

# A DIGITAL FIELD GUIDE TO PLANT IDENTIFICATION IN NIAULANI RAINFOREST\*

## TREES

### `Ōhi`a, `ōhi`a lehua (*Metrosideros polymorpha*)



75 foot tall `ōhi`a dominating upper forest canopy in Niaulani.



`Ōhi`a (*Metrosideros polymorpha* var. *polymorpha*). This variety has leaves with long, dense hairs below, almost always hairy above. Base of the leaf shaped like the top of a valentine.



`Ōhi`a (*Metrosideros polymorpha* var. *incana*). This `Ōhi`a variety has leaves with dense short hairs below and usually hairless above, but sometimes hairy. Leaf base tapered.

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- `Ōhi`a is the most abundant tall tree in the upper forest canopy at Niaulani.
- Leaves oval to elliptic, arranged opposite each other on stems.
- Leaf margins smooth, tip of leaf not pointed.
- Leaves always less than 7 cm. long.
- The three varieties of `ōhi`a pictured here are present in Niaulani.
- Virtually all of the tall `ōhi`a trees in Niaulani belong to the two varieties with hairy leaves.
- `Ōhi`a got established in Niaulani in the early 18th century after an explosive eruption of Kīlauea Volcano.
- Most `ōhi`a seedlings and saplings are the variety *glaberrima*, with hairless leaves.

\*Includes plants in view from the nature trail and planned trails.



`Ōhi`a (*Metrosideros polymorpha*, var. *glaberrima*). `Ōhi`a variety with leaves hairless above and below.

## TREES

### Koa (*Acacia koa*)



Large, multi-trunked koa along trail.



Both kinds of koa leaves pictured here: sickle-shaped leaves (actually expanded leaf bases) and true compound leaves, made up of numerous tiny leaflets. Compound leaves are characteristic of seedlings and vegetative sprouts.

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Less than ten large koa scattered throughout Niaulani Forest, including along nature trail.
- Koa in Niaulani Forest are as tall as the tallest `ōhi`a.

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### `Ōlapa (*Cheirodendron trigynum*)



(left) leaves with 3-4 leaflets; (right) leaves with 4-5 leaflets.



#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaflet margins smooth and wavy; tip of leaflets fine-pointed.
- Leaflets hairless.
- Leaflet stems flat, not round like all other trees in Niaulani Forest.
- Often grows epiphytically on tree ferns or `ōhi`a, sending down aerial roots into the soil.
- Most common tree in forest canopy below `ōhi`a and above tree ferns; seedlings and saplings fairly common too.

# TREES

## Kāwa`u (*Ilex anomala*)



*Kāwa`u with translucent veins.*

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves with intricate network of translucent veins when backlit.
- Leaves simple and alternately attached along the stems.
- Closely related to holly's (*Ilex* species) on the Mainland with prickly leaves.
- Leaf margin of older kāwa`u smooth, not prickly.
- Kāwa`u evolved in Hawai`i without big mammalian herbivores so lost defenses against herbivory.
- Grows into the tree canopy below `ōhi`a and sometimes as tall as `ōhi`a.
- Saplings often grow as unbranched "treelets."
- The treeless form is very common in trees of continental rain forest, as an adaptation to reach light on a densely shaded forest floor.



*Unbranches, treelet form of young kāwa`u reaching for light.*

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## Kōlea lau nui (*Myrsine lessertiana*)



*Kōlea lau nui (Myrsine lessertiana).*

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Central leaf vein prominent; lateral leaf veins obscure.
- Leaves simple and alternately attached along the stems.
- Grows into secondary tree canopy with `ōlapa and kāwa`u below `ōhi`a.
- Less common than `ōlapa and kāwa`u in Niaulani Forest.
- Typically gets established on forest floor or nurse logs, but occasionally as an epiphyte.



*Backlit, small kōlea lau nui tree reaching into tree fern canopy.*

**TREES**

**Pilo (*Coprosma ochracea*)**



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Small tree growing below and occasionally into the tree fern canopy.
- Leaves opposite on stems.
- Leaves thin and flexible, with soft hairs.



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**Olomea (*Perrottetia sandwicensis*)**



Note red veins in middle of leaves and red leaf stems.

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Main vein and leaf stem reddish. Leaves alternate on stems.
- Short tree potentially growing into the tree fern canopy.
- The 10 or so olomea trees in Niaulani are short, below the tree fern canopy.
- However, a 20 foot tall olomea grows within 10 feet of the trail.
- Deciduous after a fashion; loses its leaves for a 2-3 weeks in "winter."



*Three trunks of an atypical 20 foot tall olomea tree in Niaulani. Larger olomea like this are common in older rainforest.*

Small, typically-sized olomea in Niaulani, beneath the tree fern canopy.

## TREES

### Strawberry guava, waiawī (*Psidium cattleianum*)



*Mature Strawberry guava with immature green fruits. Fruits turn yellow when mature. Hope you never see mature strawberry guava trees like this one in Niaulani. Several small patches of trees removed.*

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves opposite each other on stem.
- Leaves less than 7 cm long.
- Leaf tip tapering to a blunt point. Small, invasive, root sprouting tree.
- Mature waiawī trees removed in Niaulani Forest because of control efforts.
- Seedlings abundant throughout Niaulani.
- Seedlings come from the soil seed bank or birds dispersal of seeds into Niaulani.
- Many dozens of seedlings uprooted and removed from the forest during monthly weed control sessions.



*A wet strawberry guava seedling growing up through a thin layer of `ōhi`a and tree fern leaf litter. Without frequent removal of these seedlings, Niaulani would eventually develop into a strawberry guava forest, now that guava does not have to compete with wall-to-wall stands of Himalyan (kahili) ginger, removed by VAC volunteers.*

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# TREES FERNS

## Hāpu`u, hāpu`u pulu (*Cibotium glaucum*)



### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- By far, the most abundant tree fern species in Niaulani.
- Underside of the blade is whitish-green.
- Abundant soft, usually fluffy hairs (“pulu”) on fiddleheads and lower stems.
- Becoming more abundant as this rainforest enters the “tree fern” stage of rainforest succession, 400-3,000 years.



*Abundant pulu on fiddleheads and lower frond stems.*

*Underside of fronds of white-green in color.*

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## Hāpu`u `i`i (*Cibotium menziesii*)



*Dark bristly hairs on upper stems.*



*Dull green color of underside of frond blade.*

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Dark hairs on upper stem, hairs bristly at the base.
- Lower surface of the blade is dull green.
- Second most common tree fern species in Niaulani rainforest and becoming more abundant.
- Many young hāpu`u `i`i in Niaulani on nurse logs along trail.

## TREES FERNS

### Hāpu`u, meu (*Cibotium chamissoi*)



Top of trunk with modest covering of pulu on frond bases.

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Only modest amounts of hairs (pulu) on fiddleheads and at base of frond stems.
- Underside of frond blade dull green.
- Often a persistent skirt of dead fronds hanging down along trunk in older ferns.
- Uncommon in Niaulani rainforest.
- Several large individuals along the trail near the giant koa.



Dull-green color of underside of frond blade (left side of image).

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### `Ama`u, ma`u (*Sadleria pallida*)



Translucent veins in backlit view of underside of frond.



Small `ama`u on forest floor.

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Underside of blade green, with translucent veins.
- Fairly common in some sites in understory of Niaulani Forest.

## TREES FERNS

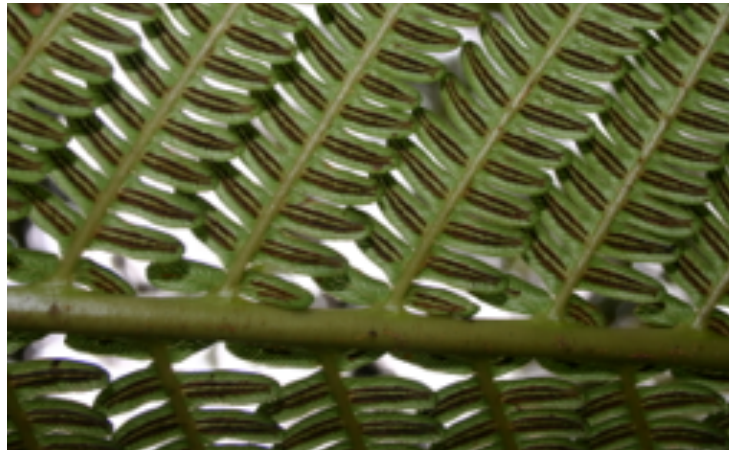
**`Ama`u, `āma`uma`u (*Sadleria cyatheoides*)**



*`Ama`u fern growing in a large forest gap.*

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Underside of blade (outside of black spore-producing structures), whitish-green in color.
- Very uncommon in Nialani.
- Found on edge of forest or in gaps.
- Requires more light than *Sadleria pallida*.



*Backlit view of white underside of frond with linear, black spore-producing structures and non-translucent veins.*

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VINES

***Stenogyne calaminthoides***



*Spreading on the forest floor. The opposite leaf pattern is recognizable in this image.*

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Recognizable as a mint by its square stems and opposite leaves.
- Reintroduced by planting and thriving now in Niaulani Forest.
- An herbaceous vine, climbing trees and tree ferns or spreading on the forest floor.
- Little minty taste or odor, a “mintless mint,” having evolved in Hawai‘i without plant eating mammals.
- No official common name; probably OK to call it mā`ohi`ohi, common name of another mint in this genus.



*Climbing on hāpu`u trunk.*

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**`Ie`ie (*Freycinetia arborea*)**



*`Ie`ie as a climbing vine a tree fern host with its grasping roots*

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- `Ie`ie is a climbing vine on `ōhi`a and hāpu`u,
- It is also a spreading vine on the forest floor.
- `Ie`ie is fairly common at Niaulani in scattered locations.
- Its abundance is partly accounted for by historic fencing and protection from feral pigs and cattle when Niaulani was the Kīlauea Ranger Station.
- Some of its abundance may be also due to the more recent pig fencing and removal of the smothering layers of kahili ginger.



*`Ie`ie vine spreading on the forest floor, punctuated by upright stems.*

**VINES**

**Hoi kuahiwi (*Smilax melastomifolia*)**



Close up of a climbing hoi kuahiwi vine.



Climbing and spreading hoi kuahiwi vine.

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Climbs trees and tree ferns or spreads on forest floor.
- A “briarless briar,” having lost its poky defenses, evolving in Hawai`i without plant eating mammals.

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**Maile (*Alyxia stellata*)**



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Vine with opposite, leathery leaves.
- When leaves cut, the white sap the exuding white sap has a pleasant odor because of the presence of coumarin.
- Usually spreading on the forest floor.
- Most maile in Niaulani probably from plantings.
- Uncommon in Niaulani.



*Small maile vine. The dark patches on the leaves are a sooty mold. The fungus may reduce photosynthesis but is no threat to maile; it is a native species.*

**WILL REPACE PHOTO**

# VINES

## Uluhe (*Dicranopteris linearis*)

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Viney climbing and spreading fern.
- Frond dichotomously divided.
- Fiddleheads and their stems purple.
- Uncommon in Niaulani.
- Small patches only and in open areas with lots of available light such as forest edge or big gaps.



*Large patch of climbing uluhe on forest edge (not in Niaulani).*



*Dichotomously branched frond blades with purple fiddleheads.*

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## SHRUBS

### Kanawao (*Broussaisia arguta*)



(left) Impressed veins prominent.  
(right) Vegetatively spreading patch of kanawao.



#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves opposite in pairs or in whorls of three.
- Veins noticeably impressed on upper surface of leaf.
- Common name in English is “Hawaiian hydrangea”; it is in the hydrangea family.
- Its umbrella-like Inflorescence resembles that of ornamental hydrangea.
- Provably most abundant native shrub in Niauani.
- Spreads vegetatively from near surface roots.
- For this reason highly vulnerable to cattle browsing and pig rooting; spreading now that protected.

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### Ilihia (*Cyrtandra platyphylla*)



Note bell-shaped, hanging flower and opposite leaves.

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Large, broadly oval leaves opposite each other on stem.
- Leaves densely and softly hairy on both surfaces; nicknamed by a local botanist as the “Hawaiian Petting Plant.”
- Scattered in forest understory.
- Spreading, mostly vegetatively, now that pigs and ginger removed.



Short, vegetatively spreading clone.

## SHRUBS

### Ha`iwale (*Cyrtandra lysiosepala*)



Vegetatively spreading clone of ha`iwale.

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves opposite or in whorls of three.
- Leaves very sparsely hairy.
- Leaf veins deeply impressed on upper surface.
- Scattered spreading clones.

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### Hybrid? *Cyrtandra platyphylla* X *Cyrtandra lysiosepala*?

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaf shape and hairiness intermediate between that of *Cyrtandra platyphylla* and *Cyrtandra lysiosepala*, the two most common *Cyrtandra* species at Nialani.
- Leaves broader than *Cyrtandra lysiosepala* and narrower than *Cyrtandra platyphylla*.
- More noticeably hairy than *Cyrtandra lysiosepala* but hairs much less dense than *Cyrtandra platyphylla*.
- *Cyrtandras* are known to readily hybridize in other locations.

## SHRUBS

### `Ōhā wai (*Clermontia parviflora*)



#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves alternate, often with purple leaf stems.
- White latex produced when leaves or fruits are cut.
- Grows terrestrially, on nurse logs, and occasionally as an epiphyte.
- Occasional shrub in Niaulani.
- Short-lived shrub species.

(left). Note purple leaf stems and main leaf veins. (right) Declining older shrub of `ōhā wai.



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### `Ōhā kēpau (*Clermontia hawaiiensis*)

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves never with a purple leaf stem.
- Leaf blades typically longer than 15 cm.
- Leaves somewhat convex-concave with slightly undulating margins.
- Fruits usually greater than 25 mm long, larger than *C. parviflora*
- White latex produced when leaves or fruits are cut.
- Typically grows terrestrially.
- Rare shrub in Niaulani.



A young individual of `ōhā kēpau.

**SHRUBS**

**Manono (*Kadua affinis*)**



(left) Elongate, opposite, leathery, and hairless leaves of manono. (right) Manono and as a small tree/shrub, with upright stem and lateral branches from the same plant spreading on the



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Leaves opposite and leathery, more than 7 cm long.
- Leaves shiny green on both surfaces, hairless.
- Life form variable in Niaulani; small trees, shrub-like with multiple stems, or even vine-like with some horizontal branches on the forest floor.
- Fairly common but scattered in Niaulani.

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**`Ōhelo kau lā`au  
(*Vaccinium calycinum*)**



Small, probably young plant with fine teeth on margin of leaf.

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Leaves thin and flexible, deciduous for a few weeks in “winter.”
- Unusual for local rainforest, large shrubby individuals rare at Niaulani.
- Small individuals, with smaller leaves, fairly common, especially on nurse logs.



Small vine-like shrub older plant, with slightly convex-concave leaves. Note stem, upper left of image, rooted in a tree fern nurse log.

# SHRUBS

## `Akia (*Wikstroemia sandwichensis*)



### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Leaves opposite each other on stem.
- Spindly shrub to small tree.
- Rare in Niaulani, reintroduced along trail.



*Tall, open `akia shrub.*

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## Kāmakahala (*Labordia hedyosmifolia*)



*Kāmakahala in flower.*

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Evergreen opposite leaves.
- Leaves pale or whitish green on lower surface (unless backlit like image on left).
- Short, upright shrub; also spreads in a vine fashion with upright stems.
- Reintroduced and planted along trail.



*A vegetatively spreading kāmakahala shrub.*



**HERBS**

**Painiu (*Astelia menziesiana*)**



(left) Note white underside of the leaves. This helps distinguish it from `ie`ie (page 9), with similar leaves but green on both surfaces. (right) Patch of vegetatively spreading painiu on forest floor.



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Painiu is a vegetatively spreading herbaceous plant in the lily family.
- Underside of the leaf is white.
- Patches of painiu fairly common in Niaulani where it is now spreading, mostly vegetatively from underground stems, following the removal of feral pigs and understory ginger.

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**`Ala`ala wainui (*Peperomia hypoleuca*)**



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Underside of leaf usually red between pale veins.
- Most abundant *Peperomia* species in Niaulani.
- Found on forest floor, nurse logs, and very occasionally as an epiphyte.



Portion of the largest patch of *Peperomia hypoleuca* in Niaulani

**HERBS**

**`Ala`ala wainui (*Peperomia mebranceum*)**



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Underside of leaf light green, never red.
- Flower/fruit bearing stalks usually greater than 6-10 cm long.
- Rare, in Niaulani.
- Associated with the trail and possibly planted in late 1990s by the Niaulani caretaker.

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**`Ala`ala wainui (*Peperomia cookiana*)**

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Stems and leaves covered with dense hairs.
- Stems red.
- Growing on forest floor or occasionally epiphytically on tree ferns.
- Rare and located only near the trail, suggesting it was planted by the Niaulani caretaker in the late 1990s.



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**Kāhili, Himalayan ginger (*Hedychium gardnerianum*)**

Most of Niaulani Forest looked like this, wall-to-wall stands of 3-5 foot tall kāhili ginger in the understory, before systematic control work began in 2007. Kāhili ginger is a forest killer, displacing understory plants and preventing trees from replacing themselves. This is also a picture of the future of Niaulani Forest if monthly weed control sessions were terminated.



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Large, broad leaves.
- Yellow flowers in late summer.
- In the same plant family as culinary ginger, grown as a crop on Hawai`i Island.
- Spreads vegetatively by large, fleshy rhizomes and also by seeds.
- Seedlings and sprouts from relictual tiny rhizomes need to be removed regularly to maintain the restoration in progress at Niaulani Forest.

# FERNS

## Kolokolo (*Adenophorus tenellus*)



Short kolokolo fronds, growing epiphytically.

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Narrow, grass-like fronds, always epiphytic.
- Uncommon in Niaulani.



Longer kolokolo fronds in Niaulani.

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## Punana manu? (*Asplenium polyodon*)



Linear sori (spore-producing structures) on underside of frond blade, extending half way or more to edge of the blade segments.

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Spore-producing structures (sori) spreading at least half-way to the margin of the blade segments.
- Uncommon in Niaulani but a few plants along the trail.
- *Asplenium contiguum*, closely resembles *A. polyodon*, but with sori extending less than half-way to the pinnae margin; very rare in Niaulani.



# FERNS

## `Ākōlea (*Athyrium microphyllum*)



Close-up view of top of frond blade with soft, tiny, translucent spines. *Dryopteris rubiginosa* has hair-like structures on top of blade but also has dense, silvery scales on main stems; `ākolea does not.

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Minute spines projecting from the top of the frond blade, mostly on the mid-vein.
- Frond blade highly divided.
- Small, often horizontal trunk.
- Rare in Niaulani.

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## Puapua moa (*Ophioderma pendulum*)

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Typically a hanging, branching epiphyte, usually on tree fern trunks.
- Spore producing structures on smaller, specialized frond blades (not present here), rather than the undersurface of the bigger blades, like most ferns.
- Rare in Niaulani.



# FERNS

## Hō`i`o (*Diplazium sandwichianum*)

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Fronds divided three times.
- Spore producing structures on underside of blade are elongate, slightly curved on one side, and at about a 45 degree angle.
- Bigger plants with a small, black trunk.
- Common in Niaulani including along the trail.



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## *Dryopteris rubiginosa*



### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Only fern in Hawai`i with abundant silvery white narrow scales along main frond stem.
- Very rare in Niaulani, but one grows along the trail.

# FERNS

## Pala (*Marrattia douglasii*)



### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Base of stem swollen and with two leafy projections from the swollen base.
- Now very rare in Nialani; formerly with three large patches.
- May have been planted by the Nialani caretaker in the late 1990s.

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## Palapalai (*Microlepia strigosa*)

### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Fronds very finely divided.
- Veins on lower surface of frond noticeably raised, darker green than surrounding blade.
- Long soft hairs on underside make younger blades soft to the touch.
- Sori (spore-producing structures) tiny, in clefts of the division along the margin of the blade.
- Scattered clumps of palapalai planted along trail and elsewhere.



**Palai hinahina (*Hymenophyllum lanceolatum*)**



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- A small filmy fern with thin, translucent frond blades.
- Stems and veins dark brown.
- Margins and veins of blade with sparse unbranched hairs.
- Always epiphytic on `ōhi`a or tree ferns.
- Abundant and widespread in Niaulani.

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**`Ōhi`a kū (*Hymenophyllum recurvum*)**

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Small filmy fern with thin, translucent frond blades.
- No hairs on fronds.
- Stems and veins not brown.
- Always epiphytic.
- Rare in Niaulani.



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**Palai hihi (*Vandenboschia davallioides*)**



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Fronds narrowed at base.
- Light green frond blades.
- Creeping on nurse logs, epiphytic, or rarely on forest floor.
- Rare in Niaulani but several small patches close to the trail.

(left) Small palai hihi growing on forest floor. Usually larger individuals found on nurse logs or epiphytic on `ōhi`a.

### Moa (*Psilotum complanatum*)



#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Also known as “flat stemmed whisk fern.
- Flattened stems, usually arched and hanging down.
- The whisk ferns are now classified as a fern family.
- Tiny orbicular spore producing structures on margins of stems.
- Always epiphytic.
- Occasional in Niaulani Forest.

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### Moa (*Psilotum nudum*)

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Stems three-sided.
- Usually upright and arched
- Much less common in Niaulani than the moa species above.





### Spreading selaginella (*Selaginella kraussiana*)

#### IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT

- Spreading selaginella is an invasive species in Niaulani.
- Introduced to Niaulani along the nature trail from foot gear of trail users, now spreading away from the trail.
- Can form dense mats that prevent establishment of native plants.
- Being controlled with herbicides after hand pulling and mulching proved to be ineffective.
- Spreading selaginella is not ferns; it is a “spike moss.” Spikemosses, along with clubhouses are an ancient group of vascular plants.



- *Spreading selaginella spreading on the trunk of a tree fern. Usually this invasive plant spreads on the forest floor.*





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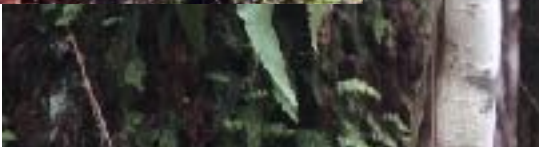


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**Mākue (*Elaphoglossum paleaceum*).** Very uncommon fern, almost always growing as an epiphyte.

**Mākue lau li'i (*Oreogrammitis hookeri*).** Rare epiphyte, mostly in naturally protected sites.



**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

**IDENTIFYING FEATURES AND WHERE TO FIND THIS PLANT**

- Bulbous structure at the base of the stem with two small “wings.”
- Very rare now in Niaulani, inside the loop trail.



Hybrid Psilotum