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New plant records from East Maui for 1998

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The following contributions include new island records, new naturalized records, a range extension, and a name change of plants located on East Maui, Hawai'i. Also included is a map of Maui showing locations of collections discussed in text (Fig. 1). Voucher specimens are housed in the Bishop Museum, Honolulu (BISH).

Acanthaceae

Thunbergia laurifolia Lindl. **New island record**

Previously known from Kaua'i and O'ahu (Wagner *et al.,* 1990: 175), this collection represents a new island record of this species from Maui. *Thunbergia laurifolia*, a native of India, is often cultivated for its showy flowers and sprawling habit. It commonly escapes the confines of the garden and, although not known to produce seeds in the Hawaiian islands, this vine is well established and has been observed spreading vegetatively in the Wailua, Honomanū and Kokomo areas of East Maui.

Material examined. **MAUI**: Hāna District, East Maui, Hāna Hwy., West side of Honomanū gulch, along road nr. Kaumahina State Wayside, 360 ft [110 m], 7 May 1998, *Starr & Martz 980507-7*.

Asteraceae

Senecio madagascariensis Poiret **New island record**

Native to Madagascar and South Africa, this species was first discovered in the early 1980s by Parker Ranch staff on the Big Island (Motooka *et al*., 1996: 1). Lorence *et al*. (1995: 24) reported *Senecio madagascariensis* as a new island record for Kaua'i where it was presumably introduced as a contaminant in grass seed used in a roadcut. It can now be found occurring in lawns, pastures, and roadsides on East Maui in Pukalani and has also been observed in Makawao, Kokomo, Olinda, Kahului, Kula, and Ulupalakua. This plant is poisonous to horses, cattle, and other livestock and has been implicated in the death of a pony in Kokomo.

Material examined. **MAUI**: Makawao District, East Maui, Pukalani, Makani Rd., from horse paddock, 1440 ft [440 m], 15 Feb 1998, *Starr & Martz 980215-71*..

Cucurbitaceae

Coccinia grandis (L.) Voigt **New island record**

Native to Africa, Asia, and Australia, *Coccinia grandis*, was previously known from O'ahu and Hawai'i (Wagner *et al.,* 1990: 570) and was first reported from Maui in 1992 by Robert Hobdy in Kahului's industrial district (Medeiros *et al.,* 1993: 89). *Coccinia*

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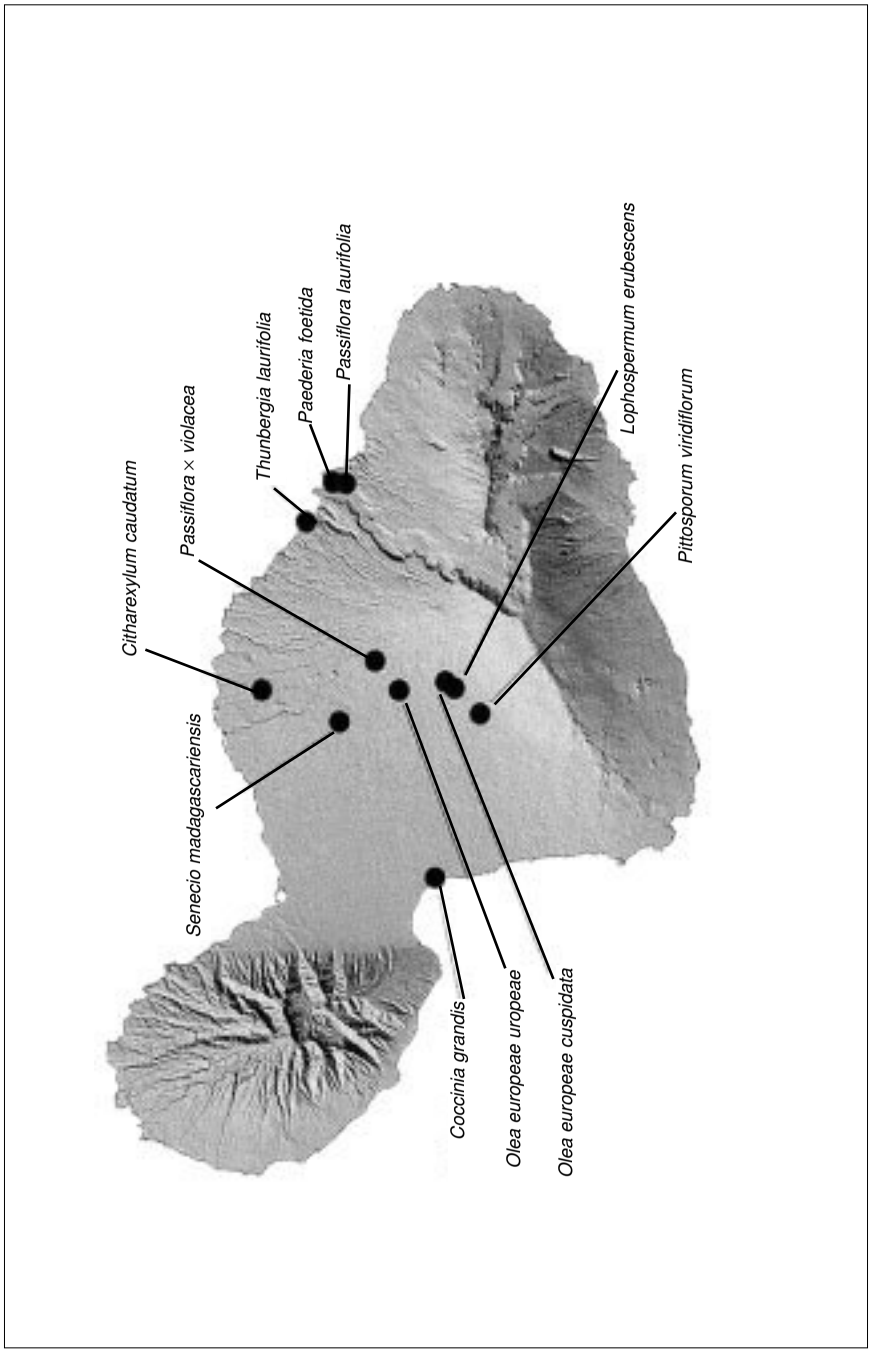
Lophospermum erubescens
Passiflora laurifolia
Paederia foetida
Thunbergia laurifolia
Passiflora × violacea
Citharexylum caudatum
Pittosporum viridiflorum
Senecio madagascariensis
Coccinia grandis
Olea europeae uropeae
Olea europeae cuspidata

grandis is established in Kīhei and has also been observed in Waiehu, Waikapū, Makawao, North Kīhei, Lahaina, Ka‘anapali, and Honolua.

Material examined. **MAUI**: Wailuku District, East Maui, North Kīhei, at intersection of Konale and Ali‘ilani, 20 ft [6 m], 27 Jan 1998, *Starr & Martz 980127-12*.

Oleaceae

Olea europaea L. subsp. ***cuspidata*** (Wall. Ex G. Don) Ciferri **New naturalized record**

[*Olea europaea* L. subsp. *africana* (Mill.) P. Green]

Native to the Mediterranean region, Wagner *et al.* (1990: 992–93) reported this subspecies as being “naturalized and becoming a serious pest on Hawai‘i in the vicinity of ‘Āinahou Ranch . . . since the fruit is a food source for game birds and since it is widely cultivated in Hawai‘i, it will presumably become more widely naturalized”. This subspecies was reported as a new island record for Kaua‘i by Lorence *et al.* (1995: 42). The article describes this subspecies as “becoming abundantly naturalized from planted trees”. On Maui, this subspecies has also been widely planted, has escaped from gardens and is naturalized in at least the Kula area.

Material examined. **MAUI**: Makawao District, East Maui, Kula, Pulehunui, from abandoned lot off side of Haleakalā Hwy., 3640 ft [1110 m], 14 Nov 1997, *Starr & Martz 971114-2*.

Olea europaea L. subsp. ***europaea*** **New naturalized record**

Cultivated for more than 4000 years (Neal, 1965: 677), this native of the Mediterranean region is reported by Wagner *et al.* (1990: 992–93) as “recently naturalized but spreading rapidly by game birds on Parker Ranch, west of Ke‘āmuku Camp, Hawai‘i”. On Maui, this subspecies has not spread as rapidly as subspecies *cuspidata* (syn. *africana*) but has proliferated beyond original plantings and is naturalizing in the Kula area.

Material examined. **MAUI**: Makawao District, East Maui, Kula, ‘A‘apueo, Haleakalā Hwy., adjacent to pasture land, 2720 ft [830 m], 17 Aug 1998, *Starr & Martz 980817-1*.

Passifloraceae

Passiflora laurifolia L. **Range extension**

Passiflora laurifolia, a native of Central and South America, is reported by Wagner *et al.* (1990: 1011) from Kaua‘i, O‘ahu, Moloka‘i, and Hawai‘i. Meidell *et al.* (1998: 7) reported *P. laurifolia* from West Maui as a new island record. This collection represents the range extension of *P. laurifolia* to East Maui. The collection was made from a forested thicket of *Hibiscus tiliaceus, Psidium guajava, Ardisia elliptica,* and *Pandanus tectorius.*

Material examined. **MAUI**: Hāna District, East Maui, Wailua, Hāna Hwy., Wailua Valley lookout park, 480 ft [145 m], 4 Aug 1998, *Starr & Martz 980807-22*.

Passiflora × ***violacea*** Loisel. **New island record**, **name change**

[*Passiflora caerulea* sensu Degener (1934), Wagner *et al.* (1990), non L.]

Passiflora × *violacea* is a hybrid between *P. caerulea* and *P. racemosa*. It is the oldest documented *Passiflora* hybrid (Vanderplank, 1996: 174). Wagner *et al.* (1990: 1010) reported it under the misapplied name *P.* × *caerulea* as “easily propagated vegetatively, it has persisted since the 1920s on Kaua‘i and O‘ahu”. This collection represents a new island record of this species from Maui and a name change (N. Evenhuis, pers. comm.).

Material examined. **MAUI**: Makawao District, East Maui, Pi‘iholo Rd., collection made nr. Aloha o ka ‘Āina farms from a vine growing with *Eucalyptus* and *Senecio mikanioides*, 3320 ft [1010 m], 6 Apr 1998, *Starr & Martz 980406-24*.

Pittosporaceae

Pittosporum viridiflorum Sims **New island record**

Pittosporum viridiflorum, a native of South Africa, is previously known from Hawai‘i and Lāna‘i (Wagner *et al.,* 1990: 1048). This collection represents a new island record of this species from Maui. It is known only from one abandoned pasture in Kula where it is persisting and spreading along with *Pennisetum clandestinum*, *Passiflora mollissima* and *Myrica faya.*

Material examined. **MAUI**: Makawao District, East Maui, Kula, Kekaulike Ave., 3250 ft [990 m], 1 May 1998, *Starr & Martz 980506-135*.

Rubiaceae

Paederia foetida L. **New island record**

[*Paederia scandens* (Lour.) Merr.]

Paedaria foetida, a native of Eastern Asia, is previously known from Kaua‘i, O‘ahu, and Hawai‘i where it is naturalized and locally common in disturbed mesic forest, coastal sites, dry forest, and subalpine woodland (Wagner *et al.,* 1990: 1160). This collection represents a new island record of this species from Maui. The collection was made from a vine that was smothering a thicket of *Hibiscus tiliaceus* near Ke‘anae School. It has also been observed in the village of Wailua.

Material examined. **MAUI**: Hāna District, East Maui, Wailua, nr. Ke‘anae School, 240 ft [75 m], 7 Aug 1998, *Starr & Martz 980807-12*.

Scrophulariaceae

Lophospermum erubescens D. Don **New island record**

Wagner *et al.* (1990: 1244) report this native of Mexico from O‘ahu and Hawai‘i, where it is widely cultivated and sometimes naturalized in dry forest, alien grassland, and shrubland. On Maui, a single population was found by Emil Lynch in Hāpapa Gulch, Kula, Maui. This collection represents a new island record of this species from Maui.

Material examined. **MAUI**: Makawao District, East Maui, Kaono‘ulu, Kula, Hāpapa Gulch, Emil Lynch collector, 3600 ft [1100 m], 4 Apr 1998, *Starr & Martz 980404-22*.

Verbenaceae

Citharexylum caudatum L. **New island record**

Citharexylum caudatum, a native of Central and South America, is previously known from O‘ahu where it is “spreading rapidly via bird dispersal out of Mānoa Valley into the Ko‘olau Mountains” (Wagner *et al.,* 1990: 1317). This collection represents a new island record of this species from Maui. It has also been observed near Kōlea Stream on the Hāna Hwy.

Material examined. **MAUI**: Makawao District, East Maui, Ha‘ikū, Pauwela, in bamboo thicket off W. Kuiaha Rd., 720 ft [220 m], 2 Apr 1998, *Starr & Martz 980402-49*.

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New records and range extensions of native Odonata (Coenagrionidae) and introduced aquatic species in the Hawaiian Islands

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The following represent new state and island records of aquatic species for Hawai'i. Voucher specimens are deposited in the Bishop Museum, Honolulu (BPBM), University of Michigan Zoology Museum Collection, Ann Arbor (UMMZ), and the Canadian National Collections of Insects, Arachnids, and Nematodes, Ottawa (CNC).

Odonata: **Coenagrionidae**

Megalagrion pacificum McLachlan **New island record**

Megalagrion pacificum McLachlan was previously known from specimens collected on Kaua'i, O'ahu, Maui, Moloka'i, and Lāna'i Islands. Because of the complete lack of museum specimens or records, and only one reference to the existence of *M. pacificum* on Hawai'i Island, Polhemus & Asquith (1996) described the status of this species occurring on that island as uncertain. Two *M. pacificum* recently discovered in CNC confirm the presence of this species from Hawai'i Island; and a visit to the 1985 collection site confirmed the continued existence of this species on Hawai'i Island. Specimens of *M. pacificum* were collected by D. Hilton, Bishop's University, on 2 days in 1985 (29 and 30 November) in Mā'ili Stream, 512 m, in the area where the rainforest abruptly ends and sugar cane fields began. Mā'ili Stream at this transition zone was low flowing, and was highly degraded with evidence of heavy livestock grazing and trampling of the stream banks (D. Hilton, pers. comm.). In 1985, *M. pacificum* were uncommon, and all speci-