
New records of weedy, non-grass plants from Moloka‘i

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In December 2022, roadside surveys were conducted across the island of Moloka‘i with the goal of identifying and mapping the grasses of the island. During these surveys, 12 new records of grasses were found (Faccenda 2023) along with 12 non-grass records, which are enumerated here. *Atriplex muelleri* was also found near the Kaunakakai port, but was not collected and could therefore not be formally included in this report. All identifications were made by the first author. Voucher collections mentioned are housed in Bishop Museum’s Herbarium Pacificum (BISH), Honolulu, Hawai‘i.

Acanthaceae

Barleria repens Nees

New island record

Barleria repens was found during roadside surveys at Kualapu‘u, where approximately 20 seedlings were found on a roadcut below a yard where *B. repens* may have been planted. *Barleria repens* is now known to be naturalized on Kaua‘i, O‘ahu, Moloka‘i, Lāna‘i, Maui, and Hawai‘i (Imada 2019).

Material examined. MOLOKA‘I: Kualapu‘u, intersection of Kahi Pl and Rt 470, partly shady, moist roadside bank, over 15 seedlings present in area, many of these flowering and fruiting, on top of roadside bank was a large colony on edge of a yard, unclear if that colony was planted or not, 477 m, 21.162470, -157.003863, 27 Dec 2022, K. Faccenda & C. Daehler 2932.

Ruellia blechum L.

New island record

A small colony of about 30 plants of *Ruellia blechum* was found during roadside surveys on Rt 450. *Ruellia blechum* is now known to be naturalized on O‘ahu, Moloka‘i, and Hawai‘i (Imada 2019).

Material examined. MOLOKA‘I: Rt 450, ca 13 km E of Kaunakakai, roadside weed from sunny area, rare along road, only about 30 plants seen in this colony, only one encountered during roadside surveys, flowers white, 8 m, 21.055782, -156.899522, 29 Dec 2022, K. Faccenda 2968.

Amaranthaceae

Amaranthus blitum L. subsp. *emarginatus*

(Salzm. ex Uline & Bray) Carretero,

Muñoz Garm. & Pedrol

New island record

Amaranthus blitum subsp. *emarginatus* is now known from Moloka‘i, where it was uncommon in the vicinity of Ho‘olehua and many hundreds of plants were observed on roadsides. *Amaranthus blitum* subsp. *emarginatus* is now known from Midway, Kaua‘i, O‘ahu, Hawai‘i, and is questionably naturalized on Maui (Imada 2019; Faccenda & Ross 2024).

Material examined. MOLOKA‘I: Ho‘olehua, intersection of Kolea Ave and Rt 480, occasionally mowed roadside, dry, sunny, small colony, along about 5 m of roadside at this location, several other colonies seen in Ho‘olehua area, 174 m, 21.171628, -157.085781, 27 Dec 2022, K. Faccenda & C. Daehler 2923.

***Amaranthus hybridus* L. subsp. *hybridus* New island record**

Amaranthus hybridus subsp. *hybridus* has previously been reported as naturalized on O'ahu and Maui (Imada 2019) but is now also known from Moloka'i, where only five plants were seen in Ho'olehua.

Material examined. MOLOKA'I: Ho'olehua, end of pavement on W end Mo'omomi Ave, disturbed roadside, dry, sunny area, rare, <5 plants seen, no other populations observed on island, 118 m, 21.168383, -157.113461, 27 Dec 2022, K. Faccenda & C. Daehler 2918.

Asteraceae***Cotula australis* (Sieber ex Spreng.) Hook. f. New island record**

Cotula australis was found growing as an uncommon weed on roadsides between Ho'olehua and Kualapu'u, where thousands of plants were observed germinating out of the seedbank along with other annuals, including *Eragrostis barrelieri*, *Malva parviflora*, and *Dysphania carinata*. *Cotula australis* is now known to be naturalized on Kaua'i, O'ahu, Moloka'i, Lāna'i, Maui, and Hawai'i (Imada 2019).

Material examined. MOLOKA'I: Ho'olehua, intersection of Kolea Ave and Rt 480, occasionally mowed roadside, dry, sunny, many thousands of plants seen around Ho'olehua on roadsides with other annuals, 174 m, 21.171468, -157.085880, 27 Dec 2022, K. Faccenda & C. Daehler 2924.

Brassicaceae***Capsella bursa-pastoris* (L.) Medik. New island record**

Capsella bursa-pastoris is now known to be naturalized on Moloka'i, where hundreds of plants were found on roadsides across the island. The species was generally uncommon across the island and was found in low densities only. *Capsella bursa-pastoris* is now known to be naturalized on Midway, O'ahu, Moloka'i, Maui, Lāna'i, and Hawai'i (Imada 2019).

Material examined. MOLOKA'I: Ho'olehua, Airport Loop, just outside of terminal, mowed roadside, sunny, rather dry area, uncommon roadside annual, uncommon in that populations found were generally small but were widely dispersed around Ho'olehua, 140 m, 21.157262, -157.094628, 27 Dec 2022, K. Faccenda & C. Daehler 2916.

Convolvulaceae***Ipomoea aquatica* Forssk. New island record**

Ipomoea aquatica is now known to be naturalized on Moloka'i, where four large colonies were found growing as emergent aquatics in a ditch near 'Ualapu'e. *Ipomoea aquatica* is now known to be naturalized on Midway, O'ahu, Moloka'i, Maui, and Hawai'i (Imada 2019).

Material examined. MOLOKA'I: Rt 450, ca 3 km E of 'Ualapu'e, roadside ditch which is permanently flooded, sunny area, 4 large clumps growing as an emergent aquatic, covering about 10 sq. meters, rooting freely from lower stems, flowers white, 13 m, 21.072802, -156.797684, 29 Dec 2022, K. Faccenda 2940.

Heliotropiaceae***Euploca procumbens* (Mill.) Diane & Hilger New island record**

Euploca procumbens is now known to be naturalized on Moloka'i, where approximately 30 plants were seen along the highway between 'Ualapu'e and Kaunakakai. *Euploca procumbens* was previously published as naturalized in Hawai'i under the name *Heliotropium procumbens*, but the genus *Euploca* is now recognized as distinct based on molecular evidence (Frohlich et al. 2022). *Euploca procumbens* is now known to be

naturalized on Kauaʻi, Oʻahu, Molokaʻi, and Maui (Imada 2019). It is also present on Hawaiʻi Island but has yet to be vouchered.

Material examined. **MOLOKAʻI:** Rt 450, ca 3 km W of ʻUalapuʻe, roadside weed in dry, sunny area, 5 plants seen in this area, more seen when driving towards Kaunakakai, 11 m, 21.053809, -156.869421, 29 Dec 2022, *K. Faccenda 2958*.

Juncaceae

Juncus ensifolius Wikstr.

New island record

Juncus ensifolius is now known to be naturalized on Molokaʻi, where thousands of plants were seen along the road leading through the Nature Conservancy's Kamakou Preserve.

Juncus ensifolius is now naturalized on Molokaʻi, Maui, and Hawaiʻi (Imada 2019).

Material examined. **MOLOKAʻI:** Road leading through TNC Kamakou Preserve, from saturated soil along road on edges of puddles and depressions, in sunny or partly sunny areas, common, 1120 m, 21.117153, -156.912707, 28 Dec 2022, *K. Faccenda 2936*.

Juncus polyanthemus Buchenau

New island record

A population of about 20 plants of *Juncus polyanthemus* was seen during roadside surveys on the Kalae Hwy. about 1 km south of the Kalaupapa overlook. Unfortunately, these were not recognized as island records at the time, and a specimen was not made, but a specimen was later obtained thanks to help from Danielle Frohlich.

Material examined. **MOLOKAʻI:** Rt 470, heading to Kalaupapa lookout, outside gate on right hand side of road halfway to lookout from town, moist, shady area, small colony of around 20 plants, -156.996221, 21.163751, 07 Jun 2023, *D. Frohlich s.n.*

Molluginaceae

Mollugo cerviana (L.) Ser.

New island record

A small patch of 4 plants of *Mollugo cerviana* was found about 6 km east of ʻUalapuʻe on a roadside. *Mollugo cerviana* is now known from Oʻahu, Molokaʻi, Lānaʻi, Maui, and Hawaiʻi (Imada 2019).

Material examined. **MOLOKAʻI:** Rt 450, ca 6 km E of ʻUalapuʻe, roadside weed in sunny, rather dry area, rare, only 4 plants seen in this population and no other populations seen along road, 12 m, 21.082984, -156.783354, 29 Dec 2022, *K. Faccenda 2948*.

Passifloraceae

Passiflora suberosa L.

New island record

A small population of about 20 plants of *Passiflora suberosa* was found at Kualapuʻu during roadside surveys. *Passiflora suberosa* is now known to occur on Kauaʻi, Oʻahu, Molokaʻi, Lānaʻi, Maui, and Hawaiʻi (Imada 2019).

Material examined. **MOLOKAʻI:** Kualapuʻu, intersection of Kahi Pl and Rt 470, partly shady, moist roadside bank, rare, several seedlings and vines seen only in this area, 477 m, 21.162470, -157.003863, 27 Dec 2022, *K. Faccenda & C. Daehler 2931*.

Taxa showing signs of naturalization

Fabaceae

Acacia mangium Willd.

Three seedlings of *Acacia mangium* were found adjacent to large *A. mangium* trees planted as a windbreak along Huaʻai Rd. Several rootsuckers were also found where roots were hit by mowers, but the seedlings were pulled up to confirm that they were not

connected to a larger root system. *Acacia mangium* has now been reported as naturalized on Kauaʻi, Oʻahu, and Hawaiʻi (Imada 2019), and potentially naturalizing on Molokaʻi.

Material examined. **MOLOKAʻI:** Hoʻolehua, Huaʻai Rd about 100 m S of its intersection with Rt 460, trees planted as a windbreak around perimeter of a farm, several plants found growing in roadside ditch, 2 appeared to be rootsuckers, but another 3 clearly seedlings as they were able to be uprooted, 115 m, 21.146565, -157.097284, 27 Dec 2022, *K. Faccenda & C. Daehler 2917.*

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