

On a small Collection of Butterflies from Christmas Island, Indian Ocean

By H. M. PENDLEBURY

The eleven species of butterflies mentioned below were taken by Mr. M. W. F. Tweedie on Christmas Island during August and September 1932.

Only nine species have been recorded previously from this locality (Butler, Monograph of Christmas Island, 1900, pp. 60-63), but two of these, *Melanitis determinata* Btlr., and *Hypolimnas misippus* L., are not represented in the present collection. It seems rather uncertain whether either can be regarded as residents: the latter is reported to have "appeared immediately after the north-easterly gales, so that there can be little doubt that it was blown over from Java". (Butler, *l.c.p.* 62).

In the following list there are four species to be added to the island fauna: *Appias paulina* Cr. (= *albina* Auctt.), possibly migrants; *Trepsichrois eleutho* Quoy, an unexpected discovery; *Hypolimnas anomala* Wall., a true resident; and *Zizeeria gaika* Trimen. This high proportion of new records is surprising when one considers what careful investigations have been carried out already in this restricted area.

Family PIERIDAE

Appias paulina micromalayana Fruh.

Papilio paulina Cramer, Pap. Exot., ii, 1777, p. 21.

Appias albina micromalayana Fruh., Fruhstorfer in Seitz, Macrolepid., ix, 1910, p. 154.

3 ♂♂, 8 ♀♀, including four forms of the latter: f. *punctata* Fruh. (4), f. *flava* Rober, (1), f. *citronella* Fruh. (1), and f. *albina* Bsdv. (1).

Eurema hecabe amplexa (Btlr.).

Terias amplexa Butler, Proc. Zool. Soc. Lond., 1887, p. 523, fig. 5;
id. Monograph Christmas Id., 1900, p. 63.

Terias moorei amplexa Fruhstorfer in Seitz, Macrolepid., ix, 1910, p. 169.

Eurema hecabe amplexa Corbet and Pendlebury, Bull. Raffles Mus., Singapore, 7, December 1932, p. 158.

A fine series of 36 ♂♂, 4 ♀♀. The ♀♀ have a much wider dark marginal forewing border which is more of the *hecabe* pattern than the ♂♂, and on the underside of the forewing there is in the ♀ only a thin reddish-brown apical streak to vein 4.

Family DANAIDAE

Danaida chrysippus L. forma **petilia** (Stoll).

Papilio petilia Stoll, Suppl. Cramer's Pap. Exot., 1787-91, pl. 28, fig. 3.

Limnas petilia Butler, Monograph Christmas Id., 1900, p. 60.

Danaida chrysippus f. *petilia* Fruhstorfer in Seitz, Macrolepid., ix, 1910, p. 194.

5 ♂♂, 13 ♀♀.

Trepsichrois climena macleari (Btlr.).

Vadebra macleari Butler, Proc. Zool. Soc. Lond., 1887, p. 522, fig. 1;
Monograph Christmas Id., 1900, p. 61.

Euploea climena macleari Fruhstorfer in Seitz, Macrolepid., ix, 1910, p. 226.

20 ♂♂, 4 ♀♀.

Trepsichrois eleutho (Quoy).

Freycinet Voy., ? 1824, pl. 83.

Euploea eleutho Fruhstorfer in Seitz, Macrolepid., ix, 1910, p. 241.

The occurrence of this species on Christmas Island is of particular interest as it is regarded as an Australian Pacific species. The single ♂ example taken agrees well with the race *eleutheria* Fruh., from Teoen Id. (Fruhstorfer, *l.c.*). It seems advisable, however, to await comparative material before imposing a race name. This species may be a true resident

on the island as other examples were seen. 1 ♂, expanse 87 mm. August 28th 1932.

It would appear that *Trepsichrois* Hbn. must replace the better-known generic name *Euploea* F. of which the type is *similis* L., a common *Danaida*.

Family NYMPHALIDAE

***Precis villida villida* (F.).**

Papilio villida Fabricius, Mant. Ins., ii, 1787, p. 35.

Junonia villida Butler, Monograph Christmas Id., 1900, p. 62.

Precis villida villida Fruhstorfer in Seitz, Macrolepid., ix, 1912, p. 522.

9 ♂♂, 9 ♀♀. Rather variable in size and in the distinctness of the pattern on the underside of the wings. September 10th–13th 1932.

***Hypolimnas antilope anomala* Wall.**

Papilio antilope Cramer, Pap. Exot., ii, 1777, p. 132.

Hypolimnas anomala Wallace, Trans. Ent. Soc. Lond., 1869, p. 285.

Hypolimnas antilope anomala Fruhstorfer in Seitz, Macrolepid., ix, 1912, p. 542.

This species seemed to be the commonest butterfly on the island at the time of Mr. Tweedie's visit, but it is not mentioned in the 'Monograph'; it may be seasonal, or a species of comparatively recent introduction. Six of the thirty-three specimens brought back were bred from the larvæ, and larvæ which were preserved in spirit agree well with Dr. Hagen's description. Those bred from the larvæ (which were gregarious) pupated on September 8/9th and emerged on the 19/20th.

***Hypolimnas bolina listeri* Btlr.**

Papilio bolina Linnæus, Syst. Nat., (x), 1758, p. 479.

Hypolimnas listeri Butler, Proc. Zool. Soc. Lond., 1888, p. 542.

Hypolimnas nerina, var. *listeri* Butler, Monograph Christmas Id., 1900, p. 62.

Hypolimnas bolina listeri Fruhstorfer in Seitz, Macrolepid., ix, 1912, p. 550.

4 ♂♂, 8 ♀♀. August 28th–September 13th 1932. The specimens vary considerably in size: ♂♂, 64–84 mm; ♀♀, 73–100 mm.

***Eriboea pyrrhus andrewsi* (Btlr.).**

Charaxes andrewsi Butler, Monograph Christmas Id., 1900, p. 61, pl. ix, fig. 8.

This appears to be merely a well-marked insular race of the widely spread *E. pyrrhus* (L.). This race though described and figured in 1900 is omitted from Seitz' *Macrolepidoptera* vol. ix. (1914).

A NEW LONGICORN BEETLE

Three female specimens were collected (expanse 102-105 mm.) between August 25th and September 10th 1932, but they are rather tattered as they had to be secured with dust shot owing to the inaccessible nature of their resting places.

Family LYCAENIDAE

Zizeeria gaika (Trimen).

Zizera gaika Trimen, Trans. Ent. Soc. Lond., 1862, p. 298. Seitz in Seitz Macrolepid., ix, 1924, p. 925.

Zizeeria gaika Evans, Identification of Indian Butterflies (Second Edition), 1932, p. 234.

Three examples of this widely distributed species were collected.

Nacaduba sp. ? *aluta* Drce.

The only *Nacaduba* reported so far from Christmas Island is *aluta*; the specimen before me though probably this species is too worn for positive identification.
