Epipremnum pinnatum cv. aureum (FLEPPC Category II) and Syngonium podophyllum (FLEPPC Category I)

Pothis (Epipremnum pinnatum cv. aureum) and Syngonium are difficult to eradicate once they become established in the hardwood hammock understory. These vines pose threats to ferns when they extend runners over the ground. If unchecked, they can completely blanket fern habitat. These photos show the imminent danger that both of these invasive species present for our rare native ferns.

1. Asplenium verecundum and pothis (A. Rosenberg)

2. Tectaria fimbriata and pothis (J. Possley)

3. Juvenile T. sclerophylla and pothis (A. Rosenberg)

(4) Another T. sclerophylla keeps company with Syngonium podophyllum. While the fern will not grow much larger, the vine has the potential to gain dozens of meters. Note that Syngonium sometimes sports variegated seedlings, and this seedling is showing the incised, palmate-leaved form that is more typical of the mature vine. (5) Immature Syngonium creeps next to a boulder that is home to TWO Florida endangered ferns: Asplenium verecundum and Tectaria fimbriata. Here, you can see why one of the common names of this morphologically plastic invasive plant is “arrowhead vine.”

(1) Asplenium verecundum (FL-Endangered) peeks out from between the leaves of a sprawling pothis runner, while young Schefflera establishes nearby. (2) Tectaria fimbriata (FL-Endangered) clings to the side of a large, bathtub-sized sinkhole, but it is still not safe from pothis. (3) A juvenile Thelypteris sclerophylla (FL-Endangered) grows toward pothis– and it is also a neighbor to several Schefflera seedlings.

Majority Threatened

Just as the rare ferns in Miami hammocks face being overwhelmed by invading exotic plants, so do most of Florida’s other rare native plants.

A compilation of case studies in the late 1990s, supported by FDEP’s Bureau of Invasive Plant Management, revealed that over half (60%) of Florida’s 534 native plant species currently listed as endangered or threatened are up against additional threats from invasive exotics.

About 30 listed species were documented as having already suffered some degree of population loss from displacement by EPPC Category I invasives. Over 170 other listed rare species faced imminent loss from invasives occurring within their habitats. Another 120+ listed species had invasives “at the door” — occurring in adjacent habitats. Involved in these plant-vs.-plant interactions were 28 Category I and two Category II pest-plant species (the Schefflera and Epipremnum shown here make it 32 species total!)

Recognizing the direct adverse effects of exotic pest plants on rare native plants is now a basic element of setting priorities for control of invasives in Florida. For more information or to add new observations, write kburks@fnai.org.

— K. C. Burks, Florida Natural Areas Inventory, FSU