



PEPP



Highlights 2021

State of Hawai'i
Department of Land & Natural Resources
Division of Forestry & Wildlife
Rare Plant Program



Kaua'i profile

Adenophorus periens

A native fern, thought to be extinct until early this year, was rediscovered by the Plant Extinction Prevention Program (PEPP) on Kaua'i. Since then, a dozen small plants have been found growing on trunks of large native trees in three separate locations.

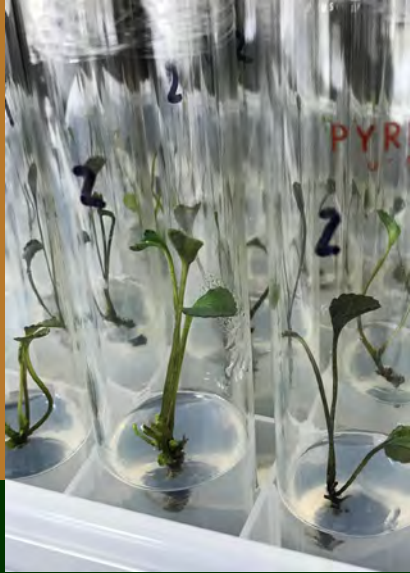




Kaua'i profile

Lysimachia scopulensis and *Cyanea asarifolia*

Teams from the National Tropical Botanical Garden, PEPP, and State of Hawai'i Division of Forestry and Wildlife leading drone surveys of the steep canyons and cliffs of Kaua'i are revealing new locations of endemic species like *Lysimachia scopulensis* and *Cyanea asarifolia*. Working together with staff on ropes, the teams have greatly increased our knowledge of these species and secured collections from remote cliffs.



O'ahu profile

Viola kauaensis var. *hosakae*

In a huge step for *Viola kauaensis* var. *hosakae*, a miniature violet found only in the Ko'olau Mountains, 40 new plants were given a new home in protected habitat. This move more than doubled the total number of plants in the world!



O'ahu profile



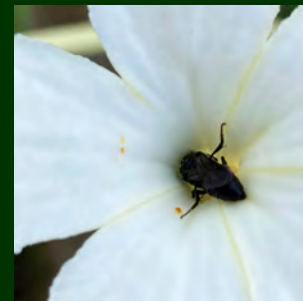
Ureca kaalae

Just as the last remaining mature plant died in the wild, more than 2,000 plants of *Ureca kaalae* were planted back into protected areas in the Wai'anae Mountains. These trees are a favorite food for pulelehua, the Kamehameha butterfly, and many other native invertebrates.

Moloka'i profile

Brighamia rockii

Helicopter surveys along Moloka'i's northern coast found numerous landslides after heavy spring rains stripped vegetation from the high sea cliffs and a decline in an iconic native plant, *Brighamia rockii*. Fewer than 10 individuals are left in the wild, so the plants are being protected and hand-pollinated to get more seeds.



Moloka'i profile

Panicum fauriei var. *carteri*

An endangered grass found on the remote coast of Moloka'i, *Panicum fauriei* var. *carteri* is vulnerable to large storms and sea-level rise, so seeds are being collected, grown, and planted into protected areas. This year, over 5,800 seeds were collected for storage at the University of Hawai'i's Lyon Arboretum.

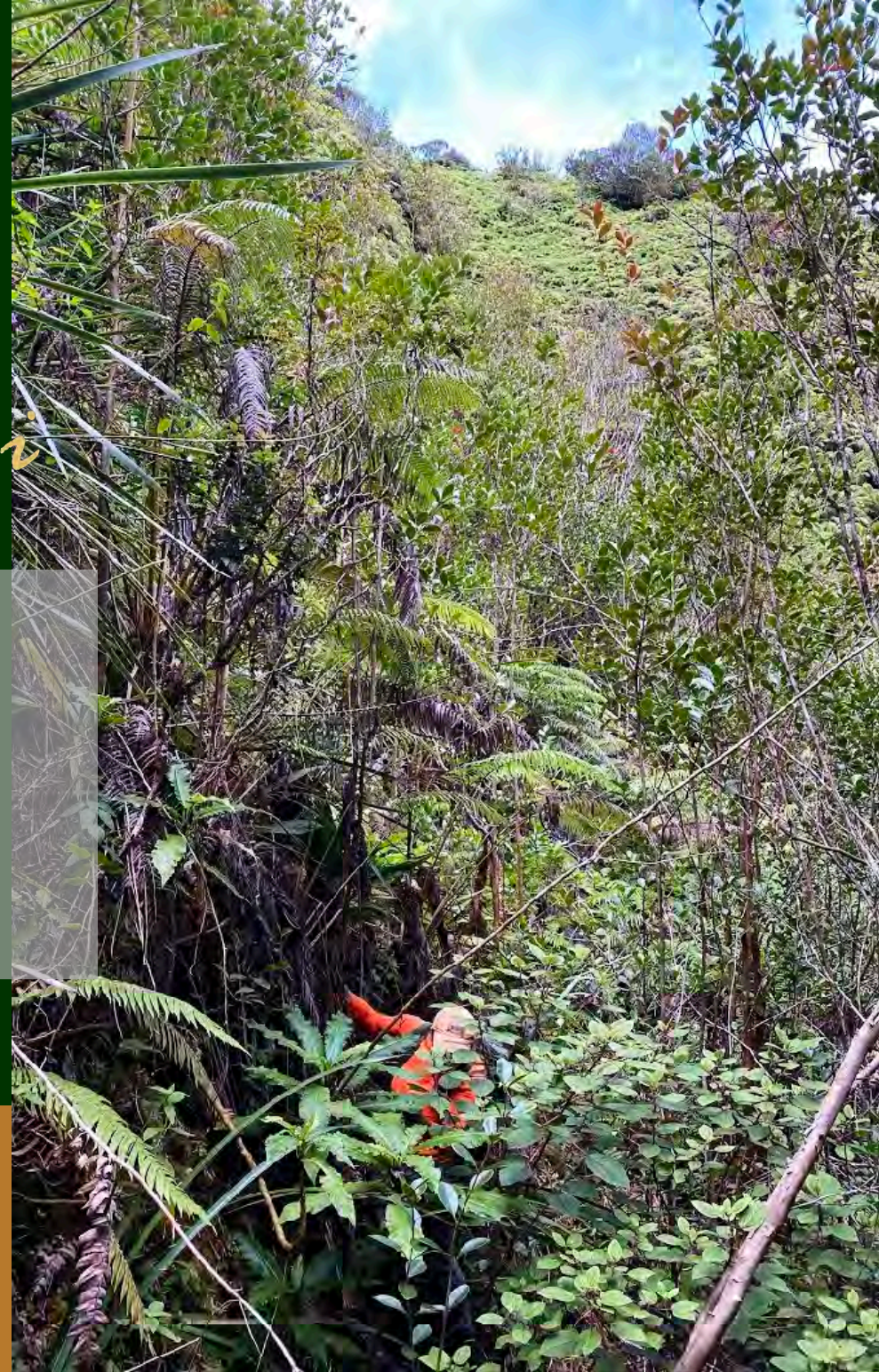




Lāna`i profile

Cyanea lobata subsp. *baldwinii* & *Cyanea gibsonii*

New populations of two critically rare endemic plants *Cyanea lobata* subsp. *baldwinii* and *Cyanea gibsonii* were discovered by the Pūlama Lāna‘i and PEPP staff! These finds doubled the number of known plants and will help accelerate recovery by providing more seeds to grow plants for creating populations at restoration sites.





Lānaʻi profile

Kadua cordata var. *remyi*

The last known wild plant of *Kadua cordata* var. *remyi*, a sprawling shrub that grows among uluhe on Lānaʻihale, died in the last year. Seeds stored in seed banks at the National Tropical Botanical Garden have been withdrawn to grow on Maui until they are ready to return home to Lānaʻi.



Kaho'olawe profile

Sesbania tomentosa

More than 600 'ōhai (*Sesbania tomentosa*) were planted into the Kamōhio watershed by the Kaho'olawe Island Reserve Commission's Restoration team. The plants were grown from seed collections of the last few wild plants remaining on a nearby islet and will help stabilize soil and reduce erosion for a Department of Health project.



Kaho'olawe profile

Kanaloa kahoolaweensis

Ka palupalu o Kanaloa (*Kanaloa kahoolaweensis*) was recognized as one of the top ten endangered species in the country threatened by global climate change. This species is extinct in the wild but kept alive in cultivation, where keiki born in 2020 began to flower for the first time.

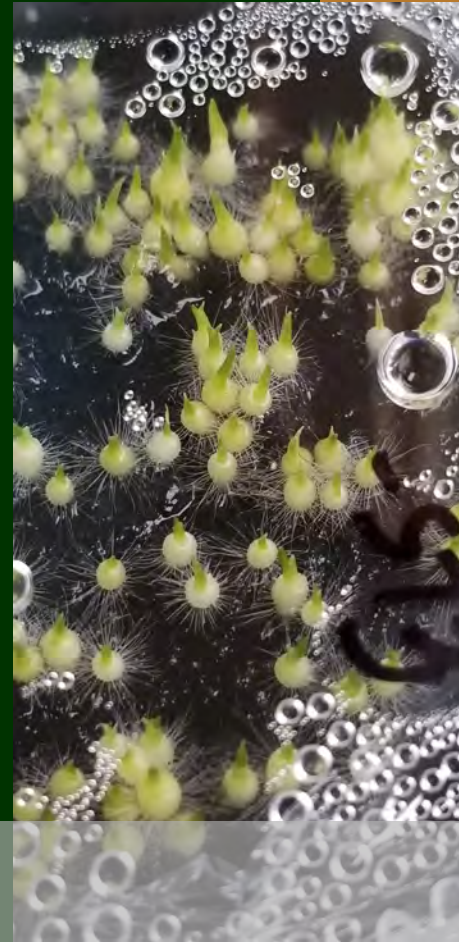




Portulaca molokiniensis

An iconic plant only known from Maui Nui, *Portulaca molokiniensis* has steeply declined over the last decade. Although it is in cultivation at native plant gardens, there are now fewer than fifty plants remaining in the wild, making it a new target for PEPP.

Maui
profile



Platanthera holochila

The rarest of Hawai‘i’s three native orchids is still found on Kaua‘i, Moloka‘i, and Maui. Seedlings were observed on Maui this year and young plants from Kaua‘i are being grown at the Lyon Arboretum.

Maui
profile

Hawai'i profile



New *Schiedea* species

An entirely new species of native plant was found by State of Hawai'i DOFAW staff near Lāupahoehoe. A single plant of an unfamiliar species was first observed in 2019. When botanists returned to the site, the plant was gone. Soil was collected and a few months later, young seedlings of the unknown species emerged and began to grow. These new plants are members of the endemic Hawaiian genus, *Schiedea*, in the carnation family, and a new name for this rare species will be announced in 2022.



Gardenia remyi

Air-layers were installed and successfully harvested from two nānū (*Gardenia remyi*) trees in the Pu' u o Umi Natural Area Reserve. These plants will join others in a nursery living collection where they can be protected and hand-pollinated to make more seeds.

Hawai'i profile



mahalo

to all our conservation partners



credits

cover	Susan Ching-Harbin, Hank Oppenheimer	<i>Brighamia rockii</i>	Ane Bakutis, Po‘ohiwa Helm, Hank Oppenheimer	<i>Portulaca molokiniensis</i>	Butch Haase, Hank Oppenheimer
<i>Adenophorus periens</i>	Susan Deans, Scotty Heintzman	<i>Panicum fauriei var. carteri</i>	Ane Bakutis	<i>Platanthera holochila</i>	Hank Oppenheimer, Cindy Yamamoto
<i>Lysimachia scopulensis</i> and <i>Cyanea asarifolia</i>	Ben Nyberg, Adam Williams	<i>Cyanea lobata subsp. baldwinii</i> & <i>Cyanea gibsonii</i>	Hank Oppenheimer, Zach Pezzillo	New <i>Schiedea</i> species	Tom Dement, Josh VanDeMark
<i>Viola kauaensis var. hosakae</i>	Susan Ching-Harbin	<i>Kadua cordata var. remyi</i>	Hank Oppenheimer	<i>Gardenia remyi</i>	Jamie Enoka, Erin Datlof
<i>Urera kaalae</i>	Susan Ching-Harbin	<i>Sesbania tomentosa</i>	Ethan Romanchak, Lyman Abbott	<i>Mahalo</i>	Hank Oppenheimer
		<i>Kanaloa kahoolaweensis</i>	Anna Palomino, Greg Koob	This page	Ane Bakutis
				<i>A special mahalo to the U.S. Fish and Wildlife Service’s Lauren Weisenberger for her review and Susan Machida for her design of this report</i>	

