

HAND FERN

Cheiroglossa palmata (L.) K. Presl

Synonyms: *Ophioglossum palmatum* L.

Family: Ophioglossaceae (adder's tongue)

FNAI Ranks: G4/S3

Legal Status: US-none; FL-none



Plants epiphytic on cabbage palm (*Sabal palmetto*); leaves palmately lobed lacking central dark veins; spore-bearing spike arising from base of leaf stalk.

Photo taken at Salt Lake WMA by Kelly Anderson.

Field Description: Fern with flat, fleshy, drooping, coarsely veined, evergreen leaves, with up to 7 lobes or "fingers" and long leaf stalks. **Spores** produced on small erect structures (**sporangial spikes**) arising from the leaf stalk. **Roots** are buried in humus accumulated in the bases of palm fronds.

Similar Species: Golden polypody (*Phlebodium aureum*) also grows from palm "boots," but its leaves are thin, not fleshy, and have more segments, most bearing conspicuous, round clusters of spores (sori) on the back side.

Related Rare Species: None

Habitat: Hammocks and cypress swamps; epiphytic, usually on *Sabal palmetto*.

Best Survey Season: All year; Sporangia mature between December and May (Nelson 2000)

Range-wide Distribution: Peninsular Florida, the West Indies, Central America, South America and the Old World tropics. In Florida, hand fern is known mainly from the southern peninsula.

Conservation Status: Early 20th century observers spoke of hand fern gathered by the wagon load from Florida's swamps. Hand fern is still collected but it dies in cultivation due to lack of essential fungi. When palm boots decay and fall to the ground, or are destroyed by fire, hand ferns are killed. Of the roughly 79 populations currently known in FL, around 30 of these are found on protected land.

Protection and Management: Protect from collection. There has been some speculation that frequent fires in hammocks have caused the decline of hand fern populations (Nelson 2000). This rare fern is particularly sensitive to adversely low humidity and high levels of desiccating sunlight. Alterations in forest hydrology and humidity levels, logging operations, and fire in a hydric hammock can reduce suitable habitat for hand fern.

References: Chrysler 1941, Coile 2000, FNA 1993, IRC 1999, Langdon 1981a, Mesler 1974, Nauman 1986, Nelson 2000, Small 1938, Ward 1979, Wunderlin and Hansen 2000a, Wunderlin and Hansen 2000b.



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Growing in wet pine cabbage palm (*Sabal palmetto*) flatwoods. Commonly occurring in area of dense cabbage palm. Photo taken at Salt Lake WMA by Kelly Anderson.

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