



Native Hawaiian Plants as Ground Covers

by Gregory A. Koob

Many native Hawaiian plants can serve well as ground covers. They work well in a variety of environments, from oceanfront gardens to landscapes up in the mountains and anywhere inbetween. Almost any place a nonnative plant works as a ground cover, there is a native plant that will work just as well. The only ground cover that cannot be replaced with a native plant is lawn grass. And with a little research, that may change some day as well.

When choosing native plants for ground covers, take into consideration the natural environment that plant normally occurs in. But don't let that restrict your thinking. There are many native plants that work as ground covers that come from beach environments that work very well in the oceanside landscape, often better than non-natives. But many of those plants also work well away from the ocean.

I'm not a big fan of using commercial fertilizers with native plants. After all, our native plants evolved with our native soils. But, if your landscape plants are showing signs of nutrient deficiencies, and your soil test recommends adding fertilizers (using ornamental plants as surrogates for fertilizer rates) then add fertilizer at about half the recommended rates. I've seen many native plants that have been "beefed up" with too much nitrogen, at the expense of flowering and resistance to pests, drought and diseases.

Native plants provide habitat for our native insects. A mixed native landscape will provide the life-history needs of many of our native pollinators. But if you want to grow native plants for pollinator habitat, make sure to limit your use of nonspecific pesticides.

Hinahina, 'ilima, pōhinahina and pā'ūohi'iaka are beach plants that all work well in valley and lower-elevation landscapes. 'Ilima also works well up to mid-elevation landscapes. Use the following list as a guide to increasing your use of native plants in the landscape. This is just a starter list. There are many more native plants that work well as ground covers.

Learn more about gardening and plants in Hawai'i at Greg's blog, [Hawaii Horticulture](http://hihort.blogspot.com/), <http://hihort.blogspot.com/>

'Ilima papa

Sida fallax

Growth Type: Spreading shrub.

Height: 2 to 4 inches.

Spread: 3 to 4 feet.

Flowers: Yellow, nickel- to quarter-sized, flat, hibiscus-like.

Foliage: Rounded dark to dull green leaves with scalloped edges.

Light: Full sun to part shade.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of salt, wind and drought.

Planting Distance: 12 to 18 inches.

Trimming requirements: Trim growing point occasionally to encourage branching and to keep the plants confined to the growing area.

Notes: There is also a taller growing form of the same species. Use the low-growing type for ground cover. 'Ilima flowers are strung into lei that were in pre-contact times restricted to the ali'i class.



Above: 'Ilima may be best known for the lei made from its flowers, but it makes a perfectly good ground cover as well.

Right: Pā'ūohi'iaka does well in full sun or in partial shade. Its creeping habit makes it a good choice to use around stepping stones.

Pā'ūohi'iaka

Jacquemontia ovalifolia

ssp. sandwicensis

Growth Type: Sprawling, non-twining vine.

Height: 2 to 4 inches.

Spread: 3 to 5 feet.

Flowers: Small, sky-blue, cup-shaped.

Foliage: Medium-green, egg-shaped leaves with smooth or slightly ruffled edges.

Light: Full sun to part shade.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of wind and salt and mild droughts.

Planting Distance: 12 to 18 inches.

Trimming requirements: Trim growing points to encourage branching and to keep the plants confined to the growing area.

Notes: Pā'ūohi'iaka means Hi'iaka's skirt and plays a central role in a story about Pele and her sister Hi'iaka.



Ākia

Wikstroemia uva-ursi

Growth Type: Short, spreading shrub.

Height: 6 to 36 inches.

Spread: 2 to 5 feet.

Flowers: Small, greenish yellow, trumpet-shaped.

Foliage: Small, dark to olive-green, rounded leaves on very short petioles.

Light: Full sun.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of salt, wind and drought.

Planting Distance: 12 to 24 inches.

Trimming requirements: Trim only to shape or encourage more branching.

Notes: The flowers are sometimes followed by orange or red, round fruits. Some people consider this plant poisonous and it should not be planted where children may put its parts in their mouths, though there have been no reported poisonings from this plant. Some people object to the flowers' smell. This is a very popular landscape plant. There are several growth habits, from very prostrate to moderately upright. Cultivar selection is being done by some nurseries.



Ākia is the most commonly used native ground cover in Hawaii landscapes today.

Pōhinahina

Vitex rotundifolia

Growth Type: Spreading shrub.

Height: 2 to 4 feet.

Spread: 3 to 6 feet.

Flowers: Small, light-blue to purple flowers.

Foliage: Silvery to green, rounded leaves that give off a spicy odor when crushed or brushed up against.

Light: Full sun to part shade.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of wind, salt and drought.

Planting Distance: 12 to 24 inches.

Trimming requirements: Trim to shape or encourage branching.

Notes: The flowers, fruit (small, round, silvery or purple balls) and foliage are all used in lei-making. In a mass planting this works well as a ground cover but it can also be planted as a border or a short hedge.



Pōhinahina works as either a tall ground cover, a border planting or a short hedge. (Queen Liliuokalani Garden, Honolulu)

'Uki'uki

Dianella sandwicensis

Growth Type: Clumping herb.

Height: 1 to 3 feet.

Spread: 2 to 3 feet.

Flowers: Small white to blue flowers on branched spikes followed by very ornamental blue fruit.

Foliage: Lily- or iris-like, light to dark green, strap-shaped leaves

Light: Full sun to part shade.

Moisture: Wet or dry.

Tolerances: Tolerant of standing water, drought and wind.

Planting Distance: 1 to 2 feet.

Trimming requirements: None.

Notes: Because of its familiar lily-like foliage and blue flowers and fruit, this plant should prove to be a popular ground cover as professionals and homeowners become familiar with it. It is tolerant of a wide range of growing conditions from wet to dry and full sun to shade. Once it starts to flower, it does so all year long and there are always flowers and fruit on established plants.



Hinahina

Heliotropium anomalum *var. argenteum*

Growth Type: Spreading herb.

Height: 2 to 6 inches.

Spread: 2 to 4 feet.

Flowers: Fragrant, small white flowers in clumps on upright stalks.

Foliage: Silvery or white, small, lance-shaped leaves in rosettes.

Light: Full sun.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of wind, salt, heat and drought.

Planting Distance: 6 to 12 inches.

Trimming requirements: None.

Notes: This plant does best in sandy, beach plantings but will perform well in other areas if it has well-drained soil, plenty of sun and is kept on the dry side.



Above: Hinahina works well in very sunny areas with good drainage. It's perfect for xeriscape gardens.

Left: 'Uki'uki has the potential to be a popular ground cover. Its blue flowers and fruit and lily-like leaves combined with its ability to thrive in varied habitats make it ideal for most landscapes.

I'lie'e

Plumbago zeylanica

Growth Type: Spreading, vining shrub.

Height: 6 to 18 inches.

Spread: 3 to 6 feet.

Flowers: Star-shaped white flowers at the ends of branches.

Foliage: Soft, thin, medium-green leaves with scalloped edges.

Light: Full sun to part shade.

Moisture: Looks best with regular irrigation.

Tolerances: Tolerant of salt, drought and wind.

Planting Distance: 1 to 3 feet.

Trimming requirements: Trim to keep confined to the planting area and to encourage branching.

Notes: 'Ilie'e can be used wherever the invasive wedelia is used. It looks best with regular irrigation during the summer but will tolerate moderate drought. It will survive severe droughts but may look ragged until the rains return.



Use 'ilie'e wherever you would use wedelia. With regular irrigating, 'ilie'e thrives in full sun or partial shade.

Nanea

Vigna marina

Growth Type: Sprawling vine.

Height: 6 to 8 inches.

Spread: 4 to 8 feet.

Flowers: Yellow, pea-like flowers.

Foliage: Large leaves with three main segments, like a bean leaf.

Light: Full sun to part shade.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of wind, salt, heat and drought.

Planting Distance: 1 to 3 feet.

Trimming requirements: Needs regular trimming to keep confined to a planting area.

Notes: Nanea will grow up trellises as well as work as a ground cover. It can be aggressive so ample growing area should be given to it.



Nanea is an aggressive ground cover perfect for quickly covering large areas.

'Ae'ae

Bacopa monnieri

Growth Type: Spreading herb.

Height: 2 to 4 inches.

Spread: 1 to 4 feet.

Flowers: Small, blue flowers.

Foliage: Small, light green shiny leaves.

Light: Full sun to part shade.

Moisture: Prefers to be kept constantly moist or wet. It will grow in standing water and ponds or streams.

Tolerances: Tolerant of wet areas and salt.

Planting Distance: 6 to 18 inches.

Trimming requirements: Trim to keep confined to a planting area. Will tolerate mowing or string trimming.

Notes: 'Ae'ae is the ideal plant for sunny, wet areas in the garden. It tolerates brackish water as well as fresh water.



'Ae'ae is one of the few ground covers that thrives in very wet areas. Here it is a ground cover in a planter at Ala Moana Shopping Center

'Ākulikuli

Sesuvium portulacastrum

Growth Type: Spreading, succulent herb.

Height: 2 to 5 inches.

Spread: 1 to 2 feet.

Flowers: Small, pink to light purple, star-shaped flowers.

Foliage: Light green to tinged red, small succulent leaves.

Light: Full sun.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of wind, heat, salt and drought.

Planting Distance: 6 to 12 inches.

Trimming requirements: None.

Notes: A very good ground cover for beach areas.



The real 'ākulikuli is a succulent ground cover ideal for sunny, dry areas and beach plantings.

Nehe

Melanthera integrifolia

Growth Type: Spreading herb.

Height: 2 to 5 inches.

Spread: 2 to 5 feet.

Flowers: Daisy-like, small yellow flowers.

Foliage: Small, light to olive green leaves.

Light: Full sun to part shade.

Moisture: Allow to dry between waterings.

Tolerances: Tolerant of wind, salt, drought and heat.

Planting Distance: 6 to 12 inches.

Trimming requirements: Trim to keep confined to planting area and to encourage branching.

Notes: Rejuvenate the planting every year with a thorough trimming to encourage new growth. Slugs and spittle bugs may attack the foliage. May be sensitive to some slug and snail poisons.



Nehe is another native ground cover that works well in hot, sunny and dry areas and beach plantings.