

Eleven New Records of Lepidoptera in the Hawaiian Islands including corrections to the Hawaiian Terrestrial Arthropod Checklist

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Eleven new state records of Lepidoptera are reported for Hawai'i along with 63 new island records of previously introduced species. A complete list of taxonomic changes and corrections to the Lepidoptera checklist in Nishida (2002) is presented (Table 1), including previous corrections by Matsunaga *et al.* (2019). Proposed changes to the establishment status of 32 species are presented alongside. A list of all species of Lepidoptera described from Hawai'i since 2002, as well as all new state records of Lepidoptera published since 2002 is provided (Table 2) to serve as a more complete supplement to Nishida (2002).

Information regarding the formerly known distribution in Hawai'i of species discussed herein is based on Nishida (2002) and subsequent publications (Giffin 2007; Giffin & Rowe 2007; Howarth & Preston 2002a, 2002b, 2006, 2007; Howarth *et al.* 2012; Matsunaga *et al.* 2019; Starr *et al.* 2004, 2006; Starr & Starr 2011, 2012). Identifications were made by the first author except where otherwise noted. Identifications were based on external morphology and genitalia dissections. Specimens were compared with illustrations and figures in the published literature as well as through comparisons with material in the Bernice Pauahi Bishop Museum (BPBM), Hawai'i Department of Agriculture (HDOA), and the University of Hawai'i Insect Museum, University of Hawai'i at Mānoa (UHIM). Voucher specimens and other examined material are deposited in the aforementioned three collections.

Blastobasidae

Blastobasis inana (Butler)

New island record

Although originally described from Hawai'i, this species has been collected widely across the Pacific, and is probably not part of the native fauna. Zimmerman (1978) considered it introduced and examined specimens from Hawai'i Island, Lāna'i, and O'ahu. We report it from Kaua'i for the first time. It likely occurs on all the main islands except perhaps Kaho'olawe and Ni'ihau.

Material examined. **Kaua'i:** 2♂, Nā Pali-Kona For[est] Res[erve], Koai'e Valley, nr. Piwa Enclosure Area; 22.1000, -159.6111; 560 m; 12–13 Oct 2021; K.A. Austin; LED bucket trap (UHIM). 1♂, same as previous except 22.1007, -159.6103; 565 m (UHIM).

Cosmopterigidae

Asymphorodes dimorpha (Busck)

New island record

Zimmerman (1978) reported this species from almost all the Hawaiian Islands: Ni'ihau, O'ahu, Moloka'i, Maui, Lāna'i, Hawai'i, Nihoa, Necker, Pearl and Hermes, Midway, and

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Kure. He also examined specimens from elsewhere in the Pacific. Curiously though, he did not examine any from Kaua'i (he wrote, "probable, but I have no record."). Nishida (2002) followed Zimmerman (1978) in omitting Kaua'i. We therefore report this species from Kaua'i for the first time.

Material examined. **Kaua'i:** 1♂, 1♀, McBryde Fld. 210; 19 Nov 1992; ex. coffee; V. Chang (HDOA).

Crambidae

Asciodes quietalis (Walker)

New state record

The earliest records of this species in Hawai'i are a series of nine specimens reared from *Bougainvillea* (Nyctaginaceae) on O'ahu in 2017. James Hayden (Florida Department of Agriculture and Consumer Services) provided the initial ID, which was subsequently confirmed by M. Alma Solis (USDA-SEL). A photo of this species from Hawai'i Island was uploaded to iNaturalist in 2021 [link], suggesting this species is also established on that island. *Asciodes quietalis* was previously only known from Hispaniola and the Galápagos Islands (Landry 2016), but its actual range may be considerably wider because it is easily confused with *Asciodes gordialis* Guenée.

Material examined. **O'ahu:** 5♂, 4♀, Pāwa'a; 2 Jun 2017; ex. *Bougainvillea* sp.; J.N. Matsunaga (HDOA).

Hellula undulalis (Fabricius)

New island record

This introduced species is a significant pest of Brassicaceae. Nishida (2002) included records of it from all the main islands except Kaho'olawe and Ni'ihau. We report it from Kaho'olawe for the first time.

Material examined. **Kaho'olawe:** 3♂, Pu'u Moa'ulanui, 7 Mar 2013. 1♂, Base of Moa'ulaiki; 20.56457, -156.58519; UV bucket trap; 7 iii 2013 (UHIM).

Herpetogramma licarsialis (Walker)

New island record

This introduced species is a pest of various grasses. Nishida (2002) recorded it from all the main islands except Kaho'olawe and Ni'ihau. We report it from Midway Atoll for the first time.

Material examined. **Midway:** 2♀, Sand Isle; 10 May [20]08; J.J. Le Roux, D. Rubinoff (UHIM).

Herpetogramma sp. A

New state record

This species closely resembles *Herpetogramma stultalis* (Walker), known from South Korea, China, Japan, India, Sri Lanka, Pakistan, Malaysia, Papua New Guinea, Australia, the Democratic Republic of the Congo, and La Réunion (Park *et al.* 2016). However, subtle differences in the angle of the forewing postmedial line make this identification somewhat suspect (James Hayden, Florida Department of Agriculture and Consumer Services, pers. comm. 2022). The dissected genitalia do not allow recognition below the generic level. We choose to include it as *Herpetogramma* sp. A until a more precise identification can be made via molecular methods.

Material examined. **Hawai'i:** 1♂, Ha[wai'i] Vo[lcano] Nat[ional] Park, Kahuku Sect[ion], Lower Palm Trail; 771 m; 19.0888, -155.6926; 17–18 Mar 2021; D. Rubinoff, C. Doorenweerd, K. Austin, R. Rubinoff; UV bucket trap. KAA diss. #0688 (UHIM). **O'ahu:** 1♂, Round Top For[est] Res[erve], Mānoa Cliff Restoration Area; 21.3381, -157.8110; 560 m; 26–27 Nov 2021; K.A. Austin, K. Faccenda; UVLED light sheet (UHIM).

***Nomophila noctuella* (Denis & Schiffermüller) New island records**

After some confusion in the earlier literature, Munroe (1973) confirmed that the species of *Nomophila* introduced to Hawai‘i is *N. noctuella*, a polyphagous Palearctic and African species. Nishida (2002) reported it from Kaua‘i, O‘ahu, Moloka‘i, Maui, and Hawai‘i. We report it from Kaho‘olawe, Lāna‘i, and Midway Atoll for the first time.

Material examined. **Kaho‘olawe:** 1♂, Kaukaikapapa, N20.53539, W156.569323; UV bucket trap; 5 Mar 2013; W. Haines, D. Rubinoff (UHIM). **Lāna‘i:** 1♀, Munro Trail Head 16–17 May [20]07; WPT #15; Rubinoff, Eiben (UHIM). 3♂, 2♀, Munro Trail; N20°50.549, W156°54.585; wet area bl trap; 16–17 May [20]07; Rubinoff, Eiben (UHIM). 2♂, Kānepu‘u Pres[erve]; 2 Jul [20]05; W. Haines (UHIM). **Midway:** 1 individual [sex unknown], Eastern Island; 10 May [20]08; J.J. Le Roux, D. Rubinoff (UHIM).

***Orphanostigma haemorrhoidalis* (Guenée) New island record & name change**

This species was released in Hawai‘i in 1956 to as a biological control agent for *Lantana camara* (Verbenaceae) (Funasaki *et al.* 1988). Nishida (2002) reported it from Kaua‘i, O‘ahu, Moloka‘i, Maui, and Hawai‘i. We report it from Lāna‘i for the first time.

Material examined. **Lāna‘i:** 1♂, 6 iii [20]08; 20.87560, -156.97836; P. Schmitz (UHIM). 1♂, Munro Trail; 3 Jul [20]05; W. Haines (UHIM). 2♂, TNC reserve; 20.87464, -156.97533; 548 m; 6 Mar [20]08; P. Schmitz, D. Rubinoff (UHIM).

Terastia* sp. A*New island record & name change**

This species was first reported in Hawai‘i in 1922 from O‘ahu as *Terastia meticulosalis* Guenée (Swezey 1923) but has not been reported in the literature since. Zimmerman (1958b) wrote that “there is reason to doubt the species is established in our islands.” Nishida (2002) listed it as *Terastia subjectalis* Lederer, presumably following Hampson (1899), who considered the Asian *T. subjectalis* Lederer synonymous with the American *T. meticulosalis* Guenée, but Nishida may have been unaware of Munroe (1995) who had validated both species. Sourakov *et al.* (2015) redescribed, figured, and diagnosed *T. meticulosalis* and *T. subjectalis* in addition to three other species in the genus. The species reported from Hawai‘i does not appear to match any of those figured in Sourakov *et al.* (2015). Hawaiian specimens have never been dissected – Zimmerman (1958b) figured an adult and male and female genitalia from Mexican specimens of *T. meticulosalis*. We feel it is best to treat the Hawaiian taxon as *Terastia* sp. A until a more comprehensive revision has been completed. We report it from Maui for the first time.

Material examined. **Maui:** 3♂, Makena; 23 Sep 2011; ex. *Erythrina sandwicensis* seed pods; J. Yalemar (HDOA).

Depressariidae***Ethmia nigroapicella* (Saalmüller)****New island record**

This introduced species feeds primarily on *Cordia subcordata* (Boraginaceae). Nishida (2002) reported it from Kaua‘i, O‘ahu, Maui, and Hawai‘i. We report it from Moloka‘i for the first time. It likely occurs on Lāna‘i as well.

Material examined. **Moloka‘i:** 1♂, Kaunakakai, Moloka‘i Shores Apartments; 21.0800, -157.0565; 11 May 2021; 20 m; D. Rubinoff, K. Austin, C. Doorenweerd; hand collected indoors (UHIM).

Dryadaulidae***Dryadula terpsichorella*** Busck**New island record**

Though described from the Hawaiian Islands and commonly known as the “Hawaiian Dancing Moth,” Zimmerman (1978) treated it as an introduced species. It also has been reported from California, Florida, and many islands in the Pacific (Kawahara *et al.* 2011). Nishida (2002) reported it from O‘ahu, Moloka‘i, Maui, and Hawai‘i. We report it from Kaua‘i for the first time. It likely occurs on all the main islands.

Material examined. **Kaua‘i:** 1♂, Nā Pali-Kona For[est] Res[erve], Koai‘e Valley, nr. Piwa Enclosure Area; 22.1000, -159.6111; 560 m; 12–13 Oct 2021; K.A. Austin; LED bucket trap (UHIM).

Erebidae***Eublemma accedens*** (Felder & Rogenhofer)**New island record**

This species was first collected in the Hawaiian Islands in 1960 (Davis, 1964). It has been reared from flower buds and leaves of *Waltheria indica* (Malvaceae). Nishida (2002) reported it from Kaua‘i, O‘ahu, Moloka‘i, and Hawai‘i; Howarth *et al.* (2012) reported it from Maui; Starr *et al.* (2006) reported it from Kaho‘olawe. We report it from Lāna‘i for the first time.

Material examined. **Lāna‘i:** 1♂, 6 Mar [20]08; N20.87560°, W156.97836°; P. Schmitz (UHIM).

Galtara extensa (Butler)**Name change**

This species was released in 2013 on Maui and Hawai‘i Island to control the noxious weed *Senecio madagascariensis* (Asteraceae). It has been referred to in the recent literature as *Secusio extensa* (e.g., Ramadan *et al.* 2011, Krushelnycky *et al.* 2018) based on comments made by a collaborating taxonomist pending a revision of *Secusio* and *Galtara* (Ramadan *et al.* 2011). However, as the type species of *Secusio* (*Secusio strigata* Walker, 1854) is significantly different from both the type species of *Galtara* (*Galtara purata* Walker, 1863) and the species in question, which more closely resemble each other, we believe it is most appropriate to treat the introduced biocontrol species as *Galtara extensa* (Butler, 1880) pending a published revision of both genera.

Hypena laceratalis Walker**New island records**

This species was first introduced to Hawai‘i in 1957 to control *Lantana camara* (Verbenaceae) (Davis & Krauss 1962). Nishida (2002) reported it from Kaua‘i, O‘ahu, Lāna‘i, Maui, and Hawai‘i Island. We report it from Kaho‘olawe and Moloka‘i for the first time.

Material examined. **Kaho‘olawe:** 1♂, 1♀, Base of Moa‘ulaiki; 20.56457, -156.58519; UV bucket trap; 7 Mar 2013 (UHIM). 1♂, 1♀, Wiliwili Grove; 6 Mar 2013 (UHIM). **Moloka‘i:** 1♂, 1♀, Kamakou Preserve, Pēpē‘ōpae Bog Boardwalk; 21.1183, -156.9041; 1230 m; 11–12 May 2021; K.A. Austin, C. Doorenweerd, D. Rubinoff; UV/LED bucket trap (UHIM).

Eutelidae***Targalla delatrix*** (Guenée)**New island record**

This species was first recorded in the Hawaiian Islands in 1964 (Beardsley 1979). Nishida (2002) included records from Kaua‘i, O‘ahu, Moloka‘i, Maui, Hawai‘i, and Pearl & Hermes Atoll. We report it from Lāna‘i for the first time.

Material examined. **Lāna‘i:** 1♂, Munro Trail; 3 Jul [20]05; W. Haines (UHIM).

Gelechiidae***Mesophleps adustipennis* (Walsingham)****New state record**

This species has been reared from seeds of the highly invasive *Leucaena leucocephala* (Fabaceae) on O‘ahu. It was first collected in the Wai‘anae Mountains in 2020 but has since been collected throughout O‘ahu. Specimens have also been collected in relatively intact native forest, suggesting that it may be feeding on *Acacia koa* as well. A photograph of an individual near Kalaoa on Hawai‘i Island in November 2020 was uploaded to iNaturalist (<https://www.inaturalist.org/observations/65455998>), suggesting that it may also be established on that island. This species also occurs in the southern United States, Central America, South America, the Caribbean, and the Galápagos Islands, where it feeds on various fruits and seeds of Fabaceae (Li & Sattler 2012). It is the only species of *Mesophleps* in the Western Hemisphere.

Material examined. **O‘ahu:** 1♂, Nānākuli Forest Reserve, Palikea Ridge Trail; D. Rubinoff, M. San Jose, J.B. Reil, K.A. Austin; 19 Nov 2020 (UHIM). 1♂, Ka‘iwi Shoreline; 21.2947, -157.6613; larva coll. 25 Sep 2021, adult ecl. 2 Oct 2021; K.A. Austin, K. Faccenda. HOST: *Leucaena leucocephala* seed pod (UHIM). 2♂, Kuli‘ou‘ou Forest Reserve, west ridge; 21.3086, -157.7299; 260 m; 1–2 Oct 2021; K.A. Austin, K. Faccenda; LED bucket trap (UHIM). 2♂, same as previous except 21.3135, -157.7296; 410 m; K. A. Austin diss. #0630 (UHIM). 1♂, ‘Ewa For[est] Res[erve], Mānana Ridge, inside fenced area; 21.4499, -157.8899; 560 m; 24–25 Nov 2021; K.A. Austin, K. Faccenda; LED bucket trap (UHIM). 1♀, same as previous except 21.4502, -157.8887; 575 m (UHIM). 2♂, Round Top For[est] Res[erve], Mānoa Cliff Restoration Area; 21.3376, -157.8108; 565 m; 26–27 Nov 2021; K.A. Austin, K. Faccenda; LED bucket trap (UHIM). 1♂, same as previous, except 21.3379, -157.8108; 555 m (UHIM).

Geometridae***Chloroclystis* sp. A****New state record**

This species is superficially similar to some species of Australian *Chloroclystis* such as *C. pyrholopha* Turner and *C. poliophrica* Turner. Males possess a unique patch of elongated scales along the basal half of the forewing costa. A more precise identification may require molecular methods. Species of *Chloroclystis* are known to feed on a wide variety of plant families (Robinson *et al.* 2010), so predicting its host range in Hawai‘i is not possible at present.

Material examined. **O‘ahu:** 1♂, 1♀, ‘Ewa For[est] Res[erve], Mānana Ridge, inside fenced area; 21.4502, -157.8887; 575 m; 24–25 Nov 2021; K.A. Austin, K. Faccenda; LED bucket trap (UHIM). 1♀, same as previous, except 21.4499, -157.8899; 560 m (UHIM). 1♂, Pahole N[atural] A[rea] R[eserve], in gulch; 21.5146, -158.1931; 610 m; 18–19 Dec 2021; K.A. Austin, K. Faccenda, H. Szczygieł; LED light trap (UHIM).

Cyclophora nanaria* (Walker)*New island records**

This introduced species was first detected in Hawai‘i in 1964 (Beardsley 1979). Nishida (2002) reported it from all of the main islands except Kaho‘olawe and Ni‘ihau. We report it from Kaho‘olawe and Midway for the first time.

Material examined. **Kaho‘olawe:** 1♂, 1♀, Hakiowa Pt., 5 m, 7 Nov 1979, G.M. Nishida (BPBM). **Midway:** 1♂, 3♀, Sand I[sle], 15 Jul 1983; at light; W.C. Gagné (BPBM).

Dislisioprocta stellata* (Guenée)*New island records**

This species was first recorded in the Hawaiian Islands in 1993 (Kumashiro 1998). Nishida (2002) reported it from Kaua‘i and Maui, but apparently omitted a record from Hawai‘i which was included in the original note (Kumashiro 1998). Tavares *et al.* (1998) mentioned

that it was reported from O‘ahu as early as 1993, but we cannot find a published record from that island. Therefore, we report it from O‘ahu and Laysan for the first time.

Material examined. **Laysan:** 3♂, Cocos Grove; bucket trap; 25 Mar [20]08; C. King (UHIM). **O‘ahu:** 1♀, Hawai‘i Kai; 17 Oct [19]93; reared from caterpillar feeding on *Bougainvillea* (HDOA). 2♂, 3♀, Honolulu, Kalihi, 21 Jun 2001, 120 m, reared [from] *Bougainvillea*; F.G. Howarth (BPBM).

Pleuroprucha sp. A

New state record

This species was identified as “Undetermined genus sp. A” by Matsunaga *et al.* (2019). We identify it here as *Pleuroprucha* sp. A. The earliest records we have examined are from O‘ahu in 1997. All species of *Pleuroprucha* are native to the Americas. A more precise identification may require molecular methods pending a taxonomic revision of the genus.

Material examined. **Kaua‘i:** 1♀, Kōke‘e; 22.1305, -159.6595; 1122 m; 20–22 Jul 2020; D., and R. Rubinoff, C. Doorenweerd (UHIM). **Maui:** 1♂, Makawao Forest Res[erve] near banana patch; 762 m; NAD83 04 Q 783642 2306658 [20.8383, -156.2745]; UV light trap; 20–21 Jun 2006; W. Haines (UHIM). **O‘ahu:** 1♀, Mānoa Valley, elev. 250 ft [76.2 m]; 23 Oct 1997; reared from marigold flower; pupation time: 7 days; W.D. Perreira (HDOA). 1♂, Ko‘olau Mtns., Wiliwilinui Trail; 6 Jun 2006; UV light trap; J. Eiben, W. Haines (UHIM). 1♀, Kuliouou Forest Reserve, west ridge; 21.3135, -157.7296; 410 m; 1–2 Oct 2021; K.A. Austin, K. Faccenda; LED bucket trap; K. A. Austin diss. #0628 (UHIM).

Scopula personata (Prout)

New island records

This species was identified as “*Scopula personata*?” by Howarth *et al.* (2012), an identification which we provisionally follow. Confirmation may require molecular methods. The earliest record of this species is from near the Honolulu International Airport in 1976. Howarth *et al.* (2012) reported it from Maui, where they considered it “common.” We examined a single specimen from Lāna‘i that appears to have been reared, but the host plant is not included on the label. A photo of this species on Hawai‘i Island was uploaded to iNaturalist [link], suggesting that it is also established on that island.

Material examined. **Lāna‘i:** 1♀, Garden of the Gods, N20°32.805, W157°00.094; 15 May [20]07; em[e]rg[e]ld 17 May [20]07 (UHIM). **O‘ahu:** 1♂, Kuli‘ou‘ou Forest Reserve, west ridge; 21.3135, -157.7296; 410 m; 1–2 Oct 2021; K.A. Austin, K. Faccenda; LED bucket trap; K. A. Austin diss. #0629 (UHIM). **Kaua‘i:** 1♂, Kipu; 29 Jun 1983; J.C.E. Riette (BPBM).

Meessiidae

Eudarcia sp. A

New state record

Larval cases of this species have been collected on rocks and have been confused with cases of the native fancy case caterpillars (Cosmopterigidae: *Hyposmocoma*). This represents the first record of the family Meessiidae in Hawai‘i. A more precise identification of this species is not possible until a comprehensive revision of the genus is completed. Though the earliest record we have is from 2006, this species may have been present in the Hawaiian Islands before then and simply overlooked because of its diminutive size. It may be the same species as “Tineidae genus sp. A” in Howarth *et al.* (2012), but we were unable to locate the voucher specimens deposited in the Bishop Museum. The genus has a nearly cosmopolitan distribution.

Material examined. **Kaho‘olawe:** 2♀, “Naval” Wiliwili Grove; light trap; 7 Mar 2013 (UHIM). **Kaua‘i:** 1♀, Nā Pali-Kona For[est] Res[erve], Koai‘e Valley, nr. Piwa Exlosure Area; 22.1000, -159.6111; 560 m; 12–13 Oct 2021; K.A. Austin; LED bucket trap; K. A. Austin diss. #0649 (UHIM). 1♀, same as previous except 22.1007, -159.6103; 565 m; K. A. Austin diss. #0648 (UHIM). **Maui:**

1♀, Auwahi area, makai of Hokano on lava; 25–29 Mar [20]08; em. 28 Apr [20]08; DR08C10B; S. Montgomery, M. Bryce (UHIM). **O‘ahu**: 1♂ [abdomen missing], 1♀, Ewa, Makaiwa Hills; 1000ft [304.8 m]; 21–22 Nov 2006; under stone (UHIM).

Momphidae

Mompha eloisella (Clemens)

Name change

Nishida (2002) included “*Laverna herellara?*” as one of two species of Momphidae in the Hawaiian Terrestrial Arthropod Checklist. We can find no records of this name anywhere in the published literature, as was likely the case for Nishida which is why he may have included a question mark. We believe the most likely origin for this name is a misspelling of *Laverna oenotheraella* Chambers, 1875 where the “*oenot-*” was somehow omitted. This species is now treated as a synonym of *Mompha eloisella* (Clemens, 1860), which feeds on *Oenothera* spp. (Onagraceae) and may have been under consideration as a bio-control agent for *Oenothera* on Maui and Hawai‘i Island. However, we can find no published references to any releases made of this species in the state. It should be listed as “not established” in the checklist.

Noctuidae

Amyna natalis (Walker)

New island records

This species was first collected on O‘ahu in 1945 (Zimmerman 1958a); Nishida (2002) included a record from Kaua‘i. Howarth *et al.* (2012) reported it from Maui; Giffin & Rowe (2007) reported it from Hawai‘i Island. We report it from Lāna‘i, Moloka‘i, and Nihoa for the first time.

Material examined. **Lāna‘i**: 3♂, Munro Trail; 3 vii [20]05; W. Haines (UHIM). 7♂, 3♀, TNC reserve; N20.87464, W156.97533; 548 m; 6 Mar [20]08; P. Schmitz, D. Rubinoff (UHIM). **Moloka‘i**: 1♀, TNC Barracks, Kamakou Pres[erve]; 18 May [20]04 (UHIM). **Nihoa**: 1♀, Upper Miller’s Gulch; UV bucket trap; 23.06223, -161.92557; 7–8 Jun 2015; J. Sprague (UHIM). 1♂, UV bucket trap; 23.05973, -161.92343; 4–5 Jun 2015; J. Sprague (UHIM).

Argyrogramma verruca (Fabricius)

New state record

This is a broadly distributed species in the Americas, recorded from Canada to Argentina. It is somewhat polyphagous and is sometimes considered a minor pest of various garden crops in its native range (Lafontaine & Poole 1991). Photographs of this species have been uploaded to iNaturalist from near Waimea [link] and Waikoloa Village [link] on Hawai‘i Island, suggesting that it has been established on the island for a while.

Material examined. **Hawai‘i**: 1♂, Ocean View, Maile Drive; 560 m; 19.0744, -155.7585; 17–19 Mar 2021; D. Rubinoff, C. Doorenweerd, K. Austin, R. Rubinoff, MV light (UHIM). **O‘ahu**: 1♂, Moanalua Valley; Dec 1999; W.D. Perreira (HDOA).

Callopietria floridensis (Guenée)

Name correction

Beardsley (1979) first reported the presence of this genus in Hawai‘i, but simply listed it as “*Callopietria* sp.” Later he identified specimens in the UHIM as *Callopietria floridensis* (Guenée) as evidenced by a handwritten note. Riotte (1991) listed the species in Hawai‘i as *Callopietria meridionalis* Collenette from material in the BPBM identified by F. Howarth and P. Maddison. Someone (perhaps Riotte) then appears to have changed Beardsley’s label to “*Callopietria* sp. nr. *floridensis*” with a separate label referencing the specimens in the BPBM identified as *C. meridionalis*. Nishida (2002) listed it as

Calloplistria maillardi Guenée, presumably following Holloway (1989) in treating *C. meridionalis* as a synonym of *C. maillardi*. However, Beardsley was correct. The species present in Hawai‘i is the North American *C. floridensis* (Guenée) as evidenced by the absence of the “three to five enlarged spatulate setae” on the node of the antennae which are present in *C. maillardi* and other Pacific species (Holloway 1983). Neither *C. maillardi* nor *C. meridionalis* (if treated as a distinct species) are currently recorded from Hawai‘i. The “*Calloplistria* sp. of Mau *et al.* 1990” mentioned by Nishida (2002) may be *C. floridensis*, but we have not been able to find this reference.

***Elaphria nucicolora* (Guenée)**

New island record

Nishida (2002) reported this species from all the main islands except Ni‘ihau and Moloka‘i. He also reported it from Laysan. We report it from Moloka‘i for the first time.

Material examined. **Moloka‘i:** 2♂, Kamakou Preserve, Waikolu Valley Lookout; 21.1295, -156.9209; 1095 m; 12–13 May 2021; K.A. Austin, C. Doorenweerd, D. Rubinoff; UV/LED bucket trap (UHIM).

***Feltia subterranea* (Fabricius)**

New island records

Prestes (2014) reported this recently introduced species from Hawai‘i Island, Lāna‘i, and Maui. We report it from Moloka‘i and O‘ahu for the first time. This species has also been photographed in Kapa‘a on Kaua‘i [link], suggesting that this species is established on that island as well.

Material examined. **Moloka‘i:** 3♂, 1♀, Kamakou Preserve, Waikolu Valley Lookout; 21.1295, -156.9209; 1095 m; 12–13 May 2021; K.A. Austin, C. Doorenweerd, D. Rubinoff; UV/LED bucket trap (UHIM). **O‘ahu:** 1♀, Wai‘anae Kai For[est] Res[erve], Mt. Ka‘ala, past south end of bog boardwalk; 1180 m; 10–11 iv 2021; 21.5029, -158.1482; K.A. Austin, M. San Jose; K. Faccenda; UV bucket trap (UHIM). 1♂, Mokulē‘ia For[est] Res[erve], West Makaleha restoration area; 21.5201, -158.1734; 840 m; 15–16 May 2021; K.A. Austin, M. San Jose; LED bucket trap (UHIM).

***Leucania loreyimima* Rungs**

New island record

This introduced species was first recorded in Hawai‘i in 1975 as *Leucania loreyi* (Duponchel) (Beardsley 1979). Peter Maddison reidentified it as *L. loreyimima* Rungs as reported by Riotte (1991). Nishida (2002) included records from Midway, Kaua‘i, O‘ahu, and Hawai‘i Island. Howarth *et al.* (2012) reported it from Maui. We report it from Nihoa for the first time.

Material examined. **Nihoa:** 3♂, UV bucket trap; 23.05973, -161.92343; 4–5 Jun 2015; J. Sprague (UHIM). 2♂, 1♀, same as previous except 23.06082, -161.92748; 6–7 Jun 2015 (UHIM). 2♂, 1♀, Upper Miller’s Gulch; UV bucket trap; 23.06223, -161.92557; 7–8 Jun 2015; J. Sprague (UHIM). 5♂, 1♀, West Central Plateau; UV bucket trap; 23.06152, -161.92237; 6–7 Jun 2015; J. Sprague (UHIM).

***Leucania striata* Leech**

New island records

This introduced species was first recorded in Hawai‘i in 1969 (Beardsley 1979). Nishida (2002) included records from Kaua‘i, O‘ahu, and Maui. We report it from Hawai‘i Island and Lāna‘i for the first time.

Material examined. **Hawai‘i:** 1♂, Ha[wai‘i] Vo[lcanoes] Nat[ional] Park, Kahuku Sect[ion], along border of Kau Forest Reserve; 1050 m; 19.1112, -155.6758; 18–19 Mar 2021; D. Rubinoff, C. Doorenweerd, K. Austin, R. Rubinoff; UV bucket trap (UHIM). **Lāna‘i:** 1♂, Munro Trail; 3 Jul [20]05; W. Haines (UHIM).

Mouralia tinctoides* (Guenée)*New island record & new status**

This species is listed as “adventive, not established?” in Nishida (2002), where it was reported from a single specimen from Kaua‘i collected in 1982 (Riotte 1991). We report it from O‘ahu for the first time and consider it likely established in the state based on the presence of the host plant (*Tradescantia* spp., Commelinaceae) in both cultivated and natural settings.

Material examined. **O‘ahu:** 1♂, Ko‘olau Mtns., Wa‘ahila Ridge; 360 m; 21.3084, -157.7958; UV light trap; 9 Jan 2010; W. Haines (UHIM).

Mythimna unipuncta* (Haworth)*New island records**

This introduced species is among the most abundant and common moths in the Hawaiian Islands. It was first reported in Hawai‘i by Butler (1880). Nishida included records from Kaua‘i, O‘ahu, Moloka‘i, Lāna‘i, Maui, Hawai‘i Island, Midway, Lisianski, and Laysan. We report it from Kaho‘olawe and Nihoa for the first time. It likely occurs on Ni‘ihau and most, if not all, of the Northwestern Hawaiian Islands.

Material examined. **Kaho‘olawe:** 5♂, 2♀, Keāliialalo; N20.53992, W156.63897; UV bucket trap; 5 Mar 2013. W. Haines, D. Rubinoff (UHIM). 3♀, planted *Erythrina* grove nr. Luamakika; N20.55715, W156.57303; UV bucket trap; 6 Mar 2013; W. Haines, D. Rubinoff (UHIM). 3♂, 4♀, Base of Moa‘ulaiki; 20.56457, -156.58519; UV bucket trap; 7 Mar 2013 (UHIM). **Nihoa:** 1♂, 1♀, UV bucket trap; 23.06082, -161.92748; 6–7 Jun 2015; J. Sprague (UHIM). 1♂, Upper Miller’s Gulch; UV bucket trap; 23.06223, -161.92557; 7–8 Jun 2015; J. Sprague (UHIM).

Peridroma saucia* (Hübner)*New island record & name correction**

In Hawai‘i this species has been repeatedly misidentified as *Lycophotia porphyrea* (Denis & Schiffmüller, 1775) (e.g., Riotte, 1991; Nishida 2002; Giffin 2007; Howarth *et al.* 2012). This likely stems from the fact that Zimmerman (1958a) listed it as *Peridroma porphyrea* (Denis & Schiffmüller, 1775). Zimmerman also incorrectly stated that “*Noctua porphyrea*” was the type species of *Peridroma* when in fact it is the type species of *Lycophotia* Hübner. He also erroneously included *Agrotis saucia* Hübner, 1808 as a synonym.

Riotte (1991), who was the first to treat the Hawaiian noctuid fauna after Zimmerman, appears to have recognized this discrepancy and attempted to remedy it by changing the combination to a correct one, *Lycophotia porphyrea* (Denis & Schiffmüller, 1775), not recognizing that this species and the species present in Hawai‘i are not the same. What should have been done is the exact opposite: correct the specific epithet to that of the type species of *Peridroma* Hübner. This is what Zimmerman intended when treating both the introduced species and the native Hawaiian ones as congeners. This would have created the correct and already widely used combination *Peridroma saucia* (Hübner, 1808).

This introduced species is among the most common Lepidoptera in Hawai‘i. It was first reported from Hawai‘i by Meyrick (1899), but likely had been present for some years before. Nishida (2002) included records from Kaua‘i, O‘ahu, Moloka‘i, Kaho‘olawe, Maui, Hawai‘i, and Laysan. We report it from Lāna‘i for the first time. It likely also occurs on Ni‘ihau and many of the Northwestern Hawaiian Islands.

Material examined. **Lāna‘i:** 1♀, Kānepu‘u Reserve, near outplanting; 18–19 Sep [20]09; D. Rubinoff, C. King, W. Haines (UHIM). 1♂, Munro Trail; N20°50.549, W156°54.585; wet area bl trap; 16–17 May [20]07; Rubinoff, Eiben (UHIM).

Papilionidae***Battus philenor*** (Linnaeus)**New state record**

A single adult was photographed by Kevin Konishi in the Sand Island area in early 2019 and reported to Janis Matsunaga. HDOA Plant Quarantine staff were able to capture the individual shortly thereafter as it was nectaring on landscaped *Pseuderanthemum carruthersii* (Acanthaceae) flowers. No additional specimens have been reported since, but because its host plant (*Aristolochia* spp., Aristolochiaceae) is naturalized in Hawai'i (Wagner *et al.* 1999), establishment may be possible. *Battus philenor* is native to the continental United States and Mexico. Identification was provided by Paul Goldstein (USDA-SEL).

Material examined. **O'ahu:** 1♀, Sand Island; 1 Feb 2019; ex. at large; coll. C. Kishimoto (HDOA).

Pyralidae***Corcyra cephalonica*** (Stainton)**New island records**

Nishida (2002) only included records from O'ahu for this introduced species. We report it from Maui and Moloka'i for the first time.

Material examined. **Maui:** 1♀, Haiku; Dec 1919; O.H. Swezey; ex. peanuts (HDOA). 1♀, Pā'ia; 22 May [19]35; O.H. Swezey; ex. jar of prepared steer feed (HDOA). **Moloka'i:** 1♂, Kaunakakai; 15 Feb [19]29; O.H. Swezey; in house (HDOA).

Hypsopygia mauritialis (Boisduval)**New island record**

Nishida (2002) included records from Ni'ihau, Kaua'i, and O'ahu for this species. We report it from Hawai'i Island for the first time.

Material examined. **Hawai'i:** 4♂, 1♀, Hilo; 22 Oct 1974; in old *Polistes* nest; S. Matayoshi (HDOA). 1♂, Kūka'iau Ranch; Sep 1955; ex. *Myrica faya*; C.J. Davis (HDOA).

Trachylepidia fructicassella Ragonot**New state record**

This species has been intercepted twice on the U.S. mainland from outbound O'ahu residents. M. Alma Solis (USDA-SEL) provided the identification of those records, but no field records on O'ahu were recorded at the time. We reared this species in good numbers from pods of *Cassia bakeriana* (Fabaceae) on the campus of the University of Hawai'i at Mānoa. M. Alma Solis subsequently confirmed our identification. It has not been recorded elsewhere on O'ahu to date, but is likely widely established based on the popularity of the host plant in landscaping. There is one iNaturalist observation of a larva from 2019 (<https://www.inaturalist.org/observations/37776400>), suggesting that it has been established for at least two years. *Trachylepidia fructicassella* occurs in India, Pakistan, and Sri Lanka, where it is believed to be native, as well as in Central America and the Caribbean, where it has been introduced. It is frequently intercepted at U.S. ports of entry but is not believed to be established in the continental United States (Solis 2006).

Material examined. **O'ahu:** 13♂, 5♀, UH Mānoa Campus, SE corner of Hamilton Library; 21.3003, -157.8158; pods coll[ected] 30 Nov 2021; adult ecl. 1–16 Dec 2021; K. Faccenda (all UHIM except 2♂, 2♀ sent to HDOA).

Sphingidae***Hippotion rosetta*** (Swinhoe)**New status**

Nishida (2002) listed a junior synonym of this species, *Hippotion depictum* Dupont, 1941, as having been intercepted in quarantine and not established in Hawai'i. It was first col-

lected in Hawai'i in 1998 from O'ahu and Kaua'i (Kumashiro *et al.* 2002). Howarth *et al.* (2012) reported it from Maui. Having examined more recent material from O'ahu and seen photographs from across the state, we have sufficient evidence to consider it permanently established across the main Hawaiian Islands.

***Psilogamma increta* (Walker)**

New island records

This species was first collected in Hawai'i in 1977 on O'ahu, where it was misidentified as *P. menephron* (Cramer, 1780) (Higa 1981). Nishida (2002) included records from Kaua'i under this misidentification. Matsunaga *et al.* (2019) reported that the species in Hawai'i is actually *P. increta* (Walker, 1865). We report it here from Lāna'i, Maui, and Hawai'i Island for the first time. It likely occurs on Moloka'i as well, but we have not seen specimens of it from that island.

Material examined. **Lāna'i:** 3♂, [no locality given] WPT 15; 6 Mar 2008 (UHIM). **Hawai'i:** 1♀, Papaikou; 26 Jan 2015; ex. at large near *Dracaena* farm; M. Akiyama (HDOA). **Maui:** 3♂, Makawao Forest Res[erve], Waiohiwi Gulch; 2500 ft [762 m]; UV light trap; 17 Jan 2005; W. Haines (UHIM). 1♂, same as previous except 16 Jan 2005 (UHIM). 1♂, Makawao Forest Res[erve], Kahakapao; 3200 ft [975 m]; UV light trap; 17 Jan 2005; W. Haines (UHIM). 1♀, Makawao Forest Res[erve] near banana patch; 762 m; NAD83 04 Q 783642 2306658 [20.8383, -156.2745]; UV light trap; 20–21 Jul 2006; W. Haines (UHIM).

Tineidae

***Erechthias pelotricha* (Meyrick)**

New state record

This species was described from Rapa Island but has been recorded in French Polynesia as well as Fiji. Clarke (1971) reared adults from dead wood of *Pandanus tectorius* (Pandanaeae). We suspect that it may also feed on dead wood of *Freycinetia arborea* (Pandanaeae) in Hawai'i based on the proximity of these plants to the localities where it has been collected so far in the central and southern Ko'olau Range where *Pandanus tectorius* is much less common.

Material examined. **O'ahu:** 1♂, Round Top; elev. 900 ft [274 m]; 16 Aug 2006; W.D. Perreira (HDOA). 1♂, Pu'u 'Ualaka'a; elev. 900 ft [274 m]; 25 May 2006; W. D. Perreira (HDOA). 1♂, same as previous except 29 Apr 2006 (HDOA). 1♂, Ko'olau Mtns., Wa'ahila Ridge; 360 m; 21.3084, -157.7958; UV light trap; 9 Jan 2010; W. Haines (UHIM). 1♂, 4♀, Tantalus Restoration Area; 8 Dec 2013; A. Prestes, L. Leblanc (UHIM). 1♂, Kuli'ou'ou Forest Reserve, west ridge; 21.3126, -157.7300; 390 m; 1–2 Oct 2021; K.A. Austin, K. Faccenda; UVLED light sheet; K. A. Austin diss. #0634 (UHIM). 2♂, same as previous, except 21.3135, -157.7296; 410 m; LED bucket trap (UHIM).

***Erechthias simulans* (Butler)**

New island records

Nishida (2002) included records from Kaua'i, O'ahu, and Hawai'i Island for this introduced species. Howarth *et al.* (2012) reported it from Maui. We report records from Lāna'i and Moloka'i for the first time.

Material examined. **Lāna'i:** 3♂, 4♀, Munro Trail; N20°50.549, W156°54.585; wet area bl trap; 16–17 May [20]07; Rubinoff, Eiben. 2♂, Munro Trail Head 16–17 May [20]07; WPT #15; Rubinoff, Eiben (UHIM). **Moloka'i:** 1♀, TNC Barracks; Kamakou Pres[erve]; 18 May [20]04 (UHIM).

***Monopis crocicapitella* (Clemens)**

New island records

Nishida (2002) included records of this species from O'ahu, Moloka'i, Lāna'i, and Hawai'i Island. We report it from Kaua'i and Maui for the first time, although the specimens are over a century old.

Material examined. **Kaua'i:** 1♂, Kōke'e; 29 Aug 1921; Swezey (HDOA). 1♀, same as previous except 26 Aug 1921 (HDOA). **Maui:** 1 specimen, sex undetermined, Kula; 26 Jan [19]10 (HDOA).

Monopis meliorella (Walker)

New island record

Nishida (2002) included records of this introduced species from Necker, Nihoa, Kaua'i, O'ahu, Moloka'i, and Gardner Pinnacles. Howarth *et al.* (2012) reported it from Maui; Giffin & Rowe (2007) reported it from Hawai'i Island; and we report it from Lāna'i for the first time.

Material examined. **Lāna'i:** 1♂, Munro Trail; 16–17 May [20]07; WPT #16, "wet area;" Rubinoff, Eiben (UHIM). 1♂, Kānepu'u Reserve, near outplanting; 18–19 Sep [20]09; D. Rubinoff, C. King, W. Haines (UHIM).

Monopis longella (Walker)

New island record & name change

Butler (1881) first recorded this introduced species in Hawai'i as *Blabophanes longella* (Walker, 1863) and said it was "unquestionably distinct" from *B. monachella*. Despite this, Meyrick (1894) synonymized the two, with Zimmerman (1978) following this treatment. Huang *et al.* (2011) removed *Monopis longella* from synonymy with *Monopis monachella* and diagnosed the two species. Based on the presence of a dark stain within the large white patch on costal margin of forewing of all Hawaiian specimens examined by us, *Monopis longella* (Walker, 1863) is the correct name for the species in the Hawaiian Islands.

Nishida (2002) included records from Kaua'i, O'ahu, Lāna'i, and Hawai'i Island. We report it from Maui for the first time. It likely occurs on all the main islands.

Material examined. **Maui:** 1♂, 1♀, Makawao Forest Res[erve], Waiohiwi Gulch; 2500 ft [762 m]; UV light trap; 17 Jan 2005; W. Haines (UHIM). 1♂, Makawao Forest Res[erve] near banana patch; 762 m; NAD83 04 Q 783642 2306658 [20.8383, -156.2745]; UV light trap; 20–21 Jun 2006; W. Haines (UHIM).

Opogona sacchari (Bojer)

New island records

Nishida (2002) included records from O'ahu and Hawai'i Island for this introduced species. We report it from Kaua'i and Maui for the first time. It is undoubtedly more widespread, feeding in a wide array of substrates from rotting wood to pineapple (Vorsino *et al.* 2005).

Material examined. **Kaua'i:** 1♀, Nā Pali-Kona For[est] Res[erve], Koai'e Valley, nr. Piwa Enclosure Area; 22.1007, -159.6103; 565 m; 12–13 Oct 2021; K.A. Austin; LED bucket trap (UHIM). **Maui:** 1♂, 1♀, Kihei; 4 Apr [19]90; ex. palm; J. Tavares. 2♀, Makawao Forest Res[erve] near banana patch; 762 m; NAD83 04 Q 783642 2306658 [20.8383, -156.2745]; UV light trap; 19 Jun 2006; W. Haines (UHIM). 1♀, same as previous, except 18 Jun 2006 (UHIM). 1♀, Hali'i Maile, south of Haleakalā Hwy, in sugar cane fields; UV light trap; 1 Jun [20]05; C. King (UHIM).

Opogona purpuriella Swezey

New island record

Nishida (2002) reported this species from Kaua'i, O'ahu, Moloka'i, and Hawai'i Island. We report it from Maui for the first time, even though the specimens are nearly a century old.

Material examined. **Maui:** 2♀, Olinda; Apr 1932; O. Bryant (HDOA).

Trichophaga mormopis Meyrick

New island record

Nishida (2002) included records from O'ahu and Maui for this introduced species. We report it from Kaua'i for the first time.

Material examined. **Kaua'i:** 2♀, [no locality given]; Jun 1963; ex. orchid media; S. Au (HDOA).

Tortricidae***Acleris zimmermani* (Clarke)****New island record & name change**

This species was first introduced to Hawai'i in 1964 on Maui to control non-native *Rubus* (Davis & Kraus 1965). It was then released on Kaua'i in 1965 and Hawai'i Island in 1966 (Zimmerman 1978). We report it from O'ahu for the first time. We can find no published records of intentional releases on O'ahu. It has been collected only in the vicinity of Ka'ala.

Material examined. **O'ahu:** 2♂, 1♀, Ka'ala N[atural] A[rea] R[eserve], fenceline near FAA "twin towers;" 1200 m; N21.50866, W158.14838; UV light trap; 25 Feb 2012; W. Haines, A. Prestes (UHIM). 1♂, Wai'anae Kai For[est] Res[erve], Mt. Ka'ala, near south end of bog boardwalk; 1200 m; 21.5033, -158.1478; 10–11 Apr 2021; K.A. Austin, M. San Jose; K. Faccenda; UV bucket trap (UHIM). 1♀, Mt. Ka'ala shelter; 1220 m; 21.5082, -158.1441; 10–11 Apr 2021; K.A. Austin, M. San Jose; K. Faccenda; UV light sheet (UHIM). 1♂, 2♀, Wai'anae Kai For[est] Res[erve], Ka'ala Trail; 21.5027, -158.1505; 1050 m; 4–5 Sep 2021; K.A. Austin, K. Faccenda; LED bucket trap (UHIM).

Crociosema lantana* Busck*New island records**

This species was introduced to Hawai'i in 1902 by Koebele for the biological control of *Lantana camara* (Zimmerman 1978). Nishida (2002) included records from Kaua'i, O'ahu, Moloka'i, Maui, and Hawai'i. We report it from Kaho'olawe and Lāna'i for the first time.

Material examined. **Kaho'olawe:** 1♀, planted *Erythrina* grove nr. Luamakika; N20.55715, W156.57303; UV bucket trap; 6 Mar 2013; W. Haines, D. Rubinoff (UHIM). **Lāna'i:** 1♂, Kānepu'u Reserve, near outplanting; 18–19 Sep [20]09; D. Rubinoff, C. King, W. Haines (UHIM).

Cryptophlebia illepada* (Butler)*New island record**

It is unclear if this species is endemic, indigenous, or introduced in Hawai'i. It has not been collected outside of the state. Zimmerman (1978) treated it as probably introduced. Nishida (2002) listed it as adventive and occurring on Maui, O'ahu, Moloka'i, Lāna'i, Maui, and Hawai'i Island. We report it from Kaho'olawe for the first time.

Material examined. **Kaho'olawe:** 2♂, [no specific locality], ex. old native plant matter; 6 Mar 2013 (UHIM).

Episimus unguiculus* Clarke*New island record & name change**

This species was introduced to Hawai'i from Brazil in 1954 to control *Schinus terebinthifolia* (Anacardiaceae), at which time it was undescribed (Zimmerman 1978). Zimmerman (1978) described it as *Episimus utilis*, now considered a junior synonym of *Episimus unguiculus* Clarke, 1951 (Razowski & Brown 2008). Nishida (2002) reported it as occurring on Kaua'i, O'ahu, Moloka'i, Maui, and Hawai'i Island. We report it from Lāna'i for the first time.

Material examined. **Lāna'i:** 2♂, 6 iii [20]08; N20.87464, W156.97533; P. Schmitz. 2♂, Kānepu'u Reserve, near outplanting; 18–19 Sep [20]09; D. Rubinoff, C. King, W. Haines (UHIM).

Eucosmogastra poetica* (Meyrick)*New state record**

A single specimen of this species was reared from the critically endangered native tree *Flueggea neowawraea* (Phyllanthaceae) by the O'ahu Army Natural Resource Program (OANRP) staff at the NIKE greenhouse in the northern Waianae Mountains near Pahole Natural Area Reserve. Although the specimen is missing a locality label, Karl Magnacca (OANRP) provided us with the locality data and year. It is unclear whether or not it is established in that area, but further surveys should be conducted as it is near one of the only places *Flueggea neowawraea* still occurs naturally on O'ahu.

Material examined. O'ahu: 1♂, [NIKE greenhouse]; coll[ected] as caterpillar 10 Nov [2015] on *Flueggea neowawraea*; pupated 22 Nov [2015], em[erged] 22 Dec [2015] (UHIM).

***Lorita scarificata* (Meyrick)**

New island records

This species was first recorded from Hawai'i in 1974 (Beardsley 1979). Nishida (2002) reported it from Kaua'i and O'ahu. We report it from Kaho'olawe and Midway Atoll for the first time.

Material examined. Kaho'olawe: 1♂, [no specific locality], ex. old native plant matter; 6 Mar 2013 (UHIM). **Midway:** 2♂, 2♀, Sand Isle; 10 May [20]08; J.J. Le Roux, D. Rubinoff (UHIM).

***Platynota stultana* Walsingham**

New island records

Platynota stultana was first collected in Hawai'i in 1985 but has only been reported from O'ahu (Miller & Hodges 1995) and Maui (Howarth *et al.* 2012). We report it from Hawai'i Island, Kaho'olawe, Kaua'i, and Lāna'i for the first time. It likely occurs on Moloka'i as well, but we have not examined any specimens from that island to date. It has been reared from a wide variety of both native and introduced plant species in Hawai'i (Austin & Rubinoff, in prep.).

Material examined. Hawai'i: 1♂, 0.5 mi W of Kamuela; dry scrub; 22 Apr [20]03; Rubinoff, Nogues (UHIM). **Kaho'olawe:** 1♂, [no specific locality], ex. old native plant matter; 6 Mar 2013 (UHIM). **Kaua'i:** 1♀, Nā Pali-Kona For[est] Res[erve], Koai'e Valley, nr. Piwa Exclosure Area; 22.0982, -159.6115; 550 m; 12–13 Oct 2021; K.A. Austin; UVLED light sheet (UHIM). **Lāna'i:** 1♀, Munro Trail Head; 16–17 May [20]07; WPT #15; Rubinoff, Eiben (UHIM).

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Table 1. Taxonomic and establishment status changes to the Lepidoptera checklist of Nishida (2002)

Family in Nishida 2002*	Name in Nishida 2002*	Current family	Current name/status	Notes/Source	Status in Nishida 2002*	Proposed status	Notes/Source
Acrolepidae	-	Glyphipterigidae	Acrolepiinae	van Neukeken <i>et al.</i> , 2011	-	-	-
Agonoxenidae	-	Eliachisidae	Agonoxeninae	van Neukeken <i>et al.</i> , 2011	-	-	-
Actinidae	-	Erebidae	Actinidae	van Neukeken <i>et al.</i> , 2011	-	-	-
Uthessidae	<i>Uthessa pulchelloides</i>	Erebidae	<i>Uthessa pulchelloides</i>	-	advNE?	advNE	-
Carposinidae	<i>Carposina bullata</i>	Erebidae	-	-	puNE?	puNE	Conant <i>et al.</i> , (2013)
Castniidae	<i>Castnia licus</i>	Castniidae	-	Lamas, 1995	advNE?	advNE	-
Coleophoridae	<i>Coleophora parthenica</i>	Coleophoridae	-	-	puNE?	puNE	Conant <i>et al.</i> , (2013)
Coleophoridae ^a	<i>Pigrfia uuku^a</i>	Blastobasidae	<i>Pigrfia uuku</i>	van Neukeken <i>et al.</i> , 2011	adv?	adv?	-
Cosmopterigidae	<i>Pyndacras bada</i>	Cosmopterigidae	<i>Anatrachynitis bada</i>	Koster & Sinev, 2003	adv	adv	-
Cosmopterigidae	<i>Pyndacras rileyi</i>	Cosmopterigidae	<i>Anatrachynitis rileyi</i>	Koster & Sinev, 2003	adv	adv	-
Crambidae	<i>Ategumia adpalis</i>	-	-	-	pur	puNE	-
Crambidae	<i>Ategumia ebulealis</i>	-	-	-	pur	err	Nakahara <i>et al.</i> , (1992)
Crambidae	<i>Ategumia mutabilis</i>	-	-	-	puNE?	pur	Nakahara <i>et al.</i> , (1992)
Crambidae	<i>Baphala homoesomella</i>	Pyralidae	<i>Baphala homoesomella</i>	^b	puqua	-	-
Crambidae	<i>Daphania bivittalis</i>	Crambidae	<i>Glyphodes bivittalis</i>	Nuss <i>et al.</i> , 2003-2022	qua	adv?	Zimmerman (1958b)
Crambidae	<i>Hypenidia doctus</i>	Crambidae	<i>Hydnis doctus</i>	Mally <i>et al.</i> , 2019	adv	-	-
Crambidae	<i>Pleuroptya aurantiacalis</i>	Crambidae	<i>Palania balteata</i>	Nuss <i>et al.</i> , 2018	qua	-	-
Crambidae	<i>Pyrausta penelgens</i>	Crambidae	<i>Glyphodes penelgens</i>	Nuss <i>et al.</i> , 2003-2022	pur	-	-
Crambidae	<i>Sablia haemorrhoidalis</i>	Crambidae	<i>Ophraostigma haemorrhoidalis</i>	Shaffer & Munroe, 2003	pur	-	-
Crambidae	<i>Syncrita oblitralis</i>	Crambidae	<i>Elophia oblitralis</i> ^a	Nuss <i>et al.</i> , 2003-2022	adv	-	-
Crambidae	<i>Terastia subaetalis</i>	Crambidae	<i>Terastia</i> sp.	See comments in text	adv	adv	Mally <i>et al.</i> , 2019
Crambidae	<i>Uresiphita polygonalis virescens</i>	Crambidae	<i>Uresiphita glivata</i>	Nuss <i>et al.</i> , 2003-2022	end?	adv	-
Erebidae	<i>Secusio extensa</i> ^a	Erebidae	<i>Galara extensa</i>	See comments in text	pur ^a	adv	-
Erebidae	<i>Anarsia lineatella</i>	Erebidae	-	-	advNE?	advNE	-
Gelechiidae	<i>Autosticha</i>	Autostichidae	<i>Autosticha</i> ^a	van Neukeken <i>et al.</i> , 2011	adv	advNE	-
Gelechiidae	<i>Stoebérinus testaceus</i>	Autostichidae	<i>Stoebérinus testaceus</i>	Hedges, 1998	adv	-	-
Gelechiidae	<i>Anacampicodes fragilata</i>	Geometridae	<i>Indopis fragilata</i>	Parsons <i>et al.</i> , 1999	adv	-	-
Geometridae	<i>Macania abydata</i>	Geometridae	<i>Psamatodes abydata</i>	Ferguson, 2008	adv	-	-
Heliodinidae	<i>Schreckensteiria</i>	Schreckensteiniidae	-	van Neukeken <i>et al.</i> , 2011	puNE	-	-
Hesperiidae	<i>Catechysops crejus</i>	Lycanidae	<i>Eclychysops crejus</i>	Bridges, 1994 ^b	puNE	puNE	-
Lycanidae	<i>Cyanophrys amytor</i>	-	-	-	puNE?	puNE	-
Lycanidae	<i>Thelcia</i> sp. nr. <i>polybetes</i>	Lycanidae	<i>Parthasius</i> sp. nr. <i>polybetes</i>	Bridges, 1994 ^b	puNE?	puNE	-
Lycanidae	-	Erebidae	Lymantiniinae	van Neukeken <i>et al.</i> , 2011	puNE?	puNE	-
Lymantiniidae	<i>Bedeilia</i>	Erebidae	<i>Bedeilia</i>	van Neukeken <i>et al.</i> , 2011	-	-	-
Lyonetiidae	<i>Bucculatrix</i>	Bucculatricidae	<i>Bucculatrix</i>	van Neukeken <i>et al.</i> , 2011	-	-	-
Lyonetiidae	<i>Layema heneilara</i> ?	Momphidae	<i>Mompha eloisella</i>	See comments in text	qua	pur	Conant <i>et al.</i> , (2013)
Momphidae	<i>Mompha trifolium</i>	-	-	-	-	-	-
Noctuidae	<i>Achnaea</i>	Erebidae	<i>Achnaea</i> ^a	Zahri <i>et al.</i> , 2011	puNE?	pur	-
Noctuidae	<i>Anomis</i>	Erebidae	<i>Anomis</i> ^a	Zahri <i>et al.</i> , 2011	-	-	-
Noctuidae	<i>Anomis vulpactor</i>	Erebidae	<i>Gonitis vulpactor</i>	Holloway, 2005	end	-	-
Noctuidae	<i>Antiblemma</i>	Erebidae	<i>Antiblemma</i> ^a	Zahri <i>et al.</i> , 2011	-	-	-
Noctuidae	<i>Ascalapha</i>	Erebidae	<i>Ascalapha</i> ^a	Zahri <i>et al.</i> , 2011	-	-	-

Table 1. Taxonomic and establishment status changes to the Lepidoptera checklist of Nishida (2002) (continued)

Family in Nishida 2002 ^a	Name in Nishida 2002 ^a	Current family	Current name/status	Notes/Source	Status in Nishida 2002 ^a	Proposed status	Notes/Source
Noctuidae	<i>Bocana</i>	Erebidae	<i>Bocana</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Caloptesia mallard</i>	Noctuidae	<i>Caloptesia floridensis</i>	See comments in text	adv	-	-
Noctuidae	<i>Disasteria tigris</i>	-	-	Matsunaga et al., 2019	pur	purNE	Conant et al., (2013)
Noctuidae	<i>Anarta trifolii</i>	Noctuidae	<i>Anarta trifolii</i> ⁹	Zahni et al., 2013	adv	-	Riote (1991)
Noctuidae	<i>Eublemma</i>	Noctuidae	<i>Eublemma</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Eudocima</i>	Erebidae	<i>Eudocima</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Eudocima fulvonia</i>	Erebidae	<i>Eudocima phalonia</i>	Zilli & Hogreves, 2002	adv	-	-
Noctuidae	<i>Grapholita molesta</i>	Toxifidae	<i>Grapholita molesta</i>	⁹	qua	-	-
Noctuidae	<i>Hypera</i>	Erebidae	<i>Hypera</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Hypocala</i>	Erebidae	<i>Hypocala</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Lycophotia porphyrea</i>	Noctuidae	<i>Pendroma saucia</i>	See comments in text	adv	err	See comments in text
Noctuidae	<i>Melipotis</i>	Erebidae	<i>Melipotis</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Mourila lineatoides</i>	Erebidae	-	-	advNE?	adv	See comments in text
Noctuidae	<i>Ophusa</i>	Erebidae	<i>Ophusa</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Pandesia</i>	Erebidae	<i>Pandesia</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Penicillaria</i>	Euliellidae	<i>Penicillaria</i>	Zahni et al., 2011	-	-	-
Noctuidae	<i>Percyema cruegeri</i>	Erebidae	<i>Percyema cruegeri</i>	-	adv	-	-
Noctuidae	<i>Polydesma</i>	Erebidae	<i>Polydesma</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Pseudaleia</i>	Noctuidae	<i>Myrthina</i>	Hacker et al., 2002	-	-	-
Noctuidae	<i>Pseudoschrankia</i>	Erebidae	<i>Pseudoschrankia</i>	Zahni et al., 2011	-	-	-
Noctuidae	<i>Rhyncophagus bunellus</i>	Noctidae	<i>Megapala bunellus</i>	Laszlo et al., 2015	pur	-	-
Noctuidae	<i>Schrankia</i>	Erebidae	<i>Schrankia</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Schrankia arnetta</i>	Erebidae	Junior syn. of <i>Schrankia allivolans</i>	Medeiros et al., 2009	end	-	-
Noctuidae	<i>Schrankia oxygramma</i>	Erebidae	Junior syn. of <i>Schrankia allivolans</i>	Medeiros et al., 2009	end	-	-
Noctuidae	<i>Schrankia sarothura</i>	Erebidae	Junior syn. of <i>Schrankia allivolans</i>	Medeiros et al., 2009	end	-	-
Noctuidae	<i>Schrankia simplex</i>	Erebidae	Junior syn. of <i>Schrankia allivolans</i>	Medeiros et al., 2009	end	-	-
Noctuidae	<i>Simplicia</i>	Erebidae	<i>Simplicia</i> ⁹	Zahni et al., 2011	-	-	-
Noctuidae	<i>Stictoptera</i>	Euliellidae	<i>Stictoptera</i>	Zahni et al., 2011	-	-	-
Noctuidae	<i>Tangala</i>	Euliellidae	<i>Tangala</i>	Zahni et al., 2011	-	-	-
Noctuidae	<i>Trichoclea edwardsi</i>	Noctuidae	<i>Anarta edwardsi</i> ⁹	Matsunaga et al., 2019	adv	advNE	Riote (1991)
Noctuidae	<i>Trichoclea postica</i>	Noctuidae	<i>Anarta decepta</i> ⁹	Matsunaga et al., 2019	adv	-	-
Oecophoridae	<i>Agonopterix ulicetella</i>	Depressantiidae	<i>Agonopterix umbellana</i>	Ireson et al., 2013	purNE?	pur	Conant et al., (2013)
Oecophoridae	<i>Ethmia</i>	Depressantiidae	<i>Ethmia</i>	Heikkilä et al., 2014	-	-	-
Oecophoridae	<i>Pleurocytis isugensis</i>	Xylopyctidae	<i>Metathrinca isugensis</i>	Hodges, 1986	qua	-	-
Oecophoridae	<i>Thyrocopa</i>	Xylopyctidae	<i>Thyrocopa</i>	Medeiros, 2009	-	-	-
Oecophoridae	<i>Thyrocopa adumbrata</i>	Xylopyctidae	Junior syn. of <i>Thyrocopa alterna</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa argentea</i>	Xylopyctidae	Junior syn. of <i>Thyrocopa indecora</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa cirimirosa</i>	Xylopyctidae	Junior syn. of <i>Thyrocopa usitata</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa depressanella</i>	Xylopyctidae	Junior syn. of <i>Thyrocopa abusa</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa fuscidentella</i>	Xylopyctidae	Junior syn. of <i>Thyrocopa abusa</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa immutata</i>	Xylopyctidae	Junior syn. of <i>Thyrocopa abusa</i>	Medeiros, 2009	end	-	-

Table 1. Taxonomic and establishment status changes to the Lepidoptera checklist of Nishida (2002) (continued)

Family in Nishida 2002*	Name in Nishida 2002*	Current family	Current name/status	Notes/Source	Status in Nishida 2002*	Proposed status	Notes/Source
Oecophoridae	<i>Thyrocopa nemis</i>	Xyloryctidae	junior syn. of <i>Thyrocopa alternans</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa ingeminata</i>	Xyloryctidae	junior syn. of <i>Thyrocopa abusa</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa librides</i>	Xyloryctidae	junior syn. of <i>Thyrocopa usitata</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa medonaculata</i>	Xyloryctidae	junior syn. of <i>Thyrocopa apatela</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa rubifer</i>	Xyloryctidae	junior syn. of <i>Thyrocopa abusa</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa pallida</i>	Xyloryctidae	junior syn. of <i>Thyrocopa abusa</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa rhycidiformis</i>	Xyloryctidae	junior syn. of <i>Thyrocopa brevipalpis</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa pulveneria</i>	Xyloryctidae	junior syn. of <i>Thyrocopa epicapna</i>	Medeiros, 2009	end	-	-
Oecophoridae	<i>Thyrocopa succosa</i>	Xyloryctidae	junior syn. of <i>Thyrocopa usitata</i>	Medeiros, 2009	end	-	-
Olethreutidae	<i>Thyrocopa tessellatella</i>	Xyloryctidae	junior syn. of <i>Thyrocopa indecora</i>	Medeiros, 2009	end	-	-
Pieridae	<i>Colias panteri</i>	Pieridae	<i>Colias panteri</i>	Ornatzov, 1945	-	-	-
Pierophoridae	<i>Platylitia lantanadaealya</i>	Pierophoridae	<i>Lantanaphaga pusillidactyla</i>	Gellis, 2006	pur	puNE	Gellis 2006
Pyralidae	<i>Oncyna ephialtonca</i>	Pyralidae	<i>Aphomia ephialtonca</i> ♀	Nusa et al., 2003:2022	adv	-	-
Pyralidae	<i>Ecomyrella crenationis</i>	Pyralidae	<i>Apomylaeis crenationis</i> ♀	Nusa et al., 2003:2022	adv	-	-
Pyralidae	<i>Melitaea prodenalis</i>	Pyralidae	-	-	pur	puNE	Conant et al., (2013)
Pyralidae	<i>Pempelia genistella</i>	-	-	-	puNE	puNE	Conant et al., (2013)
Salurniidae	<i>Samia cecropia</i>	Salurniidae	<i>Hyalophora cecropia</i>	Ferguson, 1972	qua	-	-
Salurniidae	<i>Samia euryalus</i>	Salurniidae	<i>Hyalophora euryalus</i>	Ferguson, 1972	advNE	-	-
Salurniidae	<i>Telea polyphemus</i>	Salurniidae	<i>Antherea polyphemus</i>	Ferguson, 1972	advNE	-	-
Sesiidae	<i>Melitta oedipus</i>	-	-	-	NE	pur	Cullney et al., (2003)
Sesiidae	<i>Penniseta marginata</i>	-	-	-	pur	puNE	Conant et al., (2013)
Sphingidae	<i>Deilephila neri</i>	Sphingidae	<i>Daphnis neri</i> ♀	Matsunaga et al., 2019	adv	-	-
Sphingidae	<i>Hippotion boerhaviae</i>	-	-	-	qua	-	-
Sphingidae	<i>Hippotion rosella</i>	-	-	-	qua	err	Kumashiro et al., (2002)
Sphingidae	<i>Hyles wilsoni perkinsi</i>	-	-	-	qua	adv	Kumashiro et al., (2002)
Sphingidae	<i>Psilogamma menophon</i>	Sphingidae	<i>Psilogamma incerta</i> ♀	Matsunaga et al., 2019	end	-	-
Symphocidae	<i>Ocia</i>	Audacidae	<i>Ocia</i>	Matsunaga et al., 2019	adv	-	Matsunaga et al., 2019
Tineidae	<i>Agrysethia</i>	Agrysethiidae	-	van Nieukeken et al., 2011	adv	-	-
Tineidae	<i>Choropleca advena</i>	Dyaxaulidae	<i>Dyaxaula advena</i>	Regier et al., 2015	adv	-	-
Tineidae	<i>Decadarchis flavistrata</i>	Tineidae	<i>Erechthias flavistrata</i>	Robinson & Nielsen, 1993	adv	-	-
Tineidae	<i>Decadarchis keri</i>	Tineidae	<i>Erechthias keri</i>	Robinson & Nielsen, 1993	adv	-	-
Tineidae	<i>Decadarchis penicillata</i>	Tineidae	<i>Erechthias penicillata</i>	Robinson & Nielsen, 1993	adv	-	-
Tineidae	<i>Dyaxaula tepsichorella</i>	Dyaxaulidae	<i>Dyaxaula tepsichorella</i>	Regier et al., 2015	adv	-	-
Tineidae	<i>Monops monachella</i>	Tineidae	<i>Monops longella</i>	See comments in text	adv	-	-
Tofticidae	<i>Bradleyella</i>	Tofticidae	<i>Nuritambura</i>	Koçak & Kemal, 2007	qua	-	-
Tofticidae	<i>Cacoecia rosaceana</i>	Tofticidae	<i>Choristoneura rosaceana</i>	Freeman, 1998	qua	-	-
Tofticidae	<i>Cocciolosema lepura</i>	Tofticidae	-	-	end?	end	Zimmerman (1978)
Tofticidae	<i>Cocciolosema marcidella</i>	-	-	-	end?	end	Zimmerman (1978)
Tofticidae	<i>Cocciolosema plebeiana</i>	-	-	-	adv?	err	Zimmerman (1978)
Tofticidae	<i>Oncesia zimmemanni</i>	Tofticidae	<i>Acleis zimmemanni</i>	Razowski, 1987	pur	-	-
Tofticidae	<i>Cydia dehaiana</i>	Tofticidae	<i>Cydia salitans</i>	Gilligan et al., 2020	qua	-	-

Table 1. Taxonomic and establishment status changes to the Lepidoptera checklist of Nishida (2002) (continued)

Family in Nishida 2002*	Name in Nishida 2002*	Current family	Current name/status	Notes/Source	Status in Nishida 2002*	Proposed status	Notes/Source
Tortricidae	<i>Episimus utilis</i>	Tortricidae	<i>Episimus unguiculatus</i>	Razowski & Brown, 2008	pur	-	-
Tortricidae	<i>Laspeyresia splendana</i>	Tortricidae	<i>Cydia splendana</i>	Brown, 1979	qua	-	-
Tortricidae	<i>Laspeyresia ulicetana</i>	Tortricidae	<i>Cydia ulicetana</i>	Brown, 1979	purNE?	purNE	^a
Tortricidae	<i>Tortrix excessana</i>	Tortricidae	<i>Planotortrix excessana</i>	Dugdale, 1980	qua	-	-
Tortricidae ^f	<i>Crocidosema blackburnii</i> ¹	Tortricidae	<i>Crocidosema blackburnii</i>	Zimmerman, 1978	r	end	Zimmerman (1978)
Yponomeutidae	<i>Prays</i>	Praydidae	<i>Prays</i>	van Neukeken <i>et al.</i> , 2011	-	-	-

* Except where noted

^a We can find no published records of this species in Hawaii since Nishida (2002). We have also not examined any specimens collected since this species was first reported/released in Hawaii or the years shortly thereafter. We therefore treat it as not presently established in Hawaii.

^b Incorrect spelling and/or family listing in Nishida (2002)

^c *Platyphila lantanaeactylia* is a junior synonym of *Lantanoephaga pusillidactylia*. Both species are listed in Nishida (2002). It should be omitted in future checklists unless synonyms are included. See Gielis (2006)

^d Not listed in Nishida (2002). First reported from Hawaii in Medeiros & Adamski 2011.

^e Not listed in Nishida (2002). First reported from Hawaii in Matsunaga *et al.* 2019.

^f Not listed in Nishida (2002). Zimmerman (1978) diagnoses it as being distinct from *C. plebejana*.

^g Updated taxonomy noted in Matsunaga *et al.* 2019

Table 2. Additions to the Lepidoptera checklist of Nishida (2002)

Family	Genus	Species	Authorship	Status	Distribution	Reference
Autostichidae	undet. gen. nr. <i>Autosticha</i>	sp. A		adv	Ma	see references/comments in Matsunaga <i>et al.</i> , 2019
Blastobasidae	<i>Pignilia</i>	<i>uuku</i>	Medeiros & Adamski, 2012	end?	Kh	Medeiros & Adamski, 2012
Carposinidae	<i>Carposina</i>	<i>gagneorum</i>	Medeiros & Oboyski, 2016	end	Mo	Medeiros <i>et al.</i> , 2016
Carposinidae	<i>Carposina</i>	<i>hahailella</i>	Dooreneerweerd, Austin, & Rubinfoff, 2021	end	Ka	Dooreneerweerd <i>et al.</i> , 2021
Carposinidae	<i>Carposina</i>	<i>urbanae</i>	Medeiros & Oboyski, 2016	end	Ka	Medeiros <i>et al.</i> , 2016
Choreutidae	<i>Choreutis</i>	sp. A		adv	Ha, Ka, Ma, Oa	see references/comments in Matsunaga <i>et al.</i> , 2019
Cosmopterigidae	<i>Hyposmocoma</i>	<i>anoai</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>aumakuaui</i>	Schmitz & Rubinfoff, 2011b	end	Ka	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>camivora</i>	Schmitz & Rubinfoff, 2011a	end	Ha	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>eepawai</i>	Schmitz & Rubinfoff, 2011b	end	Ka	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>ekemamao</i>	Schmitz & Rubinfoff, 2009	end	Ly	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>eliai</i>	Schmitz & Rubinfoff, 2011a	end	Ka	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>hoolo</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>ipohapuu</i>	Kawahara & Rubinfoff, 2012	end	Ha	Kawahara & Rubinfoff, 2012
Cosmopterigidae	<i>Hyposmocoma</i>	<i>ipowainui</i>	Schmitz & Rubinfoff, 2011b	end	Ka	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kahaiaoa</i>	Schmitz & Rubinfoff, 2011b	end	Ma	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kahamanoa</i>	Schmitz & Rubinfoff, 2011b	end	Oa	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kaikuono</i>	Schmitz & Rubinfoff, 2008	end	Mo	Schmitz & Rubinfoff, 2008
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kamakou</i>	Schmitz & Rubinfoff, 2011b	end	Mo	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kamaula</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kanaloa</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kapakai</i>	Schmitz & Rubinfoff, 2008	end	Oa	Schmitz & Rubinfoff, 2008
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kaupo</i>	Schmitz & Rubinfoff, 2008	end	Ma	Schmitz & Rubinfoff, 2008
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kawakoi</i>	Schmitz & Rubinfoff, 2011b	end	Ka	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>kikokolu</i>	Schmitz & Rubinfoff, 2009	end	Na	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>laysanensis</i>	Schmitz & Rubinfoff, 2009	end	Ly	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>mahoepo</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>makawao</i>	Kawahara & Rubinfoff, 2012	end	Ma	Kawahara & Rubinfoff, 2012
Cosmopterigidae	<i>Hyposmocoma</i>	<i>menehune</i>	Schmitz & Rubinfoff, 2009	end	Na	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>mokumana</i>	Schmitz & Rubinfoff, 2009	end	Ne	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>molluscivora</i>	Rubinfoff & Haines, 2006	end	Ma, Mo	Rubinfoff & Haines, 2006
Cosmopterigidae	<i>Hyposmocoma</i>	<i>moopaliikea</i>	Schmitz & Rubinfoff, 2011b	end	Ma	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>nihoa</i>	Schmitz & Rubinfoff, 2009	end	Na	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>nohomaalewa</i>	Schmitz & Rubinfoff, 2011a	end	Ka	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>nohomaha</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>ooele</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>opuulaau</i>	Schmitz & Rubinfoff, 2011a	end	Ma	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>opuualoo</i>	Schmitz & Rubinfoff, 2009	end	Ne	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>pahanalo</i>	Medeiros, Haines & Rubinfoff, 2017	end	Kh	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>papaahanau</i>	Schmitz & Rubinfoff, 2009	end	Na	Schmitz & Rubinfoff, 2009
Cosmopterigidae	<i>Hyposmocoma</i>	<i>papaalii</i>	Schmitz & Rubinfoff, 2011a	end	Ma	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>pukoa</i>	Schmitz & Rubinfoff, 2011a	end	Ma	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>pupumoehewa</i>	Schmitz & Rubinfoff, 2011a	end	Ma	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>tantala</i>	Kawahara & Rubinfoff, 2012	end	Oa	Kawahara & Rubinfoff, 2012
Cosmopterigidae	<i>Hyposmocoma</i>	<i>uhauiole</i>	Schmitz & Rubinfoff, 2011b	end	Ka	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>wauhi</i>	Medeiros, Haines & Rubinfoff, 2017	end	Ma	Medeiros <i>et al.</i> , 2017
Cosmopterigidae	<i>Hyposmocoma</i>	<i>wahikanake</i>	Schmitz & Rubinfoff, 2011a	end	Ln	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>waihonou</i>	Schmitz & Rubinfoff, 2011b	end	Ma	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Hyposmocoma</i>	<i>waikamoi</i>	Schmitz & Rubinfoff, 2011a	end	Ma	Schmitz & Rubinfoff, 2011a
Cosmopterigidae	<i>Hyposmocoma</i>	<i>waiuia</i>	Schmitz & Rubinfoff, 2011b	end	Ka	Schmitz & Rubinfoff, 2011b
Cosmopterigidae	<i>Ithome</i>	<i>lassuta</i>	Hodges, 1962	adv	Oa	see references/comments in Matsunaga <i>et al.</i> , 2019
Crambidae	<i>Asciodes</i>	<i>quietalis</i>	(Walker, 1859)	adv	Oa	
Crambidae	<i>Diaphania</i>	<i>nitidalis</i>	(Stoll, 1781)	adv	Ha, Ka, Ma, Oa	see references/comments in Matsunaga <i>et al.</i> , 2019
Crambidae	<i>Hepetogramma</i>	sp. A		adv	Ha, Oa	
Crambidae	<i>Mestolobes</i>	<i>olali</i>	Medeiros & Howarth, 2017	end	Ha	Medeiros & Howarth, 2017
Crambidae	<i>Orthomecyna</i>	<i>keoniae</i>	Medeiros & Adamski, 2012	end	Kh	Medeiros & Adamski, 2012
Crambidae	<i>Tamsica</i>	<i>kawikae</i>	Medeiros & Adamski, 2012	end	Kh	Medeiros & Adamski, 2012
Erebidae	<i>Galtara</i>	<i>extensa</i>	(Butler, 1880)	pur	Ha, Ln, Ma	see references/comments in Matsunaga <i>et al.</i> , 2019
Erebidae	<i>Oreasia</i>	<i>excavata</i>	(Butler, 1878)	adv	Ka, Ma, Oa	see references/comments in Matsunaga <i>et al.</i> , 2019
Erebidae	<i>Pseudoschrankia</i>	<i>nohoana</i>	Medeiros & Howarth, 2017	end	Ha	Medeiros & Howarth, 2017
Erebidae	<i>Schrankia</i>	<i>howarthi</i>	Davis & Medeiros, 2009	end	Ha, Ma, Oa	Medeiros <i>et al.</i> , 2009
Gelechiidae	<i>Mesophleps</i>	<i>adusipennis</i>	(Walsingham, 1897)	adv	Oa	
Geometridae	<i>Chloroclystis</i>	sp. A		adv	Oa	
Geometridae	<i>Pleuroprucha</i>	sp. A		adv	Ka, Ma, Oa	
Geometridae	<i>Scopula</i>	<i>personata</i>	(Prout, 1913)	adv	Ka, Ln, Ma, Oa	see references/comments in Matsunaga <i>et al.</i> , 2019
Geometridae	undet. gen.	sp. A		adv	Oa	identified here as <i>Pleuroprucha</i> sp. A; see Matsunaga <i>et al.</i> , 2019
Gracillariidae	<i>Caloptilia</i>	<i>coruscans</i>	(Walsingham, 1907)	adv	Ha	see references/comments in Matsunaga <i>et al.</i> , 2019
Gracillariidae	<i>Philodoria</i>	<i>akalaensis</i>	Kobayashi, Johns & Kawahara, 2021	end	Ka	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>funakae</i>	Kobayashi, Johns & Kawahara, 2021	end	Ka	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>haelaauensis</i>	Kobayashi, Johns & Kawahara, 2021	end	Ma, Mo	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>hesperomanniella</i>	Kobayashi, Johns & Kawahara, 2021	end	Ma, Oa	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>kauaualensis</i>	Kobayashi, Johns & Kawahara, 2018	end	Ma	Kobayashi <i>et al.</i> , 2018
Gracillariidae	<i>Philodoria</i>	<i>keensis</i>	Kobayashi, Johns & Kawahara, 2021	end	Ha	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>keahii</i>	Kobayashi, Johns & Kawahara, 2021	end	Ma	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>knudseniella</i>	Kobayashi, Johns & Kawahara, 2021	end	Ka	Kobayashi <i>et al.</i> , 2021
Gracillariidae	<i>Philodoria</i>	<i>kolea</i>	Kobayashi, Johns & Kawahara, 2018	end	Ha	Kobayashi <i>et al.</i> , 2018

Table 2. Additions to the Lepidoptera checklist of Nishida (2002) (continued)

Family	Genus	Species	Authorship	Status	Distribution	Reference
Gracillariidae	<i>Philodoria</i>	<i>lama</i>	Kobayashi, Johns & Kawahara, 2021	end	Ln, Ma, Oa	Kobayashi et al., 2021
Gracillariidae	<i>Philodoria</i>	<i>limahulensis</i>	Kobayashi, Johns & Kawahara, 2021	end	Ka	Kobayashi et al., 2021
Gracillariidae	<i>Philodoria</i>	<i>napaliensis</i>	Kobayashi, Johns & Kawahara, 2021	end	Ka	Kobayashi et al., 2021
Gracillariidae	<i>Philodoria</i>	<i>obamaorum</i>	Kobayashi, Johns & Kawahara, 2021	end	Ha	Kobayashi et al., 2021
Gracillariidae	<i>Philodoria</i>	<i>opuhe</i>	Kobayashi, Johns & Kawahara, 2021	end	Oa	Kobayashi et al., 2021
Gracillariidae	<i>Philodoria</i>	<i>platyphylloella</i>	Kobayashi, Johns & Kawahara, 2021	end	Ma	Kobayashi et al., 2021
Gracillariidae	<i>Phyllocnistis</i>	<i>citrella</i>	Stainton, 1856	adv	Ha, Ka, Ma, Mo, Oa	see references/comments in Matsunaga et al., 2019
Limacodidae	<i>Dama</i>	<i>pallivitta</i>	(Moore, 1877)	adv	Ka, Ha, Ma, Oa	see references/comments in Matsunaga et al., 2019
Lycenidae	<i>Zizina</i>	<i>otsi</i>	(Fabricius, 1787)	adv	Ha, Ka, Oa	see references/comments in Matsunaga et al., 2019
Meesiliidae	<i>Eudarcia</i>	sp. A		adv	Ka, Kh, Ma, Oa	
Noctuidae	<i>Agrotis</i>	<i>helela</i>	Medeiros, 2019	end	Ha	Medeiros et al., 2019
Noctuidae	<i>Agrotis</i>	<i>kuamauna</i>	Medeiros & Kirkpatrick, 2019	end	Ha	Medeiros et al., 2019
Noctuidae	<i>Agyrogramma</i>	<i>verruca</i>	(Fabricius, 1794)	adv	Ha, Oa	
Noctuidae	<i>Ctenopustia</i>	<i>albostriata</i>	(Bremer & Grey, 1853)	adv	Ma, Oa	see references/comments in Matsunaga et al., 2019
Noctuidae	<i>Felitia</i>	<i>subtermana</i>	(Fabricius, 1794)	adv	Ha, Ln, Ma, Mo, Oa	see references/comments in Matsunaga et al., 2019
Papilionidae	<i>Battus</i>	<i>philenor</i>	(Linnaeus, 1771)	adv	NE? Oa	
Pieridae	<i>Abaeis</i>	<i>nicippe</i>	(Cramer, 1779)	adv	Ha, Ka, Kh, Ma, Mo, Oa	see references/comments in Matsunaga et al., 2019
Pieridae	<i>Phoebis</i>	<i>agatithe</i>	(Bolsduval, 1836)	adv	Ka, Ma, Oa	see references/comments in Matsunaga et al., 2019
Pyralidae	<i>Loryma</i>	cf. <i>recusata</i>	(Walker, 1863)	adv	Ha, Ma	see references/comments in Matsunaga et al., 2019
Pyralidae	<i>Trachylepida</i>	<i>fructicassella</i>	Ragonot, 1887	adv	Oa	
Sphingidae	<i>Hippotion</i>	<i>rosetta</i>	(Swinhoe, 1892)	adv	Ha, Ka, Ma, Oa	see references/comments in Matsunaga et al., 2019
Tineidae	<i>Erechthias</i>	<i>pelotricha</i>	(Meyrick, 1926)	adv	Oa	
Tineidae	undet. gen.	sp. A		adv	Ka, Kh, Ma, Oa	possibly the same as <i>Eudarcia</i> sp. A identified here, see Howarth & Preston, 2002
Tortricidae	<i>Eucoenogasta</i>	<i>poetica</i>	(Meyrick, 1909)	adv	NE? Oa	
Xyloryctidae	<i>Thyrocopa</i>	<i>apikia</i>	Medeiros, 2009	end	Mo	Medeiros, 2009
Xyloryctidae	<i>Thyrocopa</i>	<i>elikapekae</i>	Medeiros, 2009	end	Ka	Medeiros, 2009
Xyloryctidae	<i>Thyrocopa</i>	<i>kanaloa</i>	Medeiros, 2009	end	Kh	Medeiros, 2009
Xyloryctidae	<i>Thyrocopa</i>	<i>kee</i>	Medeiros, 2009	end	Ka	Medeiros, 2009
Xyloryctidae	<i>Thyrocopa</i>	<i>kokeensis</i>	Medeiros, 2009	end	Ka	Medeiros, 2009
Xyloryctidae	<i>Thyrocopa</i>	<i>neckerensis</i>	Medeiros, 2009	end	Ne	Medeiros, 2009
Xyloryctidae	<i>Thyrocopa</i>	<i>nihoa</i>	Medeiros, 2009	end	Na	Medeiros, 2009

Island distribution: Ha=Hawaii, Ka=Kauai, Kh-Kahoolawe, Ln=Lanai, Ly=Laysan, Ma=Mauai, Mo=Molokai, Ne=Necker, Na=Nahoa, Oa=Oahu