Chrysotus longipalpis Aldrich
Chrysotus longipalpis Aldrich, 1896: 329.
Chrysotus pallidipalpus Van Duzee, 1933: 313, **new synonymy**

This species was previously known in Hawaiian collections as *Chrysotus pallidipalpus* Van Duzee. *Chrysotus longipalpis* was originally described from the West Indies (Aldrich 1896), but has been reported as frequenting hot houses and green houses in widely disparate regions such as the UK and the neotropics.

At the request of the author, comparisons of the types of both species in The Natural History Museum, London were made by Mr. John E. Chainey. His comparison of the salient characters of both types showed them to be conspecific, thus the new synonymy here.

Micropezidae
Taeniaptera angularis Loew **New island record**

Specimens of this species were captured on the grounds of the Bishop Museum (13 and 26 Oct. 1995) by Wayman Paglinawan. Previously, this recent introductioon to Hawaii was known only from the Big Island.

Material Examined: OAHU: Honolulu, Bishop Museum, 13 & 26.x.1995, Bishop Museum staff (BPBM).

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Range Expansions and Name Changes for Moths (Lepidoptera) in the Hawaiian Islands

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This paper summarizes some of the changes in understanding of moth species in the Hawaiian Islands through the ongoing activities of the Hawaii Biological Survey. Two kinds of changes are recorded here: changes in understanding of distributions based on specimens accumulated at Bishop Museum (BPBM), and changes in nomenclature resulting from taxonomic work published elsewhere. Many of these taxonomic changes have already been incorporated in Nishida (1994), but this paper provides the background. This paper builds on recent reviews of Sphingidae (Riotte 1986), Noctuoidea (Riotte 1991) and Pyraloidea (Munroe 1989). The recent field guide to Pyraloidea and Microlepidoptera by Robinson *et al*. (1994), although not intended to cover the Hawaiian fauna, is very useful for family-level identifications and includes many species that occur in Hawaii.

Crambidae

Euchromius ocellus (Haworth) **New island records**

Previously known from Niihau, Kauai, Oahu, Molokai, and Lanai (Nishida 1994), the identification was verified as part of the revision by Schouten (1992). Schouten's new map record for Lanai was based on the specimens cited below.

Material examined. HAWAII: Kona Dist., Kaupulehu For. Res., 600 m, 24 March 1961, L.W. Quate; KAHOOLAWE: Beck's Cove, 10 m, 11–14 February 1980, G.M. Nishida; Hakioawa, 10 m, 27 April 1980, F.G. Howarth; LANAI: Manele, March 1961; no further data, T. Blackburn.

Maruca vitrata (Fabricius)

Maruca testulalis (Geyer), 1832, was placed as a synonym of *Maruca vitrata* (Fabricius), 1787, by Munroe (1995: 69). This cosmopolitan pest of legumes is known from Kauai, Oahu, Molokai, Lanai, Maui and Hawaii.

Spoladea recurvalis (Fabricius) **New island record**

Although recorded from all the other Hawaiian Islands (Nishida 1994) and represented from Kahoolawe in BPBM for many years, the island record has never been published.

Material examined. KAHOOLAWE: Hanakanaea Bay, w. end, 18 Feb. 1931, E.H. Bryan, Jr.; Hakloawa Pt., u.v. light, 5 m, 7 Nov. 1979, G.M. Nishida; 1.2 km SE Moaula, 19 April 1989, C.E. O'Connell.

Elachistidae

Perittia lonicerae (Zimmerman & Bradley)

Perittia lonicerae (Zimmerman and Bradley) was transferred to *Perittia* from the monotypic genus *Swezeyula* by Kuroko *in* Inoue *et al*. (1982: 208). This placement was confirmed by Kaila (1995: 209) and Traugott-Olsen (1995: 268–69, figs. 14-15, 30, 41). The species, which is adventive in Hawaii, has been recognized in Japan (Kuroko 1982), although Traugott-Olsen (1995) described the Japanese specimens as new. Several other species are known from the eastern Palearctic Region, so it is likely that *P. lonicerae* originated there.

Geometridae

Macaria abydata Guenée

First recorded from Kauai and Oahu in 1970 (*U.S. Dep. Agric. Coop. Econ. Insect Report* 20: 826, 842, 1970), this species is now also known from Molokai, Lanai, Maui, and Hawaii (Nishida 1994). It has been known in the Hawaiian literature as *Semiothisa santaremaria*, now a synonym of *Macaria abydata* (Holloway 1993). Holloway (1993: 161) documents the dramatic spread of this species across the Pacific and Asia, and illustrates a larval specimen from Hawaii (pl. 19). The rapid spread of this species since 1970 is similar to that of *Heteropsylla cubana* Crawford (Homoptera: Psyllidae) (Muddiman *et al*. 1992), which is also found on *Leucaena leucocephala* (Lam.) de Wit.

Immidae

Imma mylias Meyrick **New island record**

First recorded from Oahu in 1973 (Beardsley 1978) and found on Hawaii Island in 1975 (Murai 1988).

Material examined. KAUAI: Lawai Valley, National Tropical Botanical Garden, ca. 20 m, 7–9 Sept. 1988, S.E. Miller.

Psychidae

Brachycyttarus griseus de Joannis

First recorded from Oahu in 1984, the species is also known from the islands of Kauai and Hawaii. The taxonomy and biology are detailed by Davis (1990). Kamarudin *et al*. (1995) and Robinson *et al*. (1994: 37) provide additional data on the biology and natural range of the species, including an additional synonym, *Pteroma langkawiensis* de Freina.

Pterophoridae

Leioptilus beneficus (Yano & Heppner)

Oidaematophorus beneficus was transferred to *Leioptilus* by Miller & Gielis (1995: 108). This species was introduced from Mexico in 1959, 1965 (unsuccessful), and 1973 (successful) for the biocontrol of *Ageratina riparia* (Regel) K. & R. and is known from Oahu and Hawaii (Yano & Heppner 1983).

Pyralidae

Following the recent revision of North American *Homeosoma* (Goodson & Neunzig 1993), Neunzig (pers. comm., 1995) has confirmed that *Homeosoma albosparsum* (Butler) appears to be correctly placed in *Homeosoma*, although the female genitalia lacks a signum in the corpus bursae. He also suggests that *Unadilla humeralis* Butler probably belongs in *Homeosoma*, but the taxa involved are in need of further study.

Sphingidae

Hyles lineata (Fabricius) **New island record**

Known from all the major islands, this species is recorded here for the first time from Kahoolawe.

Material examined. KAHOOLAWE: Smuggler's Cove, u.v. light, 19 April 1989, C.E. O'Connell.

Tortricidae

Crocidosema lantana Busck

Epinota lantana was transferred back to the original genus, *Crocidosema*, by Powell *et al*. (1995: 154). This species was introduced from Mexico in 1902 for the biocontrol of *Lantana* and is known from Kauai, Oahu, Molokai, Maui, and Hawaii (Zimmerman 1978).

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