

New plant records from the Big Island for 2008

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The Big Island Invasive Species Committee (BIISC) implemented its Early Detection program in May of 2008. Roadside surveys were conducted in the Ka‘ū and South Kona Districts from July to October. Here, BIISC Early Detection documents 1 new naturalized record and 7 new island records. A total of 6 plant families are discussed. Information regarding the formerly known distribution of flowering plants is based on the *Manual of the Flowering Plants of Hawai‘i* (Wagner *et al.* 1999), *A Tropical Garden Flora* (Staples & Herbst 2005), and information subsequently published in the *Records of the Hawaii Biological Survey*. Voucher specimens are deposited at B.P. Bishop Museum’s *Herbarium Pacificum* (BISH), Honolulu, Hawai‘i.

Crassulaceae

***Bryophyllum daigremontianum* Raym.-Hamet New island record & Perrier**

Native to Madagascar and introduced to horticulture in the early twentieth century, this species has distinctive channeled, rather trowel-shaped leaf blades that are yellow-green with purple-brown markings and produce plantlets in between the marginal teeth (Staples & Herbst 2005). Previously recorded as naturalized on Kaua‘i, Lāna‘i, and Maui (Lorence *et al.* 1995; Oppenheimer & Bartlett 2002; Staples *et al.* 2002; Starr *et al.* 2006), this voucher specimen was collected from a large, non-flowering population on a roadside in Hawaiian Ocean View Estates. This species propagates vigorously from plantlets; in fact, a dried specimen’s plantlets are still producing roots in our filing cabinet, over four months after collection.

Material examined. **HAWAI‘I:** Ka‘ū Distr, Hawaiian Ocean View Estates, Lehua Ln (2113302N, 208139E), significant population growing in disturbed, dry roadside, distinct markings on underside of leaf, plantlets budding from leaf margins, 7 Jul 2008, *J. Parker & R. McGuire BIED2*.

Euphorbiaceae

***Euphorbia cyathophora* Murray New island record**

In Hawai‘i, wild poinsettia is known to be naturalized in low elevation, dry, disturbed sites on Midway Atoll, Kaua‘i, O‘ahu, Moloka‘i, and Maui (Wagner *et al.* 1999). This voucher specimen was collected from a lone, small population in Nā‘ālehu. However, in South Kona there were several larger populations found along roadsides. The source appears to be the fill/gravel that is being used in shoulder reconstructions along Hwy 11 in South Kona.

Material examined. **HAWAI‘I:** Ka‘ū Distr., Discovery Harbor subdivision in Nā‘ālehu (2107818N, 223686E), one small naturalized population flowering in coarse gravel/rock driveway in private property, 17 Jul 2008, *J. Parker & R. McGuire BIED10*.

***Macaranga tanarius* (L.) Müll. Arg.**

New island record

Previously recorded as naturalized on Kaua‘i, O‘ahu, and Maui (Wagner *et al.* 1999; Oppenheimer *et al.* 1999), the following specimen was collected from a large population in the Puna District. In addition, the South Kona District has at least one significant population.

Material examined. HAWAII: Puna Distr, Hwy 130, mile marker 12, large population found in open grassy area along roadside, 200–300 m, 11 Jul 2008, *K. Bio, J. Parker & R. McGuire BIED4.*

Lamiaceae

Plectranthus cylindraceus Benth.

New naturalized record

Vick's plant is similar to the more commonly cultivated *P. amboinicus* (False oregano), but differs because of its strong camphor odor and in having smaller, more grayish-hairy leaves that are sessile or nearly so (Staples & Herbst 2005). This specimen represents a new naturalized record for the state. This voucher specimen was collected on a roadside in Hawaiian Ocean View Estates along with *Bryophyllum daigremontianum* and other, more common, Crassulaceae species.

Material examined. HAWAII: Ka'ū Distr, Hawaiian Ocean View Estates, Lehua Ln (2113305N, 208138E), numerous populations found along roadside, sprawling, spreading succulent, strong odor of camphor, flowers purple, 7 Jul 2008, *J. Parker & R. McGuire BIED1.*

Marantaceae

Calathea crotalifera S. Watson

New island record

Previously recorded as naturalized in Kāne'ohe, O'ahu (Wagner *et al.* 1999), rattlesnake plant is grown for its dark green foliage and contrasting yellow or bronzy inflorescences, which are sold both fresh and dried in the cut-flower market (Staples & Herbst 2005). The following specimen was collected from a large population in Nānāwale Forest Reserve, near Lava Tree State Park, in the Puna District.

Material examined. HAWAII: Puna Distr, Nānāwale For Res, significant population growing under canopy of *Falcataria moluccana*, 200 m, 11 Jul 2008, *K. Bio, J. Parker & R. McGuire BIED6.*

Melastomataceae

Medinilla cumingii Naudin

New island record

Seldom cultivated in Hawai'i, this species has been documented as naturalized on O'ahu (Daehler & Baker 2006; Frohlich & Lau 2010) and Maui (Oppenheimer 2004). This voucher specimen was found spreading into a vacant lot from cultivated specimens in Leilani Estates in the Puna District. This species should be watched closely in Puna because of its bird-dispersed seeds and the availability of suitable habitat.

Material examined. HAWAII: Puna Distr, Leilani Estates, single plant found on disturbed roadside near private property, 200–300 m, 11 Jul 2008, *K. Bio, J. Parker & R. McGuire BIED8.*

Medinilla magnifica Lindl.

New island record

Kapa-kapa is one of 80 *Medinilla* species native to the Philippines introduced to horticulture in the mid-1800s. This rainforest epiphyte is one of the most ornamental tropical plants in cultivation (Staples & Herbst 2005), and was recently documented as naturalized on O'ahu (Frohlich & Lau 2007). This voucher specimen was collected from a large population in the Nānāwale Forest Reserve in the Puna District. The sale of this species in Big Island nurseries should be discouraged because of the substantial amount of suitable habitat available on the windward side of the island.

Material examined. HAWAII: Puna Distr, Nānāwale For Res, large population growing under canopy of *Falcataria moluccana*, 200 m, 11 Jul 2008, *K. Bio, J. Parker & R. McGuire BIED9.*

Verbenaceae***Clerodendrum buchananii* (Roxb.) Walp. New island record**var. *fallax* (Lindl.) Bakh.

Previously recorded as naturalized on Maui (Starr *et al.* 2006), pagoda flower is cultivated for its showy flowers and is potentially invasive because of its bird-dispersed fruit and clump-forming habit. Also, roots broken off underground continue to produce suckers for years (Staples & Herbst 2005). This flowering specimen was found spreading approximately 40 m from cultivated specimens in Nāʻālehu.

Material examined. HAWAII: Kaʻū Distr., Discovery Harbor subdivision, Nāʻālehu (2106745N, 222849E), single ca 2 m tall naturalized plant found in vacant lot near private property containing cultivated specimens, 21 Jul 2008, *J. Parker & R. McGuire BIED17.*

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Literature Cited

- Daehler, C.C. & Baker, R.F.** 2006. New records of naturalized and naturalizing plants around Lyon Arboretum, Mānoa Valley, Oʻahu. *Bishop Museum Occasional Papers* **87**: 3–18.
- Frohlich, D. & Lau, A.** 2007. New plant records from Oʻahu for 2006. *Bishop Museum Occasional Papers* **96**: 8–13.
- . & Lau, A. 2010. New plant records from Oʻahu for 2008. *Bishop Museum Occasional Papers* **107**: 3–18.
- Lorence, D.H., Flynn, T.W. & Wagner, W.L.** 1995. Contributions to the flora of Hawai‘i. III. *Bishop Museum Occasional Papers* **41**: 19–58.
- Oppenheimer, H.L.** 2004. New Hawaiian plant records for 2003. *Bishop Museum Occasional Papers* **79**: 8–20.
- . & Bartlett, R.T. 2002. New plant records from the main Hawaiian Islands. *Bishop Museum Occasional Papers* **69**: 1–14.
- ., Meidell, J.S. & Bartlett, R.T. 1999. New plant records for Maui and Molokaʻi. *Bishop Museum Occasional Papers* **59**: 7–11.
- Staples, G.W. & Herbst, D.R.** 2005. *A tropical garden flora*. Bishop Museum Press, Honolulu. 908 pp.
- ., Herbst, D.R., & Imada, C.T. 2000. Survey of invasive or potentially invasive cultivated plants in Hawai‘i. *Bishop Museum Occasional Papers* **65**: 1–35.
- ., Imada, C.T. & Herbst, D.R. 2002. New Hawaiian plant records for 2000. *Bishop Museum Occasional Papers* **68**: 3–18.
- Starr, F., Starr, K. & Loope, L.L.** 2006. New plant records from the Hawaiian archipelago. *Bishop Museum Occasional Papers* **87**: 31–43.
- Wagner, W.L., Herbst, D.R. & Sohmer, S.H.** 1999. *Manual of the flowering plants of Hawai‘i*. Rev. ed. 2 vols. University of Hawai‘i Press and Bishop Museum Press, Honolulu. 1919 pp.