Published online: 27 March 2014

Records of the Hawaii Biological Survey for 2013. Edited by Neal L. Evenhuis. *Bishop Museum Occasional Papers* 115: 19–22 (2014)

New Hawaiian plant records for 2013[1]

Hank Oppenheimer[2] & Keahi M. Bustamente
Plant Extinction Prevention Program, Pacific Cooperative Studies Unit, University of Hawai'i, PO Box 909, Makawao, Hawai'i 96768, USA; e-mail: henryO@hawaii.edu

Ongoing field work, collections, and research continue to produce new, previously unpublished distributional records for the Hawaiian flora. In this paper eight new island records and two range extensions are reported. A total of 10 taxa in nine plant families are discussed. Seven taxa are dicotyledonous angiosperms, and three are monocots. One taxon is endemic. Collections were made on Kaua'i, O'ahu, Lāna'i, and Maui. Information regarding the formerly known distribution of flowering plants is based on the *Manual of Flowering Plants of Hawaii* (Wagner *et al*. 1999) and information subsequently published in the *Records of the Hawaii Biological Survey*. Voucher specimens are deposited at the Bernice Pauahi Bishop Museum *Herbarium Pacificum* (BISH), Honolulu, with duplicates at the National Tropical Botanical Garden (PTBG), Lāwa'i, Kaua'i. A few specimens may be at only one facility; only in these cases will the herbarium acronym be cited.

Acanthaceae

Barleria repens Nees **New island record**

Commonly cultivated as a ground cover or bedding plant, this species easily escapes and has been documented as a naturalized species on O'ahu (Staples *et al*. 2002: 3), Lāna'i , and East and West Maui (Oppenheimer 2003: 3). It was recently collected on Kaua'i, where it is naturalized in disturbed lowland areas.

Material examined. **KAUA'I**: Koloa Distr., Maha'ulepū, 24 m, 3 May 2013, *Oppenheimer, M. Sporck, & J.Q.C. Lau H51302*.

Asteraceae

Erigeron karvinskianus DC. **New island record**

A weedy herb known from Kaua'i, O'ahu, Moloka'i, Maui, and Hawai'i (Wagner *et al*. 1990: 315; Hughes 1995: 2), this species was recently collected on Lāna'i. It is a known habitat modifier of riparian areas and other mesic to wet sites. All plants observed were removed, and monitoring is ongoing.

Material examined. **LĀNA'I**: headwaters of Hau'ola Gulch, 950 m, 5 Feb 2013, *Oppenheimer & Perlman H11301*.

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Begoniaceae

Begonia hirtella Link **New island record**

Uncommonly cultivated, and naturalized in Hawai'i in disturbed, wet, shaded sites, especially moist banks on Kaua'i, O'ahu, East & West Maui, and Hawai'i (Wagner *et al*. 1999: 384; Lorence *et al*. 1995: 25; Oppenheimer 2004: 9), this begonia was found on Lāna'i

1. Contribution No. 2014-004 the Hawaii Biological Survey.
2. Research Associate, Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai'i 96817-2704, USA.

growing in a clogged rain gutter at a single story residence, where it was growing in soil with *Phlebodium aureum*.

Material examined. **LĀNA‘I**: Lāna‘i City, 490 m, 20 Jul 2011, *Oppenheimer, Bustamente, & Perlman H71109*.

Marantaceae

Calathea crotalifera S. Watson **New island record**

This large ornamental herb was documented as naturalized on O‘ahu (Wagner *et al*. 1999: 1464) and Hawai‘i (Parker & Parsons 2010: 42). On windward East Maui it was found to be locally common in disturbed sites in secondary lowland forest.

Material examined. **MAUI**: East Maui, Hāna Distr., Wakiu, N of Olopawa, 183 m, 24 Jan 2013, *Oppenheimer & Perlman H11304*.

Melastomataceae

Pterolepis glomerata (Rottb.) Miq. **New island record**

A weedy herb naturalized on Kaua‘i, O‘ahu, Moloka‘i, Lāna‘i, and Hawai‘i (Wagner *et al*. 1999: 912; Hughes 1995: 7; Wood 2006: 18), this species was recently collected in two sites in wet lowland forest on East Maui.

Material examined. **MAUI**: East Maui, Hāna Distr, Kawaipapa, 792 m, 23 Apr 2013, *Oppenheimer, Bustamente, & J.Q.C. Lau H41325* (BISH); Waihoi Valley, vicinity of Waiohonu Stream, 930 m, 29 May 2013, *Oppenheimer et al. H51316*.

Moraceae

Ficus religiosa L. **New island record**

Due to the presence of its pollinator wasp, Bo tree is now starting to escape cultivation on O‘ahu (Frohlich & Lau 2008: 7–8) and Hawai‘i (Parker & Parsons 2012: 20). On Maui, seedlings and saplings are becoming increasingly common in and around Lahaina. It has been observed along fences, roads, and walls, apparently below places where frugivorous birds would perch and pass the seeds. No mature trees have been observed growing near any of these immature plants.

Material examined. **MAUI**: West Maui, Lahaina Distr, Honoapi‘ilani Hwy., 7 m, 23 Apr 2013, *Oppenheimer & J.Q.C. Lau H41330*.

Myrsinaceae

Ardisia crenata Sims **Range extension**

Previously reported as naturalized on Kaua‘i, O‘ahu, West Maui, and Hawai‘i (Wagner *et al*. 1999: 932; Oppenheimer 2004: 13; Frohlich & Lau 2012: 41), this shrub was found to be occasional along a small perennial stream on East Maui.

Material examined. **MAUI**: East Maui, Hāna Distr, Kea‘akai Gulch, 206 m, small shrubs naturalized along stream on rocks beneath *Ardisia elliptica* in degraded *Pandanus-Acacia-Metrosideros* forest, 27 Feb 2013, *Oppenheimer & Perlman H21313*.

Poaceae

Dichelachne crinita (L.f.) Hook.f. **Range extension**

Previously documented from East Maui (Starr *et al*. 2003: 29), this grass was collected on West Maui in disturbed mesic forest.

Material examined. **MAUI**: West Maui, Wailuku Distr., SE slopes of Hana‘ula, extreme head of Kaunoahua Gulch, 951 m, 21 May 2007, *Oppenheimer H50724*.

Phleum pratense L. **New island record**

A pasture grass, this species was included as a note in the introduction of the Poaceae in Wagner *et al*. (1999: 1483). It had been collected as an escape on Kauaʻi, Oʻahu, and Maui. Later, Herbst & Wagner (1999: 29) considered it naturalized on Kauaʻi and Oʻahu, but the Maui occurrence was still questionable, with only a 1941 specimen collected at the Makawao Experiment Station. The following specimen documents this grass as sparingly naturalized on East Maui.

Material examined. **MAUI**: East Maui, Makawao Distr., Waikamoi Stream drainage basin, SE of Puʻu Luʻau, near gate before Hosmer Grove campground, unpaved road from Haleakalā National Park into Haleakalā Ranch and Waikamoi Preserve, 2057 m, 28 Sep 2010, *Oppenheimer & Bily H91018*.

Rutaceae

Zanthoxylum dipetalum H. Mann **New island record**

This species occurs on Kauaʻi, Oʻahu, Molokaʻi, and Hawaiʻi islands and is divided into two varieties, with variety *tomentosa* endemic to Hawaiʻi Island and extremely rare. Recently a small population of six trees was located in mesic forest on West Maui. They differ from the other two taxa in the size, shape, and number of leaflets, as well as pubescence; the abaxial surface is covered in very fine, minute white to gray hairs. Further study is needed in order to assign this population to either subtaxon.

Material examined. **MAUI**: West Maui, Lahaina Distr, Kauaʻula Valley, south slope, 853 m, 24 Apr 2013, *Oppenheimer, Bustamente, & J.Q.C. Lau H41338*.

Acknowledgments

Our sincere thanks to all the people we worked with in the field: to the staff at BISH, especially Barbara Kennedy, Clyde Imada, Danielle Frohlich, and Alex Lau, for the examination, determination, or confirmation of the species reported herein, and the curation of specimens; to Tim Flynn at PTBG for curation of specimens, as well as collaborating with KEW for the determinations of the Poaceae reported herein; and to Windward Aviation, who made access to remote areas possible. The Plant Extinction Prevention Program is funded in part by the U.S. Fish and Wildlife Service and the Hawaiʻi Department of Land and Natural Resources, Division of Forestry and Wildlife.

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