

# Cyclosorus sandwicensis (Brack.) Copel.

## Family

Thelypteridaceae

## Hawaiian Name

ho'i'o kula

## Synonyms

*Stenogramma sandwicensis* Brack.; *Dryopteris stegnogrammoides* (Baker) C. Chr.; *Phegopteris microdendron* D. C. Eaton; *Phegopteris polycarpa* (Hook. & Arn.) Hillebr.; *Phegopteris polycarpa* var. *depauperata* Hillebr.; *Phegopteris polycarpa* var. *kauaiensis* Hillebr.; \**Pneumatopteris sandwicensis* (Brack.) Holttum; *Polypodium polycarpon* Hook. & Arn.; *Polypodium stegnogrammoides* Baker; *Thelypteris hawaiiensis* C. F. Reed; *Thelypteris stegnogrammoides* (Baker) Fosberg

## Habitat

terrestrial.

## Description

Rhizomes (stems): **erect**, with scales. Scales medium to dark brown (may be tinged red), **concolorous**.

Fronds (leaves): **erect** (may be arching), **20-100 cm long** , not **proliferous**.

Stipes (petioles): not winged, grooved, light brown/tan/straw-colored, **concolorous**, with scales and hairs. Scales somewhat **clathrate**, medium to dark brown (may be tinged red), **concolorous**, sparse, throughout the lower half or only at the extreme base. Hairs **multicellular (uniseriate)**, clear/white, dense throughout.

Vasculature at base of stipe (petiole): two elongate/crescent-shaped vascular bundles.

Blades: **pinnate**, 12-48 cm wide, **lanceolate/ovate**, margins entire to **crenate**, lamina incised 1/4 to midrib (lobed) or not, apex **pinnatifid**, **chartaceous** or **coriaceous**, with hairs. Hairs **multicellular (uniseriate)**, clear/white, dense throughout.

Veins: **prominent**, **5-6(-8) vein pairs uniting to form an excurrent vein to sinuses** , not uniting to form a **marginal** or **costal commissural vein**, not **forked**.

Pinnae: 13-45 pairs, **lanceolate/ovate**, **proximal pinnae not reduced in size** .

Rachises (midribs): not winged, grooved, light brown/tan/straw-colored, with hairs. Hairs **multicellular (uniseriate)**, clear/white, dense throughout.

Costae: **costal groove** not continuous with rachis groove, with hairs.

Sori: **round**, **medial**, 8-10(-17) sori per segment, paraphyses present.

Indusia: **absent**.



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crozier with aerophores

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**Island Distribution**

Kaua'i, O'ahu, Moloka'i, Lāna'i, Maui, and Hawai'i

**Status**

Endemic

**Occurrence**

Common

**Elevational Range**

750-2100 m