
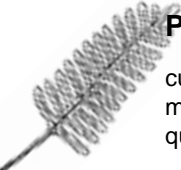




Key to identifying the ferns of South Florida

Note: Not all of these ferns can be found in Southwest Florida.

Some, like the two *Tectaria* species, are only found in rocky outcroppings, primarily in Broward County.

 <p>SIMPLE undivided</p>	<p>1. Like branched green sticks, to 6" or more, often in clumps <i>Psilotum nudum</i></p> <p>1. Fronds appear leaf-like, often paired, at ground level at base of leafless fertile stalk <i>Ophioglossum petiolatum</i></p> <p>1. Fronds slender, 3/8" or less</p> <p>2. Edges curled under, hangs like bunch of limp green linguini <i>Vittaria lineata</i></p> <p>2. Edges not curled under, fronds arching <i>Campyloneurum augustifolium</i></p> <p>1. Fronds wider than 1/2", strap-shaped, arching</p> <p>2. Full frond covered with dimples above and below <i>Campyloneurum phyllitidis</i></p> <p>2. Edges serrated; sori in angled lines towards tip of frond (rare) <i>Asplenium serratum</i></p>
 <p>PINNATIFID cut nearly to the midvein but not quite</p>	<p>1. Fronds mostly 6" or smaller, in clumps <i>Pleopeltis polypodioides</i></p> <p>1. Fronds 10" or longer, a few to several pairs of pinnae which taper to a point</p> <p>2. Pinna taper at tip <u>AND</u> base, several pairs of small pinnae at base <i>Pecluma ptilodon</i></p> <p>2. Rhizome thickly covered with golden hairs & finger-thick <i>Phlebodium aureum</i></p> <p>2. Rhizome green or black, smooth (uncommon, exotic) <i>Phymatodes scolopendria</i></p>
 <p>PINNATE blades divided into leaflets; each leaflet narrowly attached to the main axis</p>	<p>1. Fronds really large (6' or more); pinnae wide, leathery, smooth, and relatively thick <i>Acrostichum danaeifolium</i></p> <p>1. Terminal pinna (but no others) divided into three lobes <i>Tectaria incisa</i></p> <p>1. Terminal pinna longer than other pinnae</p> <p>2. Sori linear along midrib; frond medium green; stem green <i>Blechnum serrulatum</i></p> <p>2. Sori along edge; stem noticeably hairy; frond dark green (exotic) <i>Pteris vittata</i></p> <p>2. Sori completely cover underside of pinnae (rare) <i>Thelypteris serrata</i></p> <p>1. Terminal pinna not longer than other pinnae</p> <p>2. Most pinnae forked at tip, almost a fishtail-like <i>Nephrolepis biserrata</i> cv. <i>forcans</i></p> <p>2. Pinnule tips pointed</p> <p>3. Pinnae spaced out; fronds usually 4-8', vine-like <i>Nephrolepis biserrata</i></p> <p>3. Pinnae close; midrib dividing into two almost equal parts <i>Nephrolepis exaltata</i></p> <p>3. Short erect hairs on pinna midveins, stipe dark (exotic) <i>Nephrolepis multiflora</i></p> <p>2. Pinnule tips blunt & rounded, pinnae close, round tubers on many roots (exotic) <i>Nephrolepis cordifolia</i></p>
 <p>PINNATE-PINNATIFID pinnate because it has separate leaflets on the main axis, and pinnatifid because each leaflet has cuts (but not necessarily nearly to the midvein)</p>	<p>1. No small tuft of rusty-brown hairs at pinna base; sori on underside of pinnae</p> <p>2. Frond upperside smooth with no or very few hairs</p> <p>3. Pinnules cut halfway to midvein, rounded; shiny <i>Thelypteris interrupta</i></p> <p>3. Pinnules cut to (or nearly to) midvein; sori at pinnule midvein</p> <p>4. Pinnae very narrow; a few hairs on top <i>Thelypteris palustris</i></p> <p>4. Pinnules rounded; dark green pinnae <i>Dryopteris ludoviciana</i></p> <p>4. Pinnules taper to point; lobes short, blunt; chain-like veins <i>Woodwardia virginica</i></p> <p>4. Lower surface conspicuously resin-dotted (rare) <i>Thelypteris resinifera</i></p> <p>3. Terminal pinna divided into 3 lobes, lowermost pinna stalked <i>Tectaria heracleifolia</i></p> <p>2. Frond somewhat to definitely hairy</p> <p>3. Blade triangular shaped</p> <p>4. Lobes separated; hairy all over <i>Thelypteris kunthii</i></p> <p>4. Lobes close; lower frond stems not hairy (rare) <i>Thelypteris dentata</i></p> <p>3. Blade oval-shaped (rare) <i>Thelypteris ovata</i></p> <p>1. Small tuft of rusty-brown hairs at base of each pinna where midrib of pinnae meets midrib of frond; no sori on any pinnae but borne on separate spore-bearing frond) <i>Osmunda cinnamomea</i></p>





TERMS

frond the "leaf" of the fern
 pinna the leaves on the blade (plural *pinnae*)
 pinnule each segment on the pinna
 rachis the frond stalk; also called *midvein* or *main axis*

rhizome the stem of the fern
 spore one-celled reproductive unit of non-seed plants
 sporangia a spore case (plural *sporangia*)
 sori several clusters of sporangia (singular *sorus*)

Using the key

1. Identify the type of frond using the drawings & descriptions below
2. Start with each of the #1 phrases and go through the list until you get a “yes” description
3. If there are additional numbers below #1, go to all of the #2 descriptions until you get a “yes”
4. Continue until you run out of numbers. Your last “yes” description is identifies the fern.

 <p>BIPINNATE blades divided into leaflets; each leaflet has its own leaflets</p>	<p>1. Openly branched fronds; spores on separate stalk at tip of blade Osmunda regalis</p>
 <p>BIPINNATE-PINNATIFID blades divided into leaflets; each leaflet has its own <i>cut</i> leaflets</p>	<p>1. Large; blade branches into more branches; lobes of pinnae evenly rounded, smooth-edged 2. Fronds stiff; each blade branches into 3 more Pteridium aquilinum 2. Fronds soft; each blade branches into 3 more and each of those branch again (<i>exotic</i>) Pteris tripartita 1. Blade bipinnate-pinnatifid to tripinnate (three times cut) 2. Pinnae parallel, whole frond appears flat Ctenitis sloanei 2. Pinnae at angle to rachis giving a “stepped” appearance to each frond (<i>exotic</i>) Macrothelypteris torresiana 1. Pinnae wedge-shaped, coarsely toothed, leathery; found only in pineland habitat Anemia adiantifolia</p>
 <p>PALMATE hand-like</p>	<p>1. Frond 1-2” long; form thick climbing mats (<i>exotic</i>) Lygodium microphyllum 1. Fronds 4-12” long, epiphytic (<i>rare</i>) Ophioglossum palmata</p>
 <p>WATER FERNS floating on water surface or rooted under surface</p>	<p>1. Fronds round, fingertip-sized, hairy; in loose mats (<i>exotic</i>) Salvinia minima 1. Fronds irregularly branched, like flattened juniper twig (<i>rare</i>) Azolla caroliniana 1. Fronds like 4-leaf clover; rooted in mud, usually in standing water Marsilea vestita 1. Fronds strongly lobed, almost feathery 2. Fronds to 2’ tall, thick stem more than 4” diameter (<i>rare</i>) Ceratopteris pteridoides 2. Fronds to 4’ tall, thin stem less than 3” diameter (<i>exotic</i>) Ceratopteris thalictroides</p>

COMMON NAMES

Psilotum nudum Whisk Fern
 Ophioglossum petiolatum Stalked Adder’s Tongue
 Vittaria lineata Shoestring Fern
 Campyloneum augustifolium Narrow Strap Fern
 Campyloneurum phyllitidis Strap Fern
 Asplenium serratum Bird’s Nest Fern (rare)
 Pleopeltis polypodioides Resurrection Fern
 Pecluma ptilodon Greater Comb Fern
 Phlebodium aureum Golden Polypody
 Phymatodes scolopendria Wart Fern (exotic)
 Acrostichum danaeifolium Giant Leather Fern
 Tectaria incisa Incised Halberd Fern
 Blechnum serrulatum Swamp Fern
 Pteris vittata Ladder Brake Fern (exotic)
 Thelypteris serrata Cypress Fern (rare)
 Nephrolepis biserrata cv. forcans Fishtail Fern
 Nephrolepis biserrata Giant Sword Fern
 Nephrolepis exaltata Sword Fern
 Nephrolepis multiflora Asian Sword Fern (exotic)
 Nephrolepis cordifolia Boston Fern (exotic)
 Thelypteris interrupta Shiny Thelypteris
 Thelypteris palustris Marsh Fern

Dryopteris ludoviciana Florida Shield Fern
 Woodwardia virginica Virginia Chain Fern
 Thelypteris resinifera Wax-dot Shield Fern (rare)
 Tectaria heracleifolia Broad Halberd Fern
 Thelypteris kunthii Wood Fern
 Thelypteris dentata Downy Shield Fern (rare)
 Thelypteris ovata Ovate Maiden Fern (rare)
 Osmunda cinnamomea Cinnamon Fern
 Osmunda regalis Royal Fern
 Pteridium aquilinum Bracken Fern
 Pteris tripartita Giant Brake Fern (exotic)
 Ctenitis sloanei Florida Tree Fern
 Macrothelypteris torresiana Mariana Maiden Fern (exotic)
 Anemia adiantifolia Pine Fern
 Lygodium microphyllum Old World Climbing Fern (exotic)
 Ophioglossum palmata Hand Fern
 Salvinia minima Water Spangles (exotic)
 Azolla caroliniana Azolla
 Marsilea vestita Water Clover
 Ceratopteris pteridoides Water Fern (rare)
 Ceratopteris thalictroides Water Horn Fern (exotic)