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New Plant Records from Maui, Hawai‘i, and Kure Atoll¹

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The following contributions include new island, state, and high elevation records from Maui, Hawai‘i, and Kure Atoll. All records are for nonindigenous species. Images of most of the material examined can be seen at starrenvironmental.com. Voucher specimens and collections mentioned in the text are housed in Bishop Museum’s *Herbarium Pacificum* (BISH), Honolulu, Hawai‘i.

Acanthaceae

Asystasia gangetica (L.) T. Anderson

subsp. *micrantha* (Nees) Ensermu

New state record

Native to Africa, India, and Sri Lanka, this subspecies of *A. gangetica* is now an emerging weed in Australia and southern Taiwan (Hsu *et al.* 2005; Weeds of Australia 2011). It is distinguished by the following characters: “Herbs perennial. Leaves ovate to lanceolate, entire or somewhat dentate. Inflorescences terminal racemes or spikes, unilateral; bracts linear to narrowly deltoid; calyx lobes 5; corolla zygomorphic, purplish, blue, yellow, and white, the limb lobes 5; stamens 4, didynamous; anthers 2-loculate; style subulate; ovary with 2 ovules per locule; capsule distinctly stipitate; seeds 2–4, compressed orbicular” (Hsu *et al.* 2005). This diminutive-flowered herb is now known from Hawai‘i, where it was first collected in Hilo in 2001, and more recently in Hōnaunau in 2014.

Material examined. **HAWAI‘I:** Hilo, Waiākea streambed near UH-Hilo, in association with *Rhodomyrtus tomentosa* and *Melastoma candidum*, 200 ft [60 m], 1 Aug 2001, *Starr & Martz 010801-4*; Hōnaunau, 84-5094 Painted Church Rd., volunteer that appeared in home fruit orchard a few years ago and has taken off, now established in another part of the orchard ca 500 ft away, 800 ft [244 m], 1 Mar 2014, *P. van Dyke s.n.* (BISH 764374).

Asteraceae

Kalimeris indica (L.) Sch. Bip. subsp. *indica* **New island record**

Native to eastern Asian countries including China, Korea, and Japan, where it is grown for its edible and medicinal qualities, Indian aster was first reported (as *Boltonia indica* (L.) Benth.) in Hawai‘i from O‘ahu as a garden escape, but not quite naturalized (Wagner *et al.* 1999; Wikipedia 2015). Nagata (1995) then reported it as naturalized on Kaua‘i. Herbst & Wagner (1999) provided the correct taxonomic name as *K. indica* subsp. *indica*. On Maui, this showy groundcover has become established in and near lawns at Ke‘anae.

Material examined. **MAUI:** East Maui, Ke‘anae Elementary School, planted as a bedding plant and escaping into lawn areas, wet lowland, urban, lawn and ornamental plantings with *Peltophorum pterocarpum*, *Cordyline fruticosa*, spreading locally into lawn areas through underground stoloniferous runners, 282 ft [86 m] (797774, 2308334), 27 Oct 2014, *Starr & Starr 141027-01*.

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Brassicaceae***Capsella bursa-pastoris*** (L.) Medik.**High elevation record**

The previous known high elevation record in Hawai'i was made in 1981 on Maui by R. Nagata at a recent landfill near the stable area of Haleakalā National Park, elevation 6759 ft [2060 m] (Smithsonian Institution 2015). A collection was made recently near the summit of Haleakalā, elevation 9760 ft [2975 m], representing a new high elevation record.

Material examined. **MAUI:** East Maui, Haleakalā National Park, Haleakalā Visitor Center by interpretive sign near Sliding Sands trailhead, subalpine shrubland/grassland with *Dubautia menziesii* and *Erodium cicutarium*, few small plants found in a small area, 9760 ft [2975 m] (786331, 2292984), 30 Oct 2014, *Starr & Starr 141030-03*.

Caryophyllaceae***Petrorhagia velutina*** (Guss.)

P.W. Ball & Heywood

High elevation record

Previously reported by Medeiros *et al.* (1998) from a few roadside populations on the west slope of Haleakalā National Park. Recently, it was collected near the summit of Haleakalā at the Haleakalā Visitor Center, elevation 9760 ft [2975 m], representing a high elevation record.

Material examined. **MAUI:** East Maui, Haleakalā National Park, Haleakalā Visitor Center, in cinder planter areas near building, subalpine shrubland/grassland with *Deschampsia nubigena* and *Dubautia menziesii*, scattered plants, 9760 ft [2975 m] (786424, 2293037), 30 Oct 2014, *Starr & Starr 141030-02*.

Sagina japonica (Sw.) Ohwi**New island record**

Previously collected in 1985 at the Honolulu Airport, O'ahu and described as probably not established (Wagner *et al.* 1999). First collected in the Northwestern Hawaiian Islands on Midway Atoll (Starr *et al.* 2003) from the hard-packed areas of the runway. On Kure Atoll, first observed and collected in 2001, in a similar habitat by the abandoned runway. This collection represents a new island record of Kure Atoll for its distribution.

Material examined. **KURE ATOLL:** Occasional in compacted soils on and near the runway, 10 ft [3 m], 22 May 2001, *Starr & Martz 010522-3*.

Crassulaceae***Kalanchoe rotundifolia*** (Haw.) Haw.**New state record**

Kalanchoe rotundifolia (common kalanchoe) is native to South Africa and Zimbabwe and was traditionally used by the Zulu as a charm to make one invisible (PlantZAfrica.com 2015). It is now used mostly as an ornamental for its showy flowers and succulent growth habit. It is a brittle, succulent plant growing to 1 m in height, with tubular flowers ranging in color from yellow to orange or red, borne on a long erect stalk; and fleshy, rounded or lobed, blue-green leaves that are 2.5 cm broad and are clustered at the base of erect stems (PlantZAfrica.com 2015). It was recently found established along a steep roadside in Kula. A collection was made, representing a new state record.

Material examined. **MAUI:** East Maui, Kula, Haleakalā Hwy. near Kalialinui Gulch, dry roadside scrub with *Leonotis nepetifolia* and *Nicotiana glauca*, dozens of plants along the road here, all size classes present, 2125 ft [2975 m] (778181, 2302907), 24 Jun 2014, *Starr & Starr 140624-01*.

Lamiaceae***Lamium amplexicaule* L.****High elevation record**

Lamium amplexicaule (henbit) was first collected in Hawai'i on Maui in 1982 at Haleakalā National Park by R. Nagata from the margin of the parking lot at Headquarters, elevation 7000 ft (2140), where it was spreading in disturbed areas (Wagner *et al.* 1999). Medeiros *et al.* (1998) report that by 1986 it was absent from that area. Henbit was later reported as naturalized on Moloka'i, at Nihoa Pali, growing on the north-facing gray-white basalt cliffs (Wysong *et al.* 2007). On Maui, henbit was again recently observed and collected at Haleakalā National Park, this time near the summit, just outside the Haleakalā Visitor Center, at an elevation of 9760 ft (2975 m), representing a high elevation record for this species in Hawai'i.

Material examined. MAUI: East Maui, Haleakalā National Park, Haleakalā Visitor Center, in cinder area outside building, subalpine shrubland/grassland with *Deschampsia nubigena* and *Dubautia menziesii*, few mature and many seedlings, locally established despite attempts at control, 9760 ft [2975 m], (786424, 2293037), 30 Oct 2014, Starr & Starr 141030-01.

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