

The Butterflies of the Samoan Islands.

BY O. H. SWEZEY.

In identifying the butterflies collected by Dr. H. C. Kellers on the Island of Tutuila in 1917-18, I found that there were very few records of butterflies collected on that one of the Samoan Group. Ten species were collected by Dr. Kellers, none of which are new to science.

Only a few papers were found in literature recording butterflies from Samoa, and altogether only twenty species (considering the synonymy) have been recorded. I have thought best to list all of the species, with bibliographic references so far as I was able to find them. The synonymy is taken from the various papers referred to. A number of the species are widely distributed in the South Pacific and very variable, so that their representatives in Samoa are considered by some authors as local varieties.

Anosia menippe Hübner.

Danais archippus Fabr. Butler, P. Z. S., p. 275, 1874, Tutuila, Upolu.

Danais plexippus Linn. Fraser, E. M. M., (2), V:147, 149, 1894, Upolu.

Anosia menippe Hüb. Waterhouse, Trans. Ent. Soc. London, p. 481, 1904, Upolu: Lufilufi; Savaii: Satapaitea.
Kellers, 2 specimens, Dec., 1917, April, 1918, Tutuila.

Danais obscurata Butler.

Danais melissa (Cramer). Butler, Ann. M. Nat. Hist. (4), V, p. 360, 1870, Upolu.

Danais obscurata Butler, P. Z. S., p. 275, 1874, Upolu.

Tirumala mellitula (Herr.-Sch.).

Danaüs mellitula Herrich-Schaeffer, Stett. Ent. Zeit., 30:70, 1869, Upolu.

Butler, P. Z. S., p. 275, 1874, Upolu.

Tirumala hamata. Fraser, E. M. M., (2), V, p. 174, 1894, Upolu.

Tirumala mellitula. Waterhouse, Trans. Ent. Soc. London, p. 492, 1904, Upolu: Lufilufi; Savaii: Sata-paitea.

Kellers, 4 specimens, Dec., 1917; 2 specimens, April, 1918, Tutuila.

Deragena schmeltzi (Herr.-Sch.).

Euploea schmeltzi Herrich-Schaeffer, Stett. Ent. Zeit., 30:70, pl. II, fig. 8, Upolu.

Butler, P. Z. S., p. 277, 1874, Upolu.

Deragena schmeltzii. Fraser, E. M. M., (2), V:147, 1894, Upolu.

Deragena schmeltzii. Waterhouse, Tr. Ent. Soc. London, p. 492, 1904, Upolu: Apia, Lufilufi; Savaii: Sata-paitea.

Euploea eleutho var. *escholtzii* Felder.

Euploea eleutho Amoy & Gaimard, Freyc. Voy., t. 83, f. 2, 1815, Taiti; Navigators' Islands.

Butler, Trans. Ent. Soc. London, (3), V, p. 476, 1867.

Euploea eschsoltzii Felder, Reise der Novara, Lep. II, p. 345, 1867, Fiji.

Euploea eleutho var. *escholtzii*. Herrich-Schaeffer, Stett. Ent. Zeit., XXX, p. 138, pl. 2, fig. 9, 1869.

Kellers, 1 specimen, Dec., 1917; 9 specimens, April, 1918, Tutuila.

Diadema montrouzieri Butler.

Diadema montrouzieri Butler, P. Z. S., p. 281, 1874, Navigators' Islands.

Diadema lutescens Butler.

Diadema lutescens Butler, P. Z. S., p. 283, pl. XLIV,
fig. 3, 1874, Ovalau, Fiji Islands.
Kellers, 1 specimen, April, 1918, Tutuila.

Atella bowdenia Butler.

Atella bowdenia Butler, P. Z. S., p. 687, 1873, Friendly
Islands.

Atella egista Cramer, Herr-Sch., Stett. Ent. Zeit., XXX,
p. 71, 1869, Upolu.

Atella bodenia. Fraser, E. M. M., (2), V, p. 149, 1894,
Upolu.

Atella bowdenia. Waterhouse, Trans. Ent. Soc., London,
p. 493, 1904. Savaii: Satapaitea; Upolu: Lufilufi,
Apia.
Kellers, 2 specimens, Dec., 1917, 6 specimens,
April, 1918, Tutuila.

Junonia villida Fabr.

Junonia villida. Fraser, E. M. M., (2), V, p. 149, 1894,
Upolu.

Waterhouse, Trans. Ent. Soc. London, p. 493,
1904, Savaii: Satapaitea; Upolu: Lufilufi, Sata-
pouala.

Kellers, 5 specimens, Dec., 1917; 5 specimens,
April, 1918, Tutuila.

Hypolimnas bolina Linn.

Anosia otaheita Felder. Samoa.
Hudson, N. Z. Moths and Butterflies, p. 105, 1898,
Samoa.

Diadema otaheita. Butler, P. Z. S., p. 281, 1874, Taiti.

Hypolimnas bolina var. *otaheita*. Fraser, E. M. M.,
(2), V, p. 147, 1894, Upolu.

Hypolimnas bolina. Waterhouse, Trans. Ent. Soc. Lon-
don, p. 493, 1904, Savaii: Satapaitea, Salilalonga;
Upolu: Apia, Lufilufi, Satapouala.

Kellers, 4 specimens, Dec., 1917; 18 specimens,
April, 1918, Tutuila.

Melanitis leda Linn.

Melanitis leda var. *solandra*. Butler, P. Z. S., p. 279, 1874, Tutuila.

Melanitis leda. Fraser, E. M. M., (2), V, p. 148, 1894, Upolu.

Waterhouse, Trans. Ent. Soc. London, p. 494, 1904, Savaii: Satapaitea, Salilalonga; Upolu: Lufilufi.

Zizera labradus (Godt.).

Polymmatius labradus Godt. Enc. Meth., IX, p. 680, 1819.

Lycaena alsulus Herr.-Sch., Stett. Ent. Zeit., 30:75, 1869, Upolu.

Zizera labradus. Druce, P. Z. S., p. 435, 1892, Upolu: Tutuila.

Zizera lulu. Druce, P. Z. S., p. 436, 1892, Samoa.

Lycaena communis. Fraser, E. M. M., (2), V, p. 148, 1894, Upolu.

Zizera labradus. Waterhouse, Trans. Ent. Soc., London, p. 494, 1904, Savaii: Satapaitea; Upolu: Lufilufi, Apia.

Zizera alsulus. Waterhouse, l. c., Savaii: Satapaitea; Upolu: Lufilufi.

Kellers, 2 specimens, Dec., 1917; 2 specimens, April, 1918, Tutuila.

Nacaduba samoensis Druce.

Nacaduba samoensis. Druce, P. Z. S., p. 437, 1892, Samoa.

Waterhouse, Tr. Ent. Soc. London, p. 494, 1904, Savaii: Satapaitea.

Jamides woodfordi Butler.

Jamides woodfordi Butler, Ann. Mag. Nat. Hist., (5), XIII:346, 1884, Fiji.

Lycaena woodfordi. Fraser, E. M. M., (2), V:149, 1894, Upolu.

Jamides carissima (Butler).

Lampides carissima Butler, P. Z. S., p. 615, pl. LXVII, figs. 3, 4, 1875.

Jamides carissima. Druce, P. Z. S., p. 443, 1892, Samoa.
Waterhouse, Trans. Ent. Soc. London, p. 495, 1904, Savaii: Satapaitea; Upolu: Lufilufi.

Catochrysops cnejus (Fabr.).

Lycaena samoa Herr.-Sch., Stett. Ent. Zeit., 30:73, Tab. IV, fig. 18, Vanua Valava.

Catochrysops cnejus. Waterhouse, Trans. Ent. Soc. London, p. 495, 1904, Savaii: Satapaitea; Upolu: Lufilufi.

Catochrysops platissa (Herr.-Sch.).

Lycaena platissa Herr.-Sch., Stett. Ent. Zeit., 30:74, 1869, Rockampton.

Catochrysops platissa. Druce, P. Z. S., p. 444, 1892, Samoa.

Waterhouse, Trans. Ent. Soc. London, p. 495, 1904, Savaii: Satapaitea; Upolu: Lufilufi.

Kellers, 3 specimens, Dec., 1917, Tutuila.

Lampides argentina (Prittwitz).

Lycaena argentina Pritt., Stett. Ent. Zeit., 28:274, 1867, Samoa.

Lampides argentina. Butler, P. Z. S., p. 285, 1874, New Hebrides.

Papilio godeffroyi Semper.

Papilio godeffroyi Semper, Trans. Ent. Soc. London, (3), II: 469, pl. 24, 1866, Upolu.

Butler, P. Z. S., p. 289, 1874, Upolu.

Fraser, E. M. M., (2), V:148, 1894, Upolu.

Kellers, 1 specimen, April, 1918, Tutuila.

Unnamed skipper.

Fraser, E. M. M., (2), V:148, 1894, Upolu.

NOTES AND EXHIBITIONS.

Adoretus sinicus Burmeister.—Mr. Timberlake exhibited a collection of *Adoretus* from the Oriental region, including *tenuimaculatus* from Japan, *sinicus* from China and Formosa, and *compressus* from Java. The species found in the Hawaiian Islands is not *tenuimaculatus*, as it has been called in the past, but *sinicus*. This determination of the species in Hawaii was first made by Ohaus about ten years ago, but his work has escaped the attention of local entomologists. (Ent. Blatt, Berlin, 8, pp. 218-227, 1912):

Eumerus strigatus.—Mr. Whitney exhibited a few specimens of this fly, which were reared from daffodil bulbs imported from the Coast.

Mirodon equestris.—Mr. Whitney reported the larvae of this fly as intercepted in daffodils.

New Guinea butterflies.—Mr. Fullaway exhibited a collection of butterflies from New Guinea.

Determinations of immigrant beetles.—Mr. Fullaway exhibited the following named beetles with notes on their determination by Dr. E. C. Van Dyke of the University of California. The determinations are based on specimens collected by Messrs. Swezey and Fullaway and forwarded recently to Dr. Van Dyke by Mr. Fullaway.

Eucnocerus anthrenoides Sharp. (?)—The Dermestid beetle reported by Mr. Swezey at the August meeting as breeding abundantly in a box of garden seeds. It is a species found in Mexico and Panama.

Ataenius cognatus Lec. and *Psammодиус nanus* De Geer.—Two Aphodiids found in cowdung and in trash on the ground. The former common in Eastern United States, the latter found in Southern California, Mexico and Chile.

Saprinus fimbriatus Lec. and *Paromalus lautus* Zimm.—Two Histerids found in cow manure, where they are predacious on other insects. The former is common on the Pacific Coast, the latter found sparingly in both the eastern and western parts of the United States.

Cercyon quisquilius Linn. and *Cryptopleurum minutus* Fab.—Two Hydrophyllids living in cowdung, where they are predacious on other insects. More or less cosmopolitan species.

Oxytelus sculptus Grav.—A Staphilinid found in cowdung. A cosmopolitan species.

These are the first published records of these beetles in Hawaii. However, *Ataenius cognatus* is the beetle recorded in the Fauna Hawaiiensis as *A. stercorator* (Fab.). The six following species of the list have not been previously recorded, but their presence has been known for a number of years, so that they are not to be considered as newly arrived immigrants.

Report of Committee on Common Names of Economic Insects in Hawaii.

In the preparation of its report this Committee has found it advisable to make a few corrections to the list of common names adopted by the Society on March 6, 1913 (published in these Proceedings, vol. 2, pp. 296-300), as well as to present many new names. The correction of the old names has been made necessary through increased knowledge of the habits, distribution, etc., of the insects, or because the old name has proved to be of too general application. Whenever possible a name already in use here or elsewhere has been adopted, especially for the insects found in the lists of common names adopted by the American Association of Economic Entomologists.

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