



Crater Aeolian Desert

Argyroxiphium sandwicense ssp. macrocephalum “`Āhinahina”



Argyroxiphium sandwicense ssp. **macrocephalum** Subspecies is endemic to East Maui **Common name:** “`Āhinahina” “Hinahina” “Silversword” **Family:** Asteraceae **Listing Status:** Threatened **Species Info:** An endemic genus to Maui and Hawai`i. Silverswords are monocarpic, which means they flower once and then die. It is estimated that a silversword’s lifespan is from 15 to 50 years.

Park Distribution: Crater

Elevation in Park: 7300-10,023 ft.

Habitat: Alpine cinder deserts and subalpine shrublands.

General Description: Rosette shrub, single flowering stem up to 9 ft. tall. Leaves silver, rigid succulent, very narrow, sword shaped. Flowers white to purple.

Artemisia mauiensis “`Āhinahina”

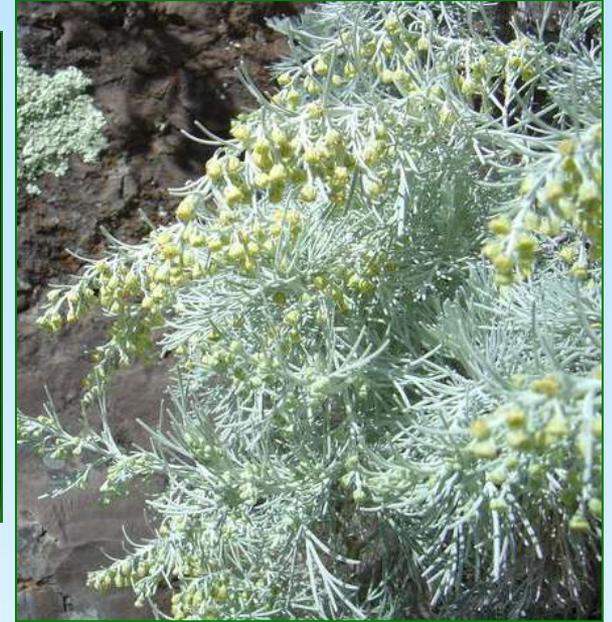


Image Source:
www.botany.hawaii.edu/faculty/carr/images,
www.hear.org, Hale/Images

Artemisia mauiensis Endemic to East Maui **Common name:** “`Āhinahina” **Family:** Asteraceae **Listing Status:** Not listed. **Species Info:** Artemisia is common in the Northern Hemisphere, and well known by species such as tarragon, absinth, wormwood, and sagebrush.

Park Distribution: Crater, Palikū cliffs, Kaupo gap, Manawainui, West Slope, Koolau Cliffs.

Elevation in Park: 4000-9000 ft.

Habitat: Steep rock cliffs and exposed rock surfaces in subalpine shrubland.

General Description: Shrubs branching widely from base. Faintly aromatic, older stems with pale gray bark. Leaves divided several times pinnately, with linear segments less than 1mm. wide, white and hairy on both surfaces. Flowers in panicles, 18-30 per head. Fruits are pale gray achenes, 1-1.5 mm. long.

Bidens micrantha ssp. kalealaha “Ko`oko`olau”



Image Source: www.hear.org

Bidens micrantha ssp. kalealaha Endemic to Lana`i, Maui **Common name:** “Ko`oko`olau” **Family:** Asteraceae
Listing Status: Endangered **Species Info:** All 19 native Bidens species are endemic to the islands, and all are interfertile.

Park Distribution: Crater, above Kapalaoa, Kaupō Gap, Waikane

Elevation in Park: 6100-7700 ft.

Habitat: Shrublands and dry forest.

General Description: Sprawling perennial herb 0.5 to 1.5 m. tall, growing in the steep rock faces and cliffs; dissected leaves with ciliate margins; leaflets ovate-lanceolate, lanceolate or narrowly lanceolate; small yellow flowers at the ends of branches in loose clusters.

Coprosma ernodeoides “Kūkaenēnē”



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

Coprosma ernodeoides Endemic to Maui and Hawai'i **Common name:** “Kūkaenēnē” “Aiakanēnē” “Ieponēnē” “nēnē” “pūnēnē” **Family:** Rubiaceae **Listing Status:** Not listed **Species Info:** 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.”

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

Elevation in Park: 5000-9800 ft.

Habitat: Moist upper elevation sites and barren subalpine zones.

General Description: 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

Coprosma montana Endemic to East Maui and Hawai`i **Common name:** “Pilo” **Family:** Rubiaceae
Listing Status: Not listed. **Species Info:** A genus of 90 species, Hawai`i has 13 species of Coprosma.

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”

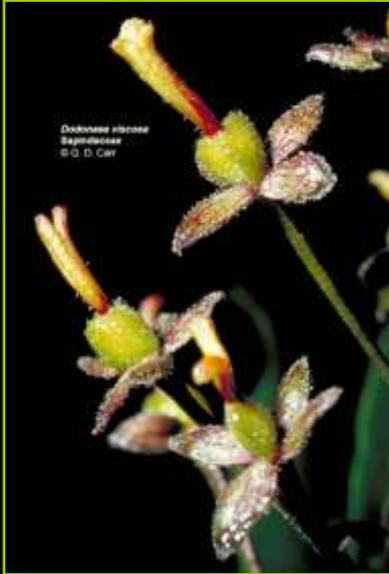


Image Source: www.hear.org/starr/hiplants,
www.botany.hawaii.edu/faculty/carr



Dodonaea viscosa Indigenous to pantropical region. **Common name:** “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.

General Description: 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”



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

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

Park Distribution: Crater, Kaupō Gap, Ko`olau Gap, Manawainui

Elevation in Park: 6000-9000 ft.

Habitat: Subalpine shrubland, barren lava, and cinder fields.

General Description: 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 (Argroxiphium sandwicense ssp. macrocephalum).

Leptecophylla tameiameiae “Pukiawe”



Image Source: www.hear.org

Leptecophylla tameiameiae (formally *Styphelia tameiameiae*) Indigenous to the Marquesas and the main Hawaiian Islands. **Common name:** “Pukiawe” “A`ali`i mahu” **Family:** Epacridaceae **Listing Status:** Not listed. **Species Info:** 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.

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

Elevation in Park: 3500-9900 ft.

Habitat: Mesic forests, wet forests, subalpine and alpine shrubland.

General Description: 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”

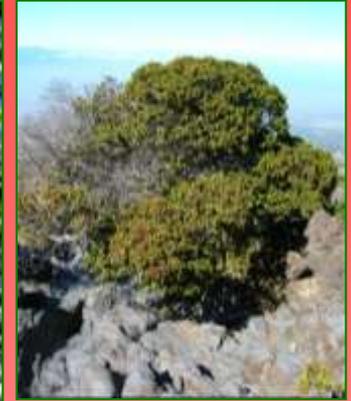


Image Source: www.hear.org, Hale/Images

Metrosideros polymorpha Endemic to the Hawaiian Islands **Common name:** “Ōhi`a” “Ōhia lehua” “Lehua” **Family:** Myrtaceae
Species Info: 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.

Habitat: Cliffs, lava flats, bogs, shrublands, mesic forests, dry forests and rainforests.

General Description: 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”).

Osteomeles anthyllidifolia “`Ūlei”

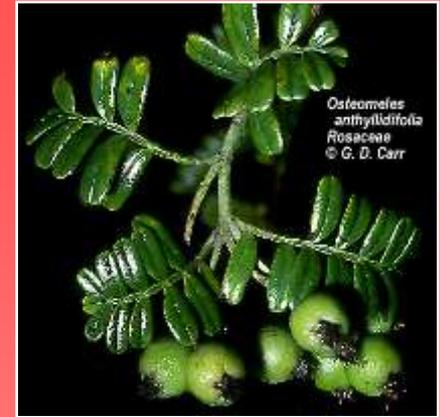
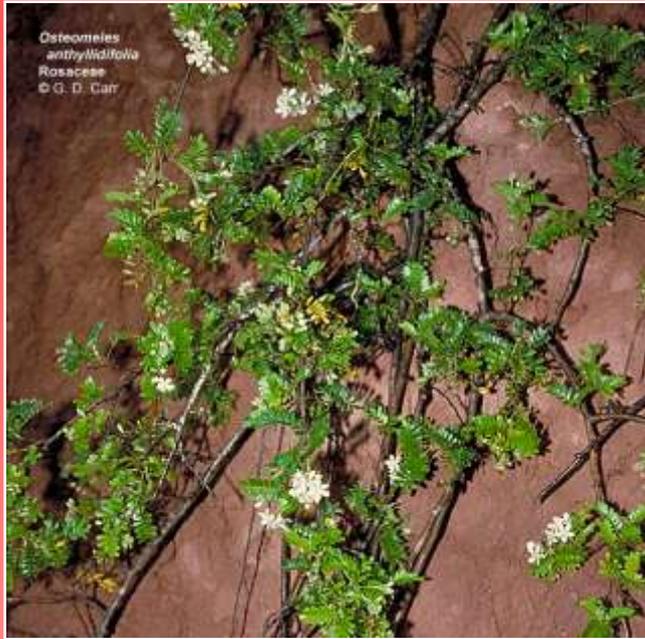


Image Source: Forest and Kim Starr www.hear.org,
www.botany.hawaii.edu/faculty/carr

Osteomeles anthyllidifolia Indigenous to the Cook Islands, Tonga, and the Hawaiian Islands. **Common name:** “`Ūlei” “u`ulei”
Family: Rosaceae **Listing Status:** Not listed. **Species Info:** The wood was used to make hoops for fishing nets, tools for agriculture, a musical instrument called the `ukēkē, and carrying poles. The berries were used for food and dye for kapa.

Park distribution: Crater, Kaupō Gap, Lower Kipahulu Valley, Ka`apahu, Front Country

Elevation: 900-8000 ft.

Habitat: Gulches in subalpine shrubland.

General Description: Large shrubs to small trees, up to 12 ft. tall, branched, with young branches grayish and drooping. Stems usually prostrate. Leaves 2 - 7 cm. long. Fruit white to purple at maturity, 10 mm. in diameter.

Rumex giganteus “Pāwale” “Uhuhakō”



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

Rumex giganteus Endemic to Molokaʻi, Maui, and Hawaiʻi **Common name:** “Pāwale” “Uhuhakō” **Family:** Polygonaceae
Listing Status: Not listed, but rare in the park. **Species Info:** Rare in crater, increasing in population in Kipahulu valley. Of about 200 species in this genus, all 3 native species most likely descended from one plant.

Park Distributuion: Crater, Kipahulu, NE rift, and West Slope

Elevation: 2165-10010 ft.

Habitat: Mesic to wet forest, and subalpine woodland.

General Description: Variable in form, ranging from a trailing liana in forest to an erect shrub in open areas. Leaves are dull in color, oblong, ovate to triangular, and hairless to slightly hairy. Inflorescences are as long as 25-80 cm. and 20-30 cm. wide. Flowers are red or rarely green.

Sanicula sandwicensis



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

Sanicula sandwicensis Endemic to East Maui and Hawai`i **Common name:** "Snakeroot" **Family:** Apiaceae

Listing Status: Not listed, but rare in the park. **Species Info:** Of the 40 species in this genus, 4 are native to Hawai`i. Of these 4 species, 2 are endangered, and 2 are not listed.

Park Distribution: Crater, near `Ō`ili-Pu`u, Kapalaoa, Kipahulu Valley, in upper heath scrub; NE rift, near Wai`ānapanapa; west slope.

Elevation: 6000-8700 ft.

Habitat: Subalpine shrubland and woodland.

General Description: Rare in the park. Stout perennial herb. Leaves are palmately divided and deeply lobed. Flowers are in terminal umbels, petals are yellow.

Silene struthioloides



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

Silene struthioloides Endemic to East Maui and Hawai'i **Common Name:** "Catchfly" **Family:** Caryophyllaceae **Listing Status:** Not listed. **Species Info:** The name Silene is thought to have been derived from the mythological father of Bacchus, Silenus. He was described as being covered with foam and always intoxicated. This is suggested by the sticky excretions of many species of Silene.

Park Distribution: Crater, West Slope

Elevation in Park: 6600-9000 ft.

Habitat: Open cinder fields.

General Description: Uncommon, branching shrubs, stemming from a taproot, 100-300 cm. long. Leaves rigid, awl-shaped. Flowers in elongated cymes, petals greenish white or yellow green, fading to maroon, deeply cleft with two lobes at base. Fruit an oblong capsule.

Sophora chrysophylla “Māmane”



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

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

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

Elevation in Park: 4000-9400 ft.

Habitat: Upper elevation shrubland, dryland, and rainforest.

General Description: 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

Stenogyne microphylla Endemic to East Maui and Hawai'i. **Common name:** "Littleleaf Stenogyne" **Family:** Lamiaceae
Listing Status: Rare, but not listed. **Species Info:** 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.

General Description: 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.

Agrostis sandwicensis



Image
Source:
www.hear.org

Agrostis sandwicensis Endemic to O`ahu, Maui, and Hawai`i **Family:** Poaceae **Listing Status:** Not listed. **Species Info:** Of four species of Agrostis found in the Hawaiian Islands, this is the only endemic species.

Park Distribution: Crater, NE Rift, Big Bog, West Slope

Elevation: 5500-10,000 ft.

Habitat: Barren cinder areas at high elevation.

General Description: Grass growing in dense tufts, aerial stems clustered together, 15-30 cm. tall. Leaf blades 5-10 cm. long, rough, margins irregular, often becoming rolled when drying. Inflorescence a terminal, cylindrical panicle, 8-12 cm. long.

Deschampsia nubigena



Image Source: Forest and Kim Starr, www.hear.org, Hale/images



Deschampsia nubigena Endemic to the Hawaiian islands **Common name:** “Alpine hairgrass” **Family:** Poaceae
Listing Status: Not listed. **Species Info:** Only one member of the genus Deschampsia 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.

Habitat: 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



Image source: www.hear.org



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

Park Distribution: Crater, East and West Kaupō gap, Kipahulu Valley, Manawainui, West Slope.

Elevation: 10 -9000 ft.

Habitat: Diverse habitats, from near the ocean to the subalpine shrubland.

General Description: 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”



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

Gahnia gahniiformis Indigenous to New Zealand and the Hawaiian Islands of Moloka`i, Lāna`i, Maui, and Hawai`i **Common name:** “`Uki”
Family: Cyperaceae **Listing Status:** Not listed. **Species Info:** 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.

Habitat: Lava fields, dry forest, mesic forest, and subalpine shrubland.

General Description: 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.

Trisetum glomeratum “He`u pueo” “Pili uka”



Image
Source:
www.botany.hawaii.edu/faculty/carr/images/
www.hear.org

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

Park Distribution: 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.

General Description: 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.

Asplenium adiantum-nigrum “`Iwa`iwa”



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



Asplenium adiantum-nigrum Indigenous to the Hawaiian Islands, Europe, Africa, Asia, Eurasia, Mexico, the Southwestern United States, Pacific Islands, and Taiwan **Common name:** “`Iwa`iwa” **Family:** **Aspleniaceae** **Listing Status:** Not listed. **Species Info:** **Asplenium** is the largest fern genus in the world, with more than 700 species. It is also the largest fern genus in Hawai`i, with 8 endemic and 11 indigenous species.

Park Distribution: Upper Kipahulu Valley, Crater, Kaupo

Elevation: 1150-10000 ft.

Habitat: Dry lava and cinder to open woods and shrublands.

General Description: Small fern, with fronds 8-40 cm. long and 5-12 cm. wide. Stalks clustered, dark brown at base, light green towards tip. Scales at base linear, dark brown, shiny. Fronds 2-3 pinnate, triangular, pale green, glossy, basal pinnae longest.

Asplenium trichomanes subsp. densum

“`Oāli`i”



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

Asplenium trichomanes subsp. densum Subspecies endemic to East Maui and Hawai`i **Common name:** “`Oāli`i” **Family:** **Aspleniaceae** **Listing Status:** Not listed. **Species Info:** Asplenium trichomanes is one of the most widespread ferns in the world, and is found in rocky habitats.

Park Distribution: Crater, Kipahulu

Elevation: 3940-8860 ft .

Habitat: Open areas in lava fields and kipuka.

General Description: Small fern with clustered fronds. Fronds 7-30 cm. long and .5-1.5 cm. wide. Stems dark brown to black, shiny, with 2 greenish ridges on the upper surface. Fronds 1-pinnate, linear, 15-45 pairs of pinnae, segments alternate, ovate to round. Sori 1-4 on each side of midribs.

Pellaea ternifolia “Kalamoho lau li`i”

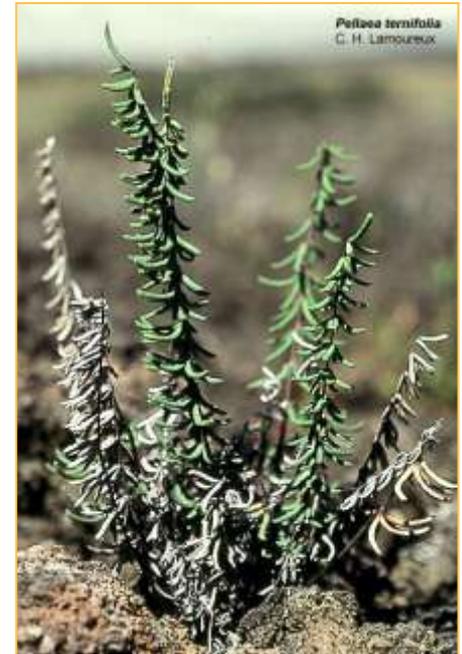


Image Source: Forest and Kim Starr www.hear.org, www.botany.hawaii.edu/faculty/carr/images

Pellaea ternifolia Indigenous to all major Hawaiian Islands, North America, Mexico, Central America, and several Pacific Islands

Common name: “Kalamoho lau li`i” “laukahi” “kalamoho” **Family:** Pteridaceae **Listing Status:** Not listed. **Species Info:** 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.

Habitat: Upper elevation exposed, dry areas.

General Description: 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.

Polypodium pellucidum “`Ae”



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

Polypodium pellucidum Endemic to the Hawaiian Islands **Common name:** “`Ae” **Family:** Polypodiaceae **Listing Status:** Not listed.
Species Info: Of 130 species in this genus, 1 is endemic to Hawai`i, and is highly variable. There are 3 varieties and 2 forms of this species.

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

Elevation: 500-7000 ft

Habitat: Mesic to wet forests (var. pellucidum), open lava flows (var. vulcanicum)

General Description: Medium sized fern, forming colonies through creeping rhizomes. Fronds erect or spreading, up to 55 cm. long. Margins toothed. Stalks covered in scales. Each blade is pinnate, 8-45 pairs of segments, sori midway between midrib and vein, veins translucent.

Sadleria cyatheoides “`Ama`u”



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



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

Park Distribution: Crater, Kipahulu Valley, Kaupō Gap

Elevation: 15-7200 ft.

Habitat: Mesic to wet forests and shrublands.

General Description: 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.