

Chinese Brake Fern

Pteris vittata (L.) Pteridaceae



Biology

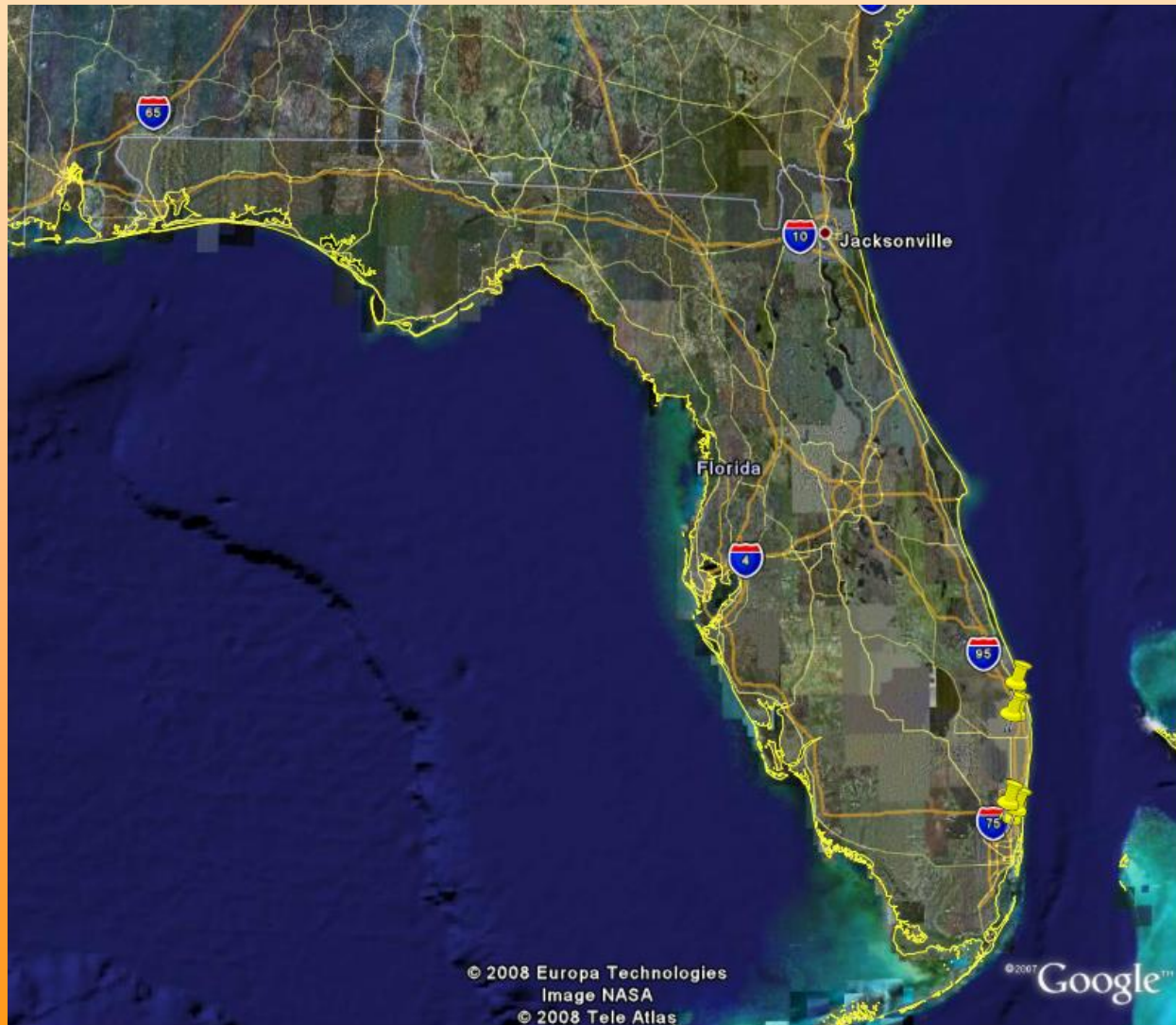


- True fern, native to China
- Also called ladder fern
- Reproduces via spores
 - Year round in south Florida
- Grows in swampy woodland areas
- Possibly introduced as an ornamental

Distribution & Impacts

- Found in south Florida, but also in isolated areas throughout all of Florida
 - Generally direct escape from cultivation
- Swampy wooded areas, competes with native swamp fern
- Aggressive spread, forming dense stands
- Quickly displaces native vegetation
- Spores readily dispersed by wind & water

Chinese Brake Fern Distribution in Florida



Identification

Mature Plant & Leaves

- Close resemblance to swamp fern (*Blechnum serrulatum*)
 - Brake fern has spores along edge of leaflet
 - Swamp fern has spores along midrib of leaflet
- Dark green fronds, 12 to 20 inches in length



Management

Preventative

Cultural

Mechanical

Biological

Chemical

Preventative



1. Limit planting as an ornamental
2. Remove existing plants, including resprouts and before seeds are produced
3. Avoid mechanical disturbance in forested areas – logging, rousing, etc. where brake fern is present

Cultural



1. Programs to educate homeowners about the problems associated with this plant and proper identification
2. Maintain good ground cover and mixture of plant species to reduce establishment

Biological



1. There are no known biological control agents available for brake fern management in Florida or the southeastern U.S.

Mechanical



1. Hand pull young seedlings, repeated pulling for resprouts
2. Mowing or cutting is effective, although likely impractical, but must be repeated to control resprouts

Chemical



1. Over-the-top applications of glyphosate at 2 to 3% solution plus 0.25% surfactant
2. Triclopyr applied at 1 to 2% solution plus 0.25% surfactant
3. Thoroughly wet leaves with herbicide
4. Retreatment will likely be necessary for complete eradication



Useful Links

- Floridata Homepage:
http://www.floridata.com/main_fr.cfm?state=Welcome&viewsrc=welcome.htm
- University of Florida Center for Aquatic and Invasive Plants:
<http://aquat1.ifas.ufl.edu/welcome.html>
- The Plant Conservation Alliance's Alien Plant Working Group. Weeds Gone Wild: Alien Plant Invaders of Natural Areas:
<http://www.nps.gov/plants/alien/index.htm>

Useful Links

- Invasive Plants of the Eastern United States: <http://www.invasive.org>
- American Fern Society: <http://amerfernsoc.org/>

Literature Cited

- Langeland, K.A. and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. IFAS Publication SP 257. University of Florida, Gainesville. 165 pp