

TECTARIA INCISA CAV.

Dryopteridaceae/Wood Fern Family

- Common Name:** Incised halberd fern
Synonymy: *Tectaria martinicensis* (Spreng.) Copel., *Aspidium martinicense* Spreng., *Aspidium macrophyllum* Rudolphi [sometimes placed in Aspleniaceae, or placed under illegitimate family name of Aspidiaceae]
Origin: Mexico, Central and South America, West Indies

Botanical Description: Terrestrial or epilithic (on rock) in habit. Rhizomes stout, short-creeping, with brownish black scales. Leaves (fronds) pale green, once pinnate, fertile and sterile fronds similar in shape and size; petioles as long or longer than blades, pale brown above, dark brown and scaly at base, pubescent on both sides; blades to 90 cm (35 in) long and 60 cm (24 in) wide, with a large, deeply lobed terminal leaflet (pinna) and below that, 3-6 pairs of mostly entire pinnae; each leaflet of the lowest pair with usually 1 large, downward-pointing (basispic) lobe. Sori in 1-several rows on lower surface of leaflets between midvein and margin; indusia (tissue covering sporangia) round-reniform, attached at 1 edge (not centrally attached).

NOTE: May be confused with native *T. heracleifolia* (Willd.) Underw., which has centrally attached (peltate) indusia; dark green, slightly shiny fronds, with all margins at least shallowly lobed and on each of the basal pinnae at least 2 basispic lobes. Other *Tectaria* species in Florida much smaller in size.

Ecological Significance: First noted in Florida in the late 1970s (Nauman 1978, Austin *et al.* 1979), in a few localities. Since noted for several more localities in Dade and Broward County tropical hammocks (D. Austin, Florida Atlantic University, 1997 personal communication), where it competes in the understory with rare native ferns, such as the state-listed threatened species, *T. heracleifolia*. Thought by some to be of uncertain origin (G. Gann, Institute for Regional Conservation, 1997 personal communication) or possibly native (Lucansky, University of Florida, 1997 personal communication), but appearing from best current evidence to be a recent introduction. Not described for Florida in earlier works (Small 1918a and 1918b, Long and Lakela 1971, Lakela and Long 1976). By 1985 (Lellinger), noted as "rare to infrequent" in Dade and Broward. Grown as a landscape plant (Lellinger 1985) and possibly escaped from cultivation via dumping of yard refuse (Ward, University of Florida, 1997 personal communication). Considered "often a weedy plant" by Standley (1927) in describing ferns of the Panama Canal Zone, a plant "able to persist in partly denuded areas" of Barro Colorado Island. Also noted by Kenoyer (1928) as remaining common in "pioneer forest" areas on the island 50 years after abandoned agricultural cultivation.

Distribution: Widely distributed in its native range (Morton 1966). In Florida, found in Dade County in Bill Fadowsky Park, Charles Deering Estate, Black Creek Forest, and Hattie Bauer Hammock, and in Broward County in the Fern Forest Nature Area. Documented by herbarium specimens from these two counties (Wunderlin *et al.* 1995).

INCISED HALBERD FERN

Life History: Fertile all year (Wunderlin 1982). Spread by natural dispersal of spores and aided by dumping of yard refuse (D. B. Ward, University of Florida, 1997 personal communication). Cold-sensitive tropical. Prefers moist to wet habitats (Standley 1927). Occurs in Florida most often in shade of rocky hammocks. Able to hybridize—a known cross, *Pleuroderris michleriana* (D. C. Eaton) Maxon, occurring in *T. incisa*'s Central American range (Wagner *et al.* 1978), suggesting the potential for genetic swamping of threatened and endangered native *Tectaria*.



In Fern Forest natural area, Broward County



Frond



Sporangia clusters