butterfly, commonly called 'The Baronet', was recorded as rare from Bhavnagar by Mosse (1929) and as common throughout the year in South Gujarat (Shull, 1963).

16. *Hypolimnas bolina* (Linnaeus)

1758. *Papilio bolina* Linnaeus, *Syst. Nat.*, (ed. 10), 1 : 479.

1899. *Hypolimnas bolina*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 512.

Material examined : Dangs District, Ahwa, 5 exs., 28.ix.1975 (*Y P. Sinha leg.*).
Fore wing length. - 36-45 mm.

Distribution : Almost throughout the Oriental and Australian Regions.

Remarks : The butterfly, commonly called 'The Great Eggfly', occurs in Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929), Kheda District (Aldrich, 1946) and as common throughout the year in South Gujarat (Shull, 1963).

17. *Neptis hylas astola* Moore

1872. *Neptis astola* Moore, *Proc. zool. Soc. Lond.*, : 560.

1932. *Neptis hylas astola*, Evans, *The Identification of Indian Butterflies* : 166.

1946. *Neptis hylas varmona*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 376.

1963. *Neptis hylas*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 587.

Material examined : Dangs District, Ahwa, 1 ex., 8.ii.1975, 2 exs., 11.ii.1975 (T G. Vazirani leg.). *Fore wing length.* - 26-29 mm.

Distribution : India, Burma and Sri Lanka.

Remarks : The butterfly, popularly known as 'The Common Sailer' was reported as rare in Kheda District by Aldrich (1946) who also remarked that it has not been recorded to the south-west of Bhavnagar, nor to the west or north of Kheda District.

18. *Precis orithya swinhoei* (Butler)

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

1899. *Junonia orithya*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 511.

1929. *Precis orithya*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 890.

1946. *Precis orithya swinhoei*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 376.

1963. *Precis orithya (sic)*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 588.

Material examined : Banas Kantha, Palanpur 7 exs., 12.x.1964 (V. C. Agarwal leg.). *Fore wing length.* - 21-23 mm.

Distribution : Pakistan (Baluchistan), India and Sri Lanka.

Remarks : The butterfly, commonly called 'The Blue Pansy' occurs in Kachchh (Nurse, 1899), and was recorded as very common in Kathiawar (Mosse, 1929), Kheda District (Aldrich, 1946) and as very common throughout the year in South Gujarat (Shull, 1963). It is a new record for Banas Kantha District.

19. *Precis almana almana*, (Linnaeus)

1758. *Papilio almana* Linnaeus, *Syst. Nat.* (ed.10) 1 : 472.

1929. *Precis amana*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 890.

1946. *Precis almana almana*, Aldrich, *J. Bombay nat. Hist.* 46(2) : 376.

Material examined : Banas Kantha District, 1 ex., 10.x.1964 (V. C. Agarwal leg.), Dangs District, Ahwa, 1 ex., 8.ii.1975 (T G. Vazirani leg.), Dangs District, 11 exs., 7.x.1976 (Y P. Sinha. leg.). *Fore wing length.* - 30-32 mm.

Distribution : Japan, China, India, Burma, Sri Lanka and Malayan subregion.

Remarks : The butterfly, popularly known as 'The Peacock Pansy' was recorded from Kathiawar by Mosse (1929), Kheda District by Aldrich (1946). This nominate subspecies is common throughout the year in South Gujarat (Shull, 1963). It is a new record for Banas Kantha District.

20. *Cynthia cardui* (Linnaeus)

1758. *Papilio cardui* Linnaeus, *Syst. Nat.*, (ed. 10), 1 : 475.

1899. *Pyrameis cardui*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 512.

1929. *Vanessa cardui*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 890.

1946. *Vanessa cardui*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 376.

1963. *Vanessa cardui*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 588.

1967. *Vanessa cardui*, Shull and Nadkerny, *J. Bombay nat. Hist. Soc.*, 64(2) : 264.
 1971. *Cynthia cardui*, Field, *Smithsonian Contributions to Zoology*, 84 : 37.
 1977. *Cynthia cardui*, Varshney, *Newsl. zool. Surv. India*, 3(1) : 13-14.

Material examined : Dangs District, Ahwa, 1 ex., 28.ix.1976 (Y P. Sinha leg.).
Fore wing length. - 30 mm.

Distribution : Almost Worldwide.

Remarks : The butterfly, commonly known as 'The Painted Lady' occurs in Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929) Kheda District (Aldrich, 1946), Surat and Dangs Districts (Shull and Nadkerny, 1967). It is found as very common throughout the year in South Gujarat (Shull, 1963).

Family LYCAENIDAE
 Subfamily LYCAENINAE

21. *Jamides celeno aelianus* (Fabricius)

1793. *Hesperia aelianus* Fabricius, *Ent. Syst.*, 3(1) : 280, no. 79.
 1869. *Lampides aelianus*, Butler, *Cat. Fabr. Lep.*, : 166, no. 16.
 1907. *Lampides celeno*, Bingham, *Fauna of British India (Butterflies)*, 2 : 404.
 1962. *Jamides celeno aelianus*, Cantlie, *The Lycaenidae portion (except the Arhopala Group) of Brigadier Evans' The Identification of Indian Butterflies*, 1932 : 71.
 1963. *Jamides celeno celeno*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 591.

Material examined : Panch Mahal, Godhra, 7 exs., 15.i.1975 (T G. Vazirani leg.).
Fore wing length. - 14-18 mm.

Distribution : Pakistan, India and Burma.

Remarks : The butterfly, popularly called 'The Common Cerulean' is common throughout the year in South Gujarat (Shull, 1963). It is a new record for Panch Mahal District.

Subfamily THECLINAE

22. *Curetis dentata dentata* Moore

1874. *Curetis dentata* Moore, *Proc. zool. Soc. Lond.*, : 137, 139.
 1962. *Curetis dentata dentata*, Cantlie, *The Lycaenidae portion (except the Arhopala Group) of Brigadier Evans' The Identification of Indian butterflies*, 1932 : 104.
 1963. *Curetis acuta dentata*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 592.

Material examined : Dangs District, Ahwa, 3 exs., 8.ii.1975 (T G. Vazirani leg.).
Fore wing length. - 18-20 mm.

Distribution : India (Himalayas from Kulu to Assam; Madhya Pradesh, Pachmarhi; South India), and Burma.

Remarks : The butterfly, commonly known as 'The Toothed Sunbeam' was reported as fairly common throughout the year in South Gujarat (Shull, 1963).

Family HESPERIIDAE

23. *Telicota augias augias* (Linnaeus)

1763. *Papilio augias* Linnaeus, *Amoen. acad.*, 6 : 410.

1881. *Telicota augias*, Moore, *Lep. Ceylon*, 1(4) : 169.

1949. *Telicota augias augias*, Evans, *A Catalogue of the Hesperiidae from Europe, Asia and Australia in the British Museum* : 394-395.

1963. *Telicota ancilla*, Shull, *J. Bombay nat. Hist. Soc.*, 60(3) : 598.

1964. *Telicota ancilla*, Shull and Nadkerny, *J. Bombay nat. Hist. Soc.*, 61(2) : 466.

Material examined : Dangs District, Ahwa, 4 exs., 5.ii.1975, 4 exs., 7.ii.1975 (T G. Vazirani leg.). *Fore wing length.* - 16-18 mm.

Distribution : India, Burma, Sri Lanka, Saigon, Malaya, Java, Banka and Borneo.

Remarks : The butterfly is commonly known as 'The Pale palm Dart.' Shull (1963) referred to this nominate subspecies (especially the dark brown) as being common from November to May in South Gujarat. Shull and Nadkerny (1964) also reported its occurrence in South Gujarat.

24. *Pelopidas mathias mathias* (Fabricius)

1798. *Hesperia mathias* Fabricius, *Suppl. Ent. Syst.*, : 443.

1899. *Chapra mathias*, Nurse, *J. Bombay nat. Hist. Soc.*, 12 : 513.

1929. *Baoris mathias*, Mosse, *J. Bombay nat. Hist. Soc.*, 33(4) : 891.

1946. *Baoris mathias mathias*, Aldrich, *J. Bombay nat. Hist. Soc.*, 46(2) : 377.

1949. *Pelopidas mathias mathias*, Evans, *A Catalogue of the Hesperiidae from the Europe, Asia and Australia in the British Museum* : 411-442.

Material examined : Kachchh District, Bhuj, Amisar tank, 5 exs., 19.x.1964, Rajrani tank, 1 ex., 25.x.1964 (V. C. Agarwal leg.). *Fore wing length.* - 16-18 mm.

Distribution : India, Sri Lanka, Burma, Siam (Thailand), Malaya, Sumatra, Java, Batoe Is., Siberut, Mindoro, Celebes, Djampea, Lombok, Engano, Timor and Tenimber.

Remarks : The butterfly, popularly known as 'The Small Branded Swift' occurs in Kachchh (Nurse, 1899), Kathiawar (Mosse, 1929) and Kheda District (Aldrich, 1946). According to Shull (1963) the nominate subspecies is common throughout the year in South Gujarat.

Family SATURNIIDAE

Subfamily SATURNIINAE

25. *Antheraea paphia* (Linnaeus)

1758. *Phalaena bombyx paphia* Linnaeus, *Syst. Nat.*, Ed. 10(1) : 496.

1964. *Antheraea paphia*, Shull and Nadkerny, *J. Bombay nat. Hist. Soc.*, 61(2) : 284.

1979. *Antheraea paphia*, Arora and Gupta, *Mem. zool. Surv. India*, 16(1) : 25.

Material examined : Dangs District, Ahwa, 2 exs. 8.ii.1964 (*T. G. Vazirani leg.*).
Fore wing length. - 62-70 mm.

Distribution : South China, India, Bangladesh, Nepal, Bhutan, Burma and Sri Lanka.

Remarks : The moth, popularly called 'The Indian Tasar Moth', was recorded from Surat and Dangs Districts by Shull and Nadkerny (1964). The cocoon of this moth is a source of the economically important tasar silk.

Family ARCTIIDAE

26. *Cretonotus gangis* (Linnaeus)

1764. *Phalaena gangis* Linnaeus, *Amoen. Acad.*, 6 : 410.

1822. *Cretonotus interrupta*, Hübner, *Verz. bekannt. Schmett* : 170.

1892. *Cretonotus interruptus*, Hampson, *Fauna of British India (Moths)*, 2 : 26.

1901. *Cretonotus gangis*, Hampson, *Cat. Lep. Phal. Brit. Mus.*, 3 : 333.

1914. *Cretonotus gangis*, Rothschild, In Seitz (1933) : *The Macrolepidoptera of the World*, 10 : 253.

Material examined : Sabar Kantha District, Himatnagar, Berna Village, 3 exs. 6.xi.1975 (*R. N. Bhargava leg.*). **Fore wing length.** - 20-22 mm.

Distribution : India, Burma, Sri Lanka to China and Australia.

Remarks : This species represents a new locality record from Sabar Kantha District in Gujarat State.

Family NOCTUIDAE

Subfamily AGROTINAE

27. *Agrotis spinifera* (Hübner)

1826. *Noctua spinifera* Hübner, *Eur. Schmett. Noct.*, : 83.

1894. *Agrotis biconica*, Hampson, *Fauna Brit. India, (Moths)*, 2 : 182.

1903. *Euxoa spinifera*, Hampson, *Cat. Lep. Phal. Brit. Mus.*, 4 : 177.

1971. *Agrotis spinifera*, Kapur and Arora, *Rec. zool. Surv. India*, 65(1-4) : 107.

Material examined : Rajkot District, Okha, Suraj Karari tank, 2 exs., 13.iii.1966 (*V. C. agarwal leg.*). **Fore wing length.** - 15 mm.

Distribution : Persia, India, Bhutan, Burma and Sri Lanka.

Remarks : This species is a new record for Rajkot District in Gujarat.

Subfamily CATOCALINAE

28. *Chalciope hyppasia* (Cramer)

1779. *Phalaena (Noctua) hyppasia* Cramer, *Pap. Exot.*, 3 : 250.

1894. *Trigonodes hyppasia*, Hampson, *Fauna of British India (Moths)*, 2 : 527.

1899. *Trigonodes hyppasia*, Nurse, *J. Bombay nat. Hist. Soc.*, 12(3) : 514.

1913. *Chalciope hyppasia*, Hampson, *Cat. Lep. Phal. Brit. Mus.*, 13 : 27.

1964. *Trigonodes hyppasia*, Shull and Nadkerny, *J. Bombay nat. Hist. Soc.*, **61**(2) : 292.

Material examined : Banas Kantha District, Palanpur (Dak bungalow), 8 exs., 11.x.1964 (V. C. Agarwal leg.). *Fore wing length*. - 23-25 mm.

Distribution : Africa, Mauritius, Aden, China, India, Burma, Sri Lanka, Java and Thailand.

Remarks : Shull and Nadkerny (1964) reported this species from Surat and Dangs Districts. It is a new record for Banas Kantha District.

29. *Fodina stola* Guenee

1852. *Fodina stola* Guenee, *Noct.*, **3** : 275, 1715.

1894. *Fodina stola*, Hampson, *Fauna of British India* (Moths), **2** : 530.

Material examined : Dangs District, Ahwa, 6 exs., 6.ii.1975 (T. G. Vazirani leg.). *Fore wing length*. - 20-22 mm.

Distribution : India, Bhutan, Burma and Sri Lanka.

Remarks : This species was recorded from Surat and Dangs Districts by Shull and Nadkerny (1964).

Family PYRALIDAE

30. *Diaphania laticostalis* (Guenee)

1854. *Nargarodes laticostalis* Guenee, *Delt. & Pyral.*, : 303, no. 315, ♂

1895. *Glyphodes laticostalis*, Hampson, *Fauna of British India* (Moths), **4** : 346.

1980. *Diaphania laticostalis*, Mandal and Bhattacharya, *Rec. zool. Surv. India*, **77** : Table I, no. 61.

Material examined : Dangs District, Ahwa, 3 exs., 7.ii.1975 (T. G. Vazirani leg.). *Fore wing length*. - 41-43 mm.

Distribution : India, Burma, Sri Lanka, Pulo Laut; Sumbawa, Ceram and New Hebrides.

Remarks : This species is a new record from the Dangs District in Gujarat State.

SUMMARY

The paper incorporates the account of thirty species and subspecies distributed over twenty six genera belonging to eleven families of Lepidoptera from Gujarat along with their common name, fore wing length and geographical distribution. Of these, eleven are new locality records from seven Districts of the State.

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