

Coprosma ernodeoides "Kūkaenēnē"





<u>Image Source:</u> Forest and Kim Starr, www.hear.org/starr/hiplants/images/thumbnails/html/coprosma_ernodeoides.htm

<u>Coprosma ernodeoides</u> Endemic to Maui and Hawai`i <u>Common name:</u> "Kūkaenēnē" "Aiakanēnē" "leponēnē" "nēnē" "pūnēnē" <u>Family:</u> Rubiaceae <u>Listing Status:</u> Not listed <u>Species Info:</u> 13 species of this genus are endemic to Hawai`i. Other species in this genus inhabit islands throughout the pacific. This species is thought to represent a colonization event separate from the other species. The Hawaiian name is literally translated as "Nene feces."

<u>Park Distribution</u>: Crater, Kaupō Gap, Kipahulu Valley, Manawainui

Elevation in Park: 5000-9800 ft.

<u>Habitat</u>: Moist upper elevation sites and barren subalpine zones.

<u>General Description</u>: Many branched prostrate and trailing shrubs usually 10 - 15 ft. long. Branches less than 20 cm. long. Leaves opposite and very closely spaced. Fruits glossy black berries, nearly round, 8-13 mm. in diameter.

Coprosma montana "Pilo"







Image Source: Forest and Kim Starr, www.hear.org/starr/hiplants/images/thumbnails/html/coprosma montana.htm

<u>Coprosma montana</u> Endemic to East Maui and Hawai`i <u>Common name:</u> "Pilo" <u>Family:</u> Rubiaceae listed. Species Info: A genus of 90 species, Hawai`i has 13 species of Coprosma.

Listing Status: Not

Park Distribution: Crater, Kaupō Gap, Kipahulu Valley, Manawainui.

Elevation: 5000-9800 ft.

Habitat: Subalpine, alpine, shrubland and woodland.

General Description: Branched small tree or shrub, 6-24 ft. tall. Branches ascending, stiff. Leaves opposite, often clustered toward the tips of branches. Fruit orange to reddish-orange berry, 6-10 mm. long.

Dodonaea viscosa "A`ali`i"









Image Source: www.hear.org/starr/hiplants, www.botany.hawaii.edu/faculty/carr

<u>Dodonaea viscosa</u> Indigenous to pantropical region. <u>Common name:</u> "A'ali'i "`a`ali`i kū makani" "`a`ali`i kū ma kua", "kūmakani" **Family: Sapindaceae Species Info:** This plant has many ethnobotanical uses, from medicinal to weaponry.

Park Distribution: Crater, Kaupō Gap, Kipahulu Valley, Manawainui

Elevation in Park: 300-8800 ft.

Habitat: Xeric to wet forests, cinder deserts, and subalpine shrublands.

<u>General Description:</u> Erect large shrub or small tree 6 - 24 ft. tall. Branched with reddish brown to gray or blackish gray bark. Leaves 2 - 15 cm. long and 1 - 6 cm. wide. Flowers male or female, 1 - 5 cm. long.

Dubautia menziesii "Kūpaoa"









<u>Image Source:</u> www.botany.hawaii.edu/faculty/carr/dmenz.htm, Forest and Kim Starr www.hear.org

<u>Dubautia menziesii</u> Endemic to Haleakalā <u>Common name:</u> "Kūpaoa" "Na`ena`e" <u>Family:</u> Asteraceae <u>Listing Status:</u> Not listed. <u>Species</u> <u>Info:</u> Often loses leaves and dies back after winter ice storms.

<u>Park Distribution</u>: Crater, Kaupō Gap, Ko'olau Gap, Manawainui

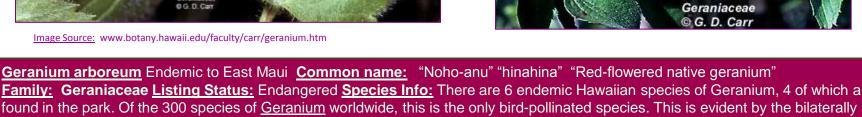
Elevation in Park: 6000-9000 ft.

<u>Habitat</u>: Subalpine shrubland, barren lava, and cinder fields.

<u>General Description</u>: Small to large shrub up to 7.5 ft. tall. Leaves opposite or alternate, crowded to lax and spreading. Flowers yellowish orange, usually 4.5 - 6 mm. long. Occasionally hybridizes with the Haleakalā silversword (<u>Argroxiphium sandwicense</u> ssp. <u>macrocephalum</u>).

Geranium arboreum "Noho-anu"





Geranium arboreum

Family: Geraniaceae Listing Status: Endangered Species Info: There are 6 endemic Hawaiian species of Geranium, 4 of which are found in the park. Of the 300 species of Geranium worldwide, this is the only bird-pollinated species. This is evident by the bilaterally symmetrical red flowers, which are an adaptation to bird pollination.

Park Distribution: West Slope, in gulches below Hosmer's Grove

Elevation in Park: 6800-7200 ft.

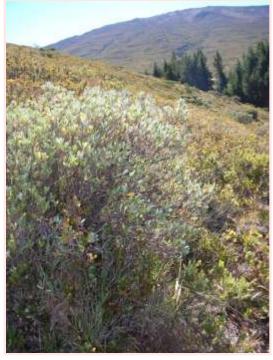
<u>Habitat</u>: Moist gulches primarily in subalpine shrubland.

General Description: Large, branched spreading shrub 2-4 m. tall with green, somewhat hairy leaves, oval or heart-shaped; magenta flowers 20-25 cm. occurring in short-stalked groups of 1-4.

Geranium cuneatum ssp. tridens "Hinahina"









<u>Image Source:</u> Forest and Kim Starr www.hear.org, www.botany.hawaii.edu

<u>Geranium cuneatum</u> ssp. <u>tridens</u> Endemic to Haleakalā <u>Common name:</u> "Hinahina" "Nohoanu" <u>Family:</u> Geraniaceae <u>Listing Status:</u> Not listed. <u>Species Info:</u> Of 300 or more species, there are 6 endemic species of <u>Geranium</u> in Hawai`i.

Park Distribution: Crater, West slope

Elevation in Park: 6800-9400 ft.

Habitat: Subalpine shrubland.

<u>General Description</u>: Compact, erect, silvery shrub 30 - 50 cm. tall. Stems and branches reddish to black. Leaves dense, curling towards apex, alternate, 1.5 - 5 cm. long, .5 - 1.4 cm. wide. Flowers white or cream with purple veins.

Geranium multiflorum "Nohoanu"











<u>Geranium multiflorum</u> Endemic to Haleakalā <u>Common name:</u> "Hinahina" "Nohoanu" <u>Family:</u> <u>Geraniaceae</u> <u>Listing Status:</u> Endangered <u>Species Info:</u> Yellow faced bees have been seen pollinating this plant. This is one of 6 endemic Geraniums.

<u>Park Distribution</u>: Crater, Upper Kipahulu Valley, Kaupō gap (extirpated), NE Rift, West Slope.

Elevation in Park: 6170-7400 ft.

<u>Habitat</u>: Moist subalpine shrubland, steep gulch walls, cinder desert.

<u>General Description</u>: Compact, many-branched shrub 1-3 m. tall; stems gray to reddish or dark-gray; leaves green on upper surface, silvery-green underneath, oval-shaped with tiny teeth; distinguished from other <u>Geraniums</u> by its white, regularly symmetrical flowers, normally with purple veins and purple at their centers. It can be distinguished from <u>Geranium cuneatum</u> ssp. <u>tridens</u> by silver-green only on the undersides, and small teeth extending farther down the leaf.

Leptecophylla tameiameiae "Pukiawe"









Image Source: www.hear.org

<u>Leptecophylla tameiameiae</u> (formally *Styphelia tameiameiae*) Indigenous to the Marquesas and the main Hawaiian Islands. <u>Common name:</u> "Pukiawe" "`A`ali`i mahu" <u>Family:</u> Epacridaceae <u>Listing Status:</u> Not listed. <u>Species Info:</u> This plant was used to sanctify the Kapu of the chiefs. It was burned and smoke was smudged on the `Ali`i when he wished to mingle with commoners.

<u>Park Distribution</u>: Crater, Kaupō Gap, Kipahulu Valley, Manawainui, Front Country.

Elevation in Park: 3500-9900 ft.

<u>Habitat</u>: Mesic forests, wet forests, subalpine and alpine shrubland.

<u>General Description</u>: Erect and spreading shrubs, sometimes treelike. Leaves often closely spaced and narrow, 4-10 mm. long, 1.5 - 6mm. wide. Flowers white to pale pink. Fruit dark red to pink and sometimes white.

Metrosideros polymorpha "`Ōhi`a lehua"













Image Source: www.hear.org, Hale/Images

<u>Metrosideros polymorpha</u> Endemic to the Hawaiian Islands <u>Common name:</u> "Ōhi'a" "Ōhia lehua" "Lehua" <u>Family:</u> <u>Myrtaceae Species Info:</u> The most common native tree in Hawai'i. It is variable in ecological range; morphologically eight varieties of this species are recognized. The reddish wood is very hard and was used in house and canoe building, and for various tools.

Park Distribution: Crater, Kaupō Gap, Kipahulu Valley, Ka`apahu, Hana Rainforest.

Elevation in Park: 800-7300 ft.

<u>Habitat</u>: Cliffs, lava flats, bogs, shrublands, mesic forests, dry forests and rainforests.

<u>General Description</u>: Shrub to tall trees, bark usually rough and fissured. Leaves orbicular or elliptic, 1-8 cm long and 1-5 cm wide. Flowers red, orange, or occasionally white or yellow ("Lehua mamo").

Rubus hawaiensis "`Ākala"







Image Source: Forest and Kim Starr,

hear.org/starr/hiplants/images/ thumbnails/html/rubus_hawaie nsis.htm

www.botany.hawaii.edu/facult y/carr/rubus.htm, Hale/Images





Rubus hawaiensis Endemic to Kaua`i, Moloka`i, Maui, and Hawai`i Common name: "`Ākala" "`Ākalakala" "Kala"

Family: Rosaceae Listing Status: Not listed. Species Info: Two endemic species of Rubus exist in Hawai'i.

Park Distribution: Crater, Kaupo Gap, Kaapahu, Kipahulu Valley, Manawainui, Hana Rainforest.

Elevation in Park: 2400-7300 ft.

<u>Habitat:</u> Subalpine shrubland, mesic forest, rainforest.

<u>General Description:</u> Shrub with shredded bark, up to 400 cm. tall. Stems erect and arching covered with slender prickles up to 4 mm. long. Leaves palmately compound, 8-25 cm. long, 5-15 cm. wide. Flowers 18-30 mm. long, dark pink to dusky rose. Fruit a red to dark purple or yellow berry, 2-5 cm. long.

Santalum haleakalae "`lliahi"









Image Source: Forest and Kim Starr www.hear.org

<u>Santalum haleakalae</u> Endemic to East Maui <u>Common name:</u> "Sandalwood" <u>Family:</u> Santalaceae <u>Listing Status:</u> Rare, but not listed. <u>Species Info:</u> The Sandalwood industry was started by Captain John Kendrick in 1791. The fragrant wood sold for \$125 a ton and brought an estimated 3 to 4 million dollars to the islands. The industry ended in 1845 when all trees of marketable size had been harvested. This trade greatly impacted the Hawaiian people because they were forced by their kings to abandon their farming and bring the wood to the coast.

Park Distribution: Kaupō Gap, Crater, Ko'olau Gap.

Elevation in Park: 5700-8700 ft.

Habitat: Subalpine shrubland, cinder desert.

<u>General Description</u>: Small tree 6 - 12 ft. Leaves olive green often purplish tinged, 2.5 - 7.5 cm long, 2-6 cm. wide. Flowers weakly fragrant, reddish to creamy colored in bud. Fruit black or purplish black at maturity, 10-15 mm. long.

Sophora chrysophylla "Māmane"









Image Source: www.kcc.hawaii.edu/campus/tour/plants/pmamane.htm Forest and Kim Starr www.hear.org, Hale/Images

<u>Sophora chrysophylla</u> Endemic to the Hawaiian Islands <u>Common name:</u> "Māmane" <u>Family:</u> Fabaceae <u>Listing Status:</u> Not listed. <u>Species Info:</u> One of the major species in the shrublands, it has been increasing in population with the removal of feral goats.

<u>Park Distribution</u>: Kaupō Gap, Kipahulu Valley, Manawainui, Crater.

Elevation in Park: 4000-9400 ft.

<u>Habitat</u>: Upper elevation shrubland, dryland, and rainforest.

<u>General Description</u>: Shrubs to trees up to 50 ft. tall. Leaflets alternate or opposite. Flowers yellow, peak in March in the Front Country and in December in Kaupō Gap; 11.5-21 mm. long, 8 - 20 mm. wide. Seeds yellow, brown, or grayish black.

Stenogyne microphylla





Image Source: www.botany.hawaii.edu/faculty/carr/stenogyne.htm

<u>Stenogyne microphylla</u> Endemic to East Maui and Hawai`i. <u>Common name:</u> "Littleleaf Stenogyne" <u>Family:</u> Lamiaceae <u>Listing Status:</u> Rare, but not listed. <u>Species Info:</u> Stenogyne is an endemic genus of 20 species. Maui, with 9 species, has the most species of any island.

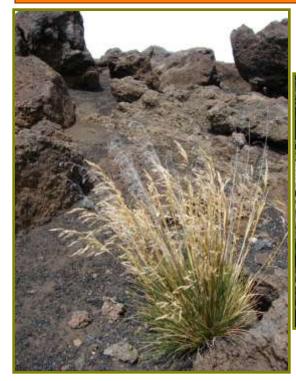
Park Distribution: Crater; West slope.

Elevation in Park: 7300-9050 ft.

Habitat: Subalpine shrubland.

<u>General Description:</u> Climbing clump forming vines that grow up to several meters tall with woody bases. Leaves are membranous, ovate or elliptic and small. Often climbing in Māmane or other subalpine trees.

Deschampsia nubigena









<u>Deschampsia nubigena</u> Endemic to the Hawaiian islands <u>Common name:</u> "Alpine hairgrass" <u>Family:</u> <u>Poaceae Listing Status:</u> Not listed. <u>Species Info:</u> Only one member of the genus <u>Deschampsia</u> is native to Hawai`i, the rest of the species in the genus are native to arctic and temperate regions.

Park Distribution: Crater, Kaupō Gap, Kipahulu Valley, Manawainui, Front Country, Hana Rainforest.

Elevation in Park: 500-9800 ft.

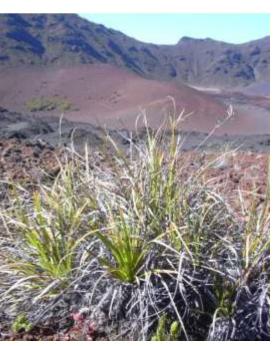
<u>Habitat</u>: Subalpine shrubland, cinder fields, and grasslands. Along streams in rainforest to near sealevel.

General Description: Tufted grass 30-100 cm. tall. Blades 5-30 cm. long and .5-1.5 mm. wide. Inflorescences paniculate 5-20 cm. long.

Carex wahuensis











<u>Carex wahuensis</u> Endemic to the Hawaiian Islands <u>Family:</u> Cyperaceae <u>Species Info:</u> Carex is the largest genus in the family Cyperaceae, with approximately 2000 species worldwide.

<u>Park Distribution:</u> Crater, East and West Kaupō gap, Kipahulu Valley, Manawainui, West Slope.

Elevation: 10 -9000 ft.

<u>Habitat</u>: Diverse habitats, from near the ocean to the subalpine shrubland.

<u>General Description:</u> Common perennial, rhizomatous sedge forming large clumps. Stems three sided, 15-100 cm. tall, with inflorescence spikes 1/3 to 1/2 of stem. Leaves up to 8 per stem, tough and leathery, deep green on upper surface, 1.5-15 mm. wide, lower surface rough.

Morelotia gahniiformis "`Uki"







<u>Gahnia gahniiformis</u> Indigenous to New Zealand and the Hawaiian Islands of Moloka`i, Lāna`i, Maui, and Hawai`i <u>Common name:</u> "`Uki" <u>Family:</u> Cyperaceae <u>Listing Status:</u> Not listed. <u>Species Info:</u> A genus of about 30 species, existing throughout the pacific region.

Park Distribution: Crater, Kalapawili, East Kaupō Gap, Manawainui, West Slope

Elevation in Park: 4000-8000 ft.

Image Source: Forest and Kim Starr www.hear. org

<u>Habitat:</u> Lava fields, dry forest, mesic forest, and subalpine shrubland.

<u>General Description:</u> Perennials with short rhizomes, having brown or yellowish sheaths around the stems, aerial stems densely tufted 20-70 cm. tall. Stems are three sided, 2-4 mm. in diameter on lower part, 1-3 nodes between the base and the flower. Leaves basal, linear, longer than the stems, 2-8 mm. wide, rough margins. Inflorescence is a panicle 10-35 cm. long, bearing 3-5 small panicles, more dense towards the top.

Dryopteris wallichiana "Laukahi"









<u>Dryopteris wallichiana</u> Indigenous to all major Hawaiian Islands except Lana'i; and Madagascar, Africa, India, Nepal, China, Japan, and the Americas from Mexico to Argentina <u>Common name:</u> "`i`o nui" "laukahi" <u>Family:</u> <u>Dryopteridaceae <u>Listing Status:</u> Not listed. <u>Species Info:</u> A genus of about 200 species worldwide, this is the only Indigenous species in Hawai`i. The other 12 species of <u>Dryopteris</u> are endemic.</u>

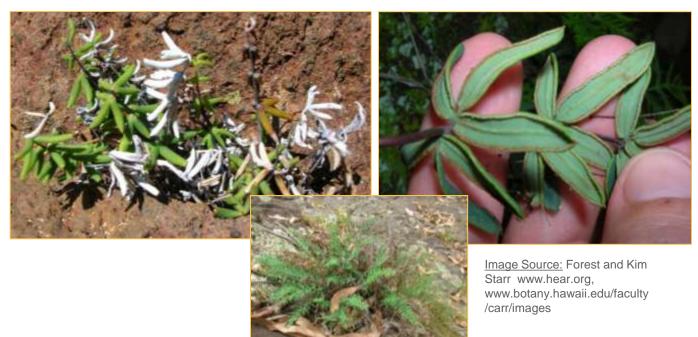
<u>Park Distribution:</u> Crater, Kipahulu Valley, Kaapahu, Kaupō Gap

Elevation: 2800-9000 ft

<u>Habitat:</u> Moist sites in wet and mesic forests, and in open areas.

<u>General Description:</u> Medium to large fern. Fronds arranged in a shuttlecock shape, radiating from base at a 45 degree angle, on apexes of rhizomes, up to 1.5 m. long. Stems about 1/3 frond length, covered in dense reddish-brown scales. Blades pinnate, elliptical to lanceolate, dark green on upper surface, light green on lower surface. 20-25 pairs of segments along frond, middle segments 5.5-15 cm. long, tapering at base. Sori toward tip, 2-4 pairs per segment.

Pellaea ternifolia "Kalamoho lau li`i"





<u>Pellaea ternifolia</u> Indigenous to all major Hawaiian Islands, North America, Mexico, Central America, and several Pacific Islands <u>Common name:</u> "Kalamoho lau li`i" "laukahi" "kalamoho" <u>Family:</u> <u>Pteridaceae Listing Status:</u> Not listed. <u>Species Info:</u> Rare in Hawai`i outside of upper elevation dry areas on Hawai`i and Maui.

Park Distribution: Crater, Nu`u, Kaupo

Elevation: 1970-11,480 ft.

<u>Habitat:</u> Upper elevation exposed, dry areas.

<u>General Description:</u> Small terrestrial fern, with creeping, branching rhizomes. Fronds 10-25 cm. long, 1.5-2.5 cm. wide. Stalks dark brown, smooth. Blades pinnate, linear shaped. Segments 4-16 pairs, mostly opposite, arranged in threes, 1-2 mm. wide, pointed at tips, margins rolled inward.

Sadleria cyatheoides "`Ama`u"











<u>Sadleria cyatheoides</u> Endemic to the main Hawaiian Islands <u>Common name:</u> "`ama`u" "ma`u" "ma`uma`u" "pua'a `ehu`ehu" <u>Family:</u> <u>Blechnaceae</u> <u>Listing Status:</u> Not listed. <u>Species Info:</u> A red dye for kapa was made from the trunk, and a glue was made from the sap.

<u>Park Distribution:</u> Crater, Kipahulu Valley, Kaupō Gap

Elevation: 15-7200 ft.

<u>Habitat:</u> Mesic to wet forests and shrublands.

<u>General Description:</u> Common, medium-sized fern, fronds 55-300 cm. long, stalks grooved and straw-colored with brown linear scales at the base. Dead fronds form skirts at the base. Young fronds are red, turning to dark green. The smallest divisions of the frond are 35-60 per pinna, are dark green on the top surface and light green on the lower surface, with obscure veins.

Trisetum glomeratum "He`u pueo" "Pili uka"



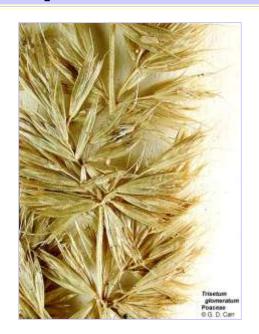




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<u>Trisetum glomeratum</u> Endemic to Lāna`i, Maui, and Hawai`i <u>Common name:</u> "He`u pueo" "Pili uka" "Mountain Pili" <u>Family:</u> Poaceae <u>Listing Status:</u> Not listed. <u>Species Info:</u> There are 50-65 species in the genus <u>Trisetum</u>, mostly from temperate and arctic regions. There are 2 species native to Hawai`i.

<u>Park Distribution:</u> Crater, Kalapawili, Kaupō Gap, NE Rift, West Slope

Elevation in Park: 5340-9900 ft.

Habitat: Barren cinder fields, subalpine grasslands and shrublands, wet forest around bog margins.

<u>General Description:</u> Fairly common grass with tufted stalks, 400-900 cm. tall. Leaves tough and flexible, 10-20 cm. long, 2-6 mm. wide, smooth or slightly hairy. Inflorescence a spike-like panicle. 12-20 cm. long.