

Invasive Look-alikes

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This presentation was adapted from Dexter Sowell & Kim Gulledge at the Florida Natural Areas Inventory (March 2018).

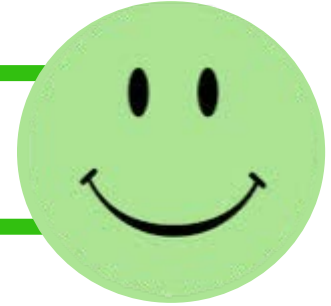


What is the difference?



INVASIVE

- Non-native and causes some kind of harm.
- Problems with invasives:
 - Economic losses
 - Ecological harm
 - Human/animal health hazards



NATIVE

- Occurs naturally in a region or ecosystem without human introduction.
- Benefits of natives:
 - Support local ecosystems

Resources


Atlas of Florida Plants

Institute for Systematic Botany

Scientific Name Search
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Plant Photos



1 / 25 *Anthracanthera villosa*
Photo by Tom Dudley

Browse Photos

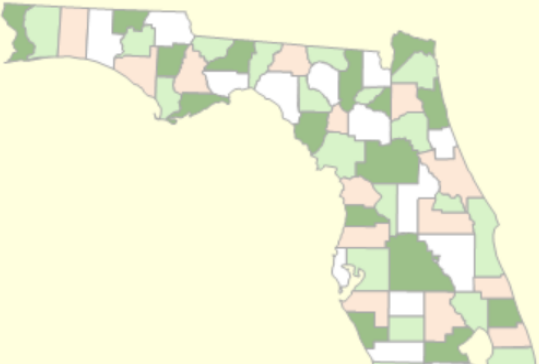
About the Plant Atlas

Florida has over 4,700 species of native or naturalized plants in Florida, including over 4,300 species of vascular plants and over 400 species of bryophytes (plants known only from cultivation are not included). The Atlas of Florida Plants is a joint effort by the Institute for Systematic Botany, the University of South Florida, and the USF Water Institute to provide a comprehensive searchable database of plants in the state of Florida. This website also provides access to the [USF Herbarium](#), which houses about 300,000 specimens from around the world (about 2/3 of these are databased and available online).

[Learn more about the Plant Atlas »](#)

Browse the Plant Atlas By Map

Select a county below to view plant species for that county. Hover over a county to view the county name.

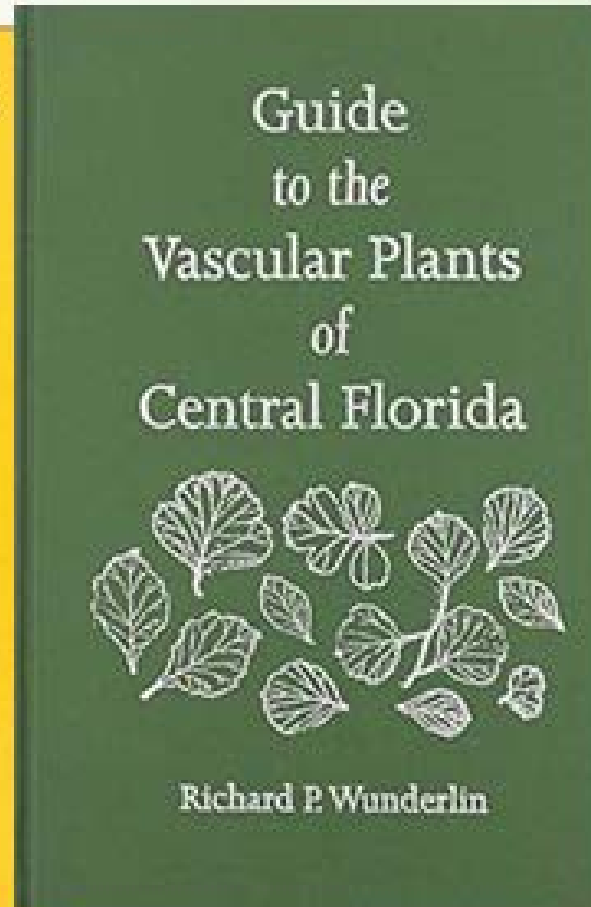
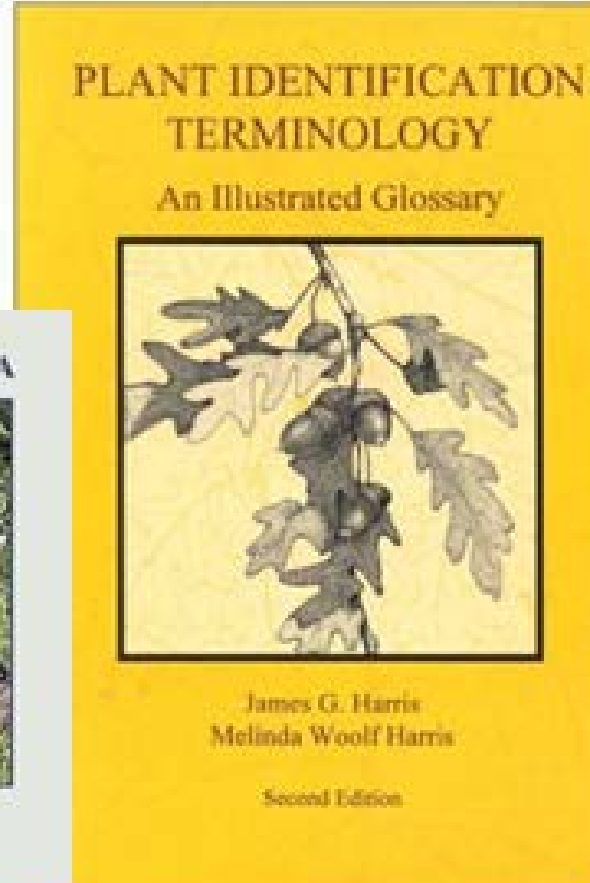
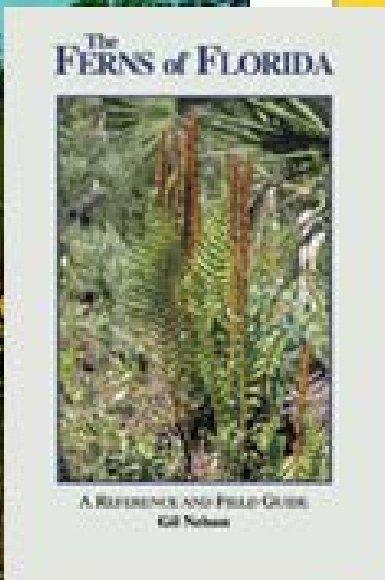
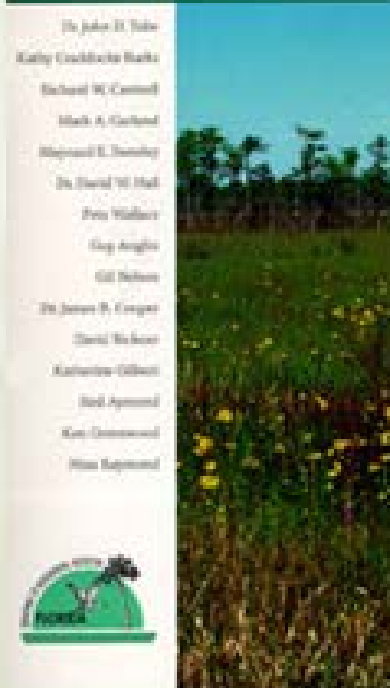
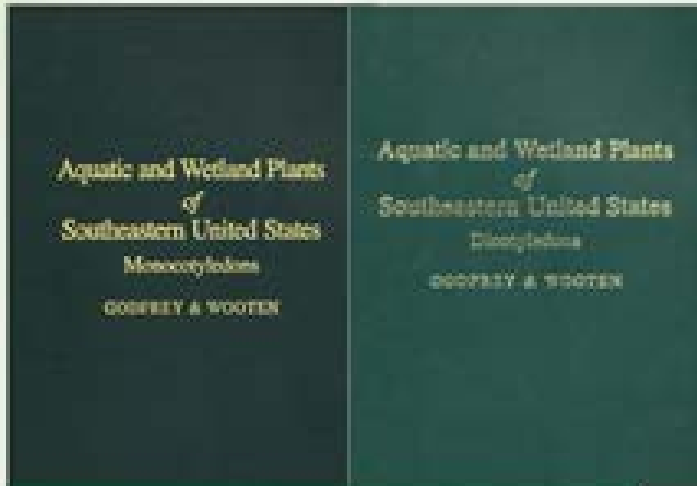


Institute for Systematic Botany

The Institute for Systematic Botany of the Cell Biology, Microbiology, and Molecular Biology Department at the University of South Florida was established in 1990 to promote basic research in plant systematics and to coordinate research, educational and service programs in plant systematics.

<https://florida.plantatlas.usf.edu/#>

* Identification



Distinction & Dissection

- **Habitat**
 - Where is the plant growing?
- **Range**
 - Are the range maps showing it found in your area?
 - Does the dichotomous key also state it to be found in a particular ecosystem or part of Florida?
- **Dissecting scope**
 - Use a microscope to LOOK at the various parts of the plant collected





Species:

The arrangement of grass flowers



Grasses- Poaceae

COGON GRASS

Imperata cylindrica



BROOMSEDGE BLUESTEM

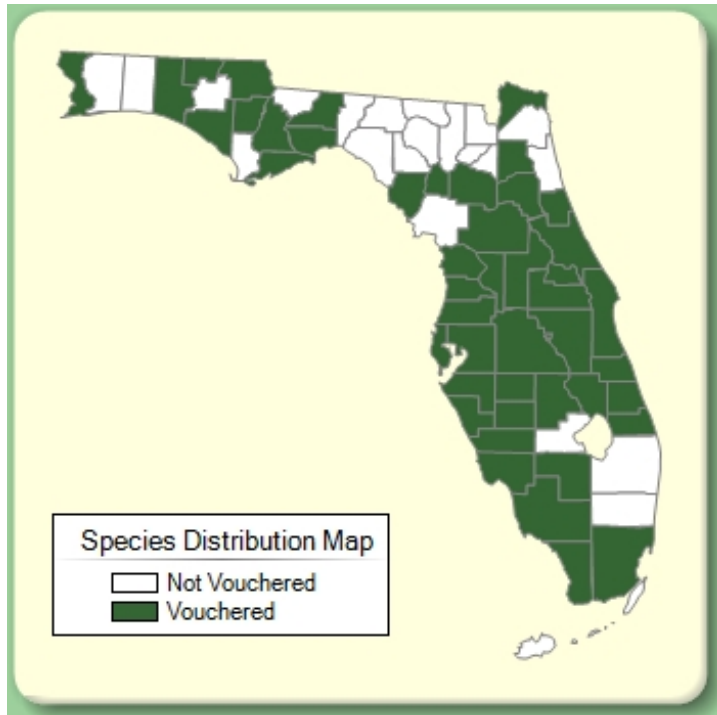
Andropogon virginicus



COGON GRASS

Imperata cylindrica

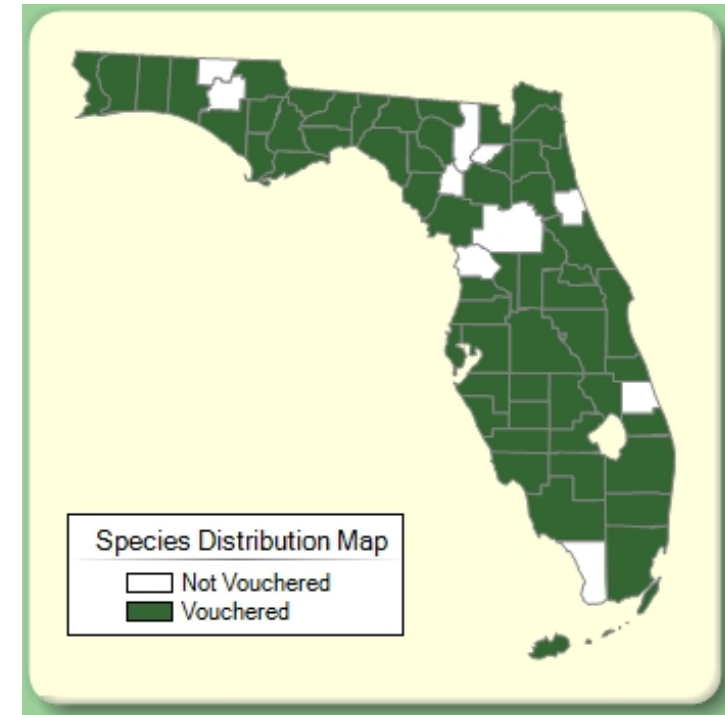
- Rhizomatous
- Midvein of leaf white and often offset



BROOMSEDGE BLUESTEM

Andropogon virginicus

- Clumping
- Midvein of leaf usually centered



COGON GRASS

Imperata cylindrica



BROOMSEDGE BLUESTEM

Andropogon virginicus



COGON GRASS
Imperata cylindrica



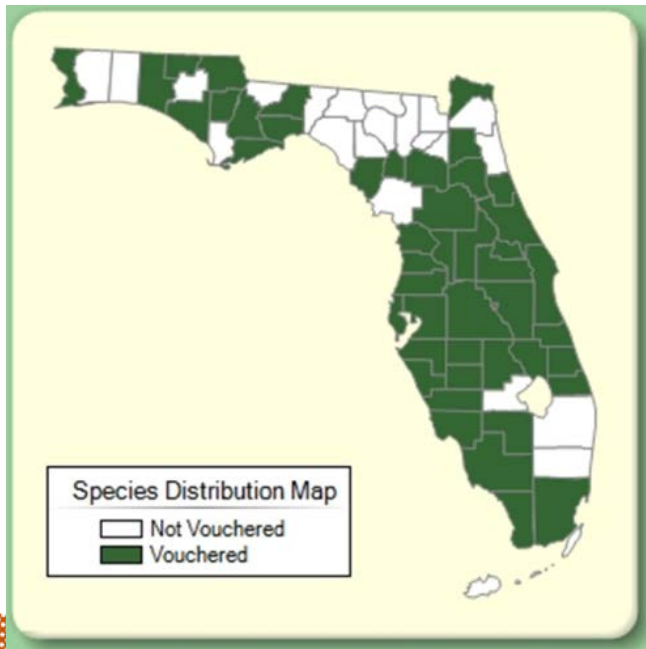
YELLOW INDIANGRASS
Sorghastrum nutans



COGON GRASS

Imperata cylindrica

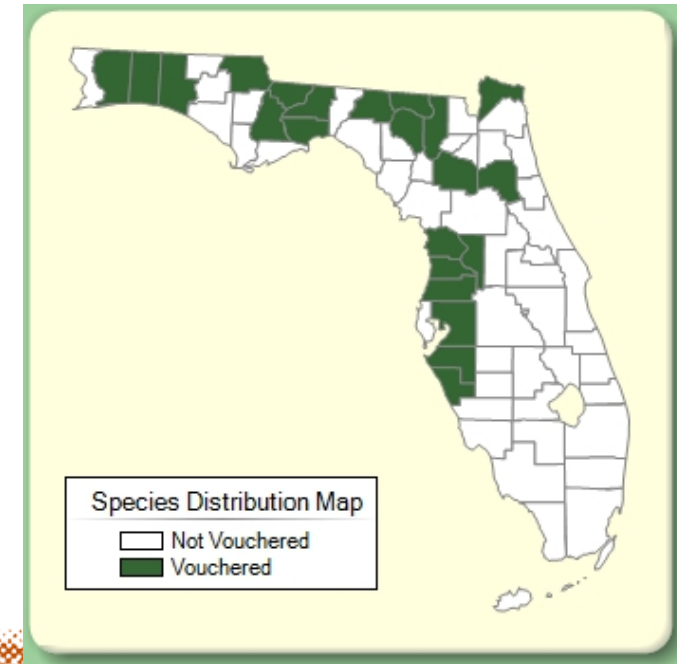
- Midvein of leaf white and often offset
- Ligule short (0.2-3.5 mm)
- Large fuzzy panicle of flowers, silvery white and cylindrical



YELLOW INDIANGRASS

Sorghastrum nutans

- Midvein of leaf usually centered
- Ligule long (2-6 mm)
- Plume-like panicle of flowers, bronze yellow



COGON GRASS
Imperata cylindrica



YELLOW INDIANGRASS
Sorghastrum nutans



HOW DO YOU TELL COGON GRASS FROM OTHER SPECIES?

1. The color is always light green
2. The off-set mid-vein
3. The ligule is really small

TORPEDO GRASS

Panicum repens



MAIDENCANE

Panicum hemitomon



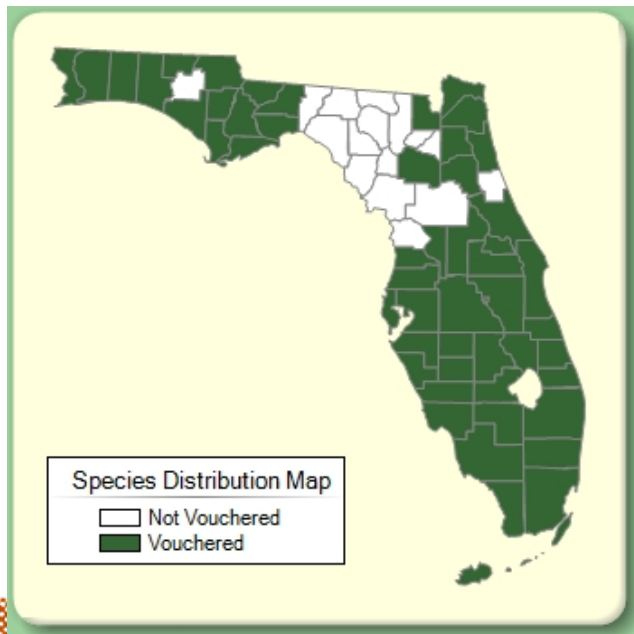
Torpedo Grass



TORPEDO GRASS

Panicum repens

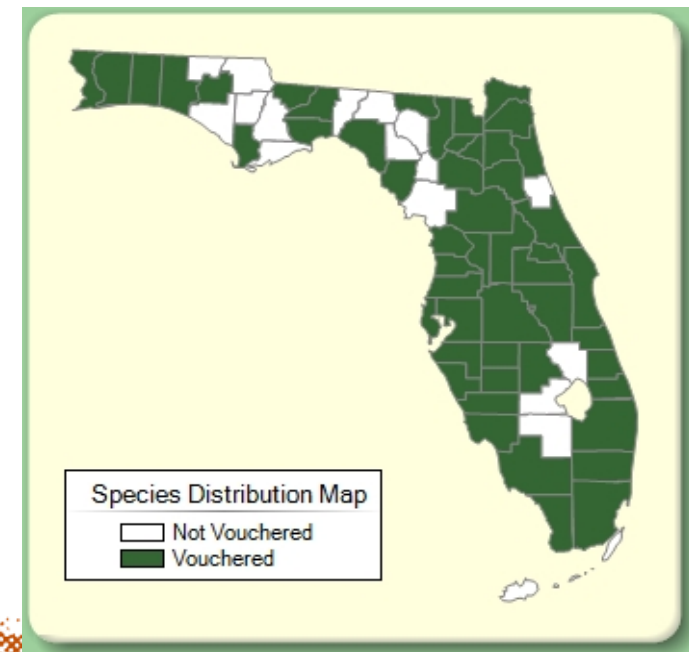
- Plants shorter (20-90 cm tall), leaves narrower
- Rhizomes sharp-pointed
- Inflorescence broader



MAIDENCANE

Panicum hemitomon

- Plants taller (50-200 cm tall), leaves broader
- Rhizomes not sharp
- Inflorescence narrow (up to 1 cm wide)



WEST INDIAN MARSH GRASS

Hymenachne amplexicaulis



MAIDENCANE

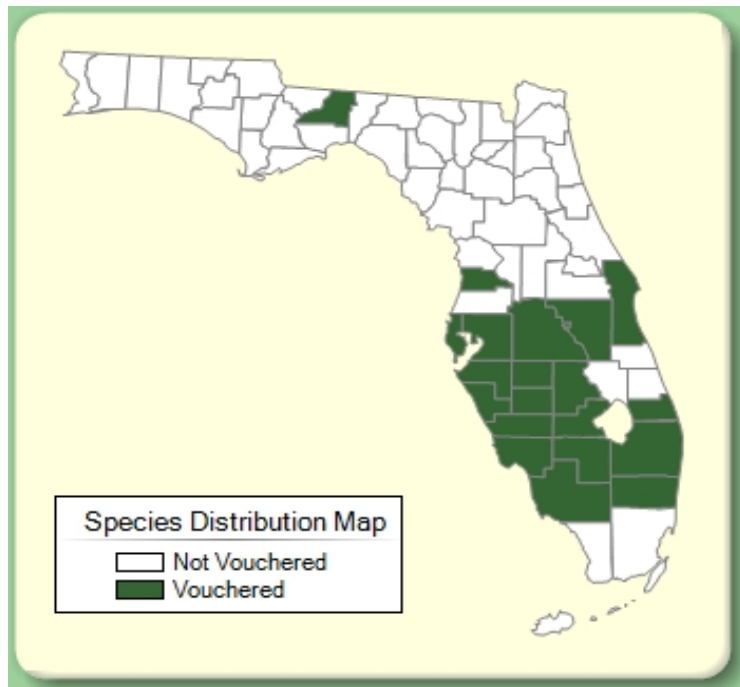
Panicum hemitomon



WEST INDIAN MARSH GRASS

Hymenachne amplexicaulis

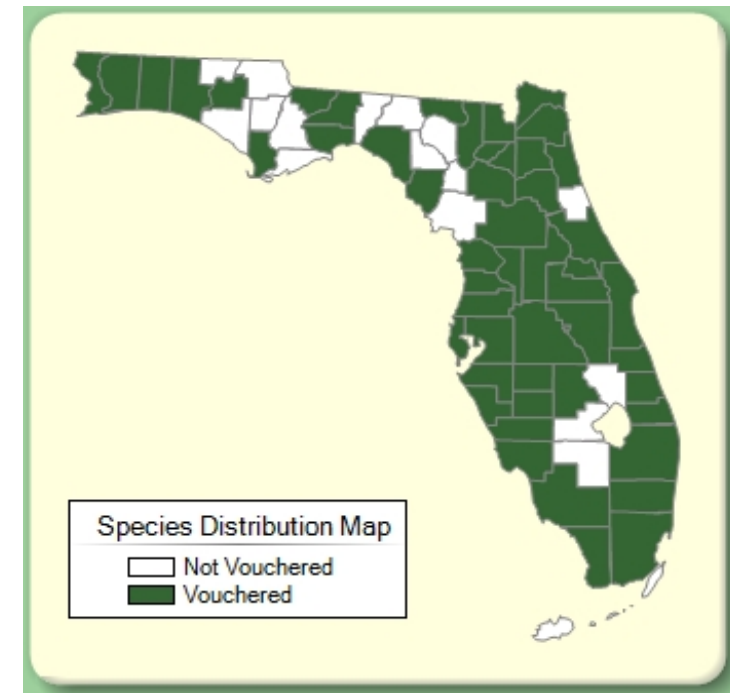
- Ligules 1-2.5 mm long
- Internodes with solid white pith
- Base of leaf blade clasping



MAIDENCANE

Panicum hemitomon

- Ligules <1 mm long
- Internodes without solid white pith
- Base of leaf cordate



WEST INDIAN MARSH GRASS

Hymenachne amplexicaulis

Hymenachne amplexicaulis
Photo by William Overholt



MAIDENCANE

Panicum hemitomon



WEST INDIAN MARSH GRASS

Hymenachne amplexicaulis



AMERICAN CUPSCALE

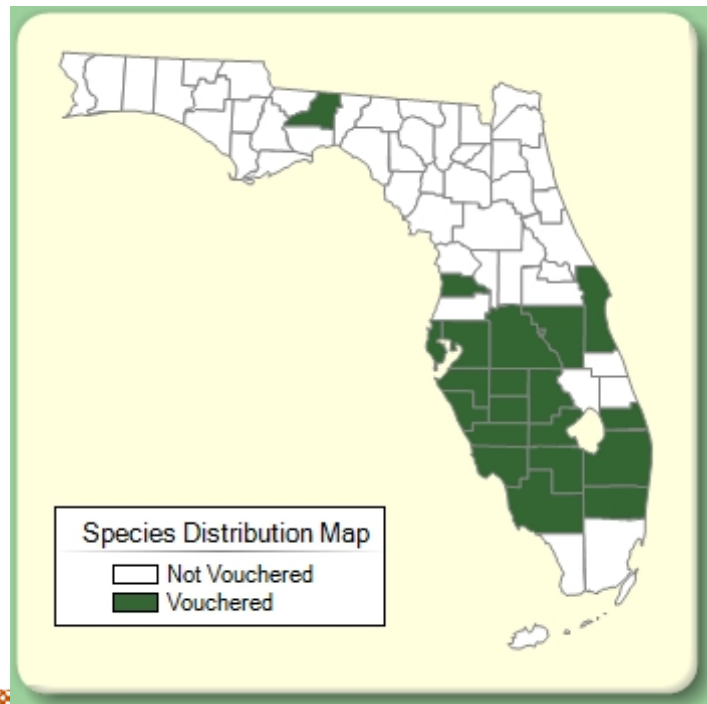
Sacciolepis striata



WEST INDIAN MARSH GRASS

Hymenachne amplexicaulis

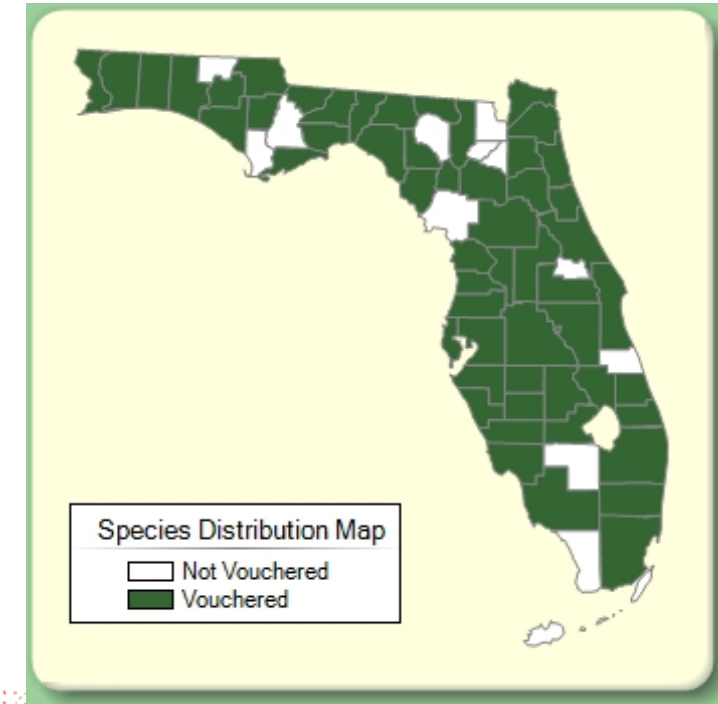
- Ligules 1-2.5 mm long
- Internodes with solid white pith
- Base of leaf blade clasping



AMERICAN CUPSCALE

Sacciolepis striata

- Ligules <1 mm long
- Internodes without solid white pith
- Base of leaf cordate



MAIDENCANE

Panicum hemitomon



AMERICAN CUPSCALE

Sacciolepis striata



BURMA REED

Neyraudia reynaudiana



COMMON REED

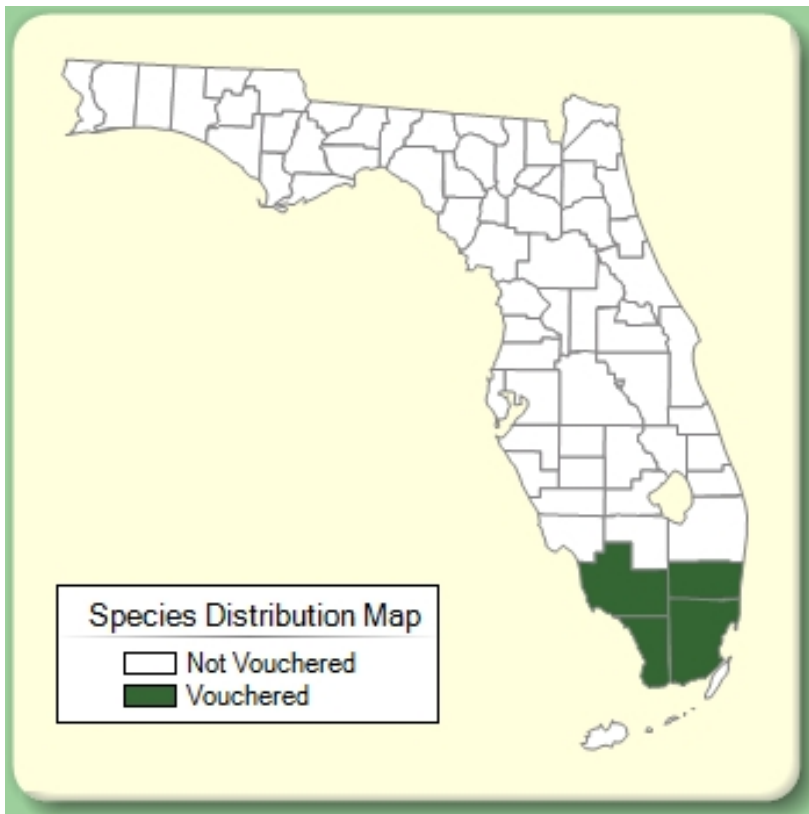
Phragmites australis



BURMA REED

Neyraudia reynaudiana

- Ligules on both sides of leaf
- Glabrous internodes



COMMON REED

Phragmites australis

- Ligule only on inside of leaf
- Pubescent internodes



NAPIER GRASS

Pennisetum purpureum



COMMON REED

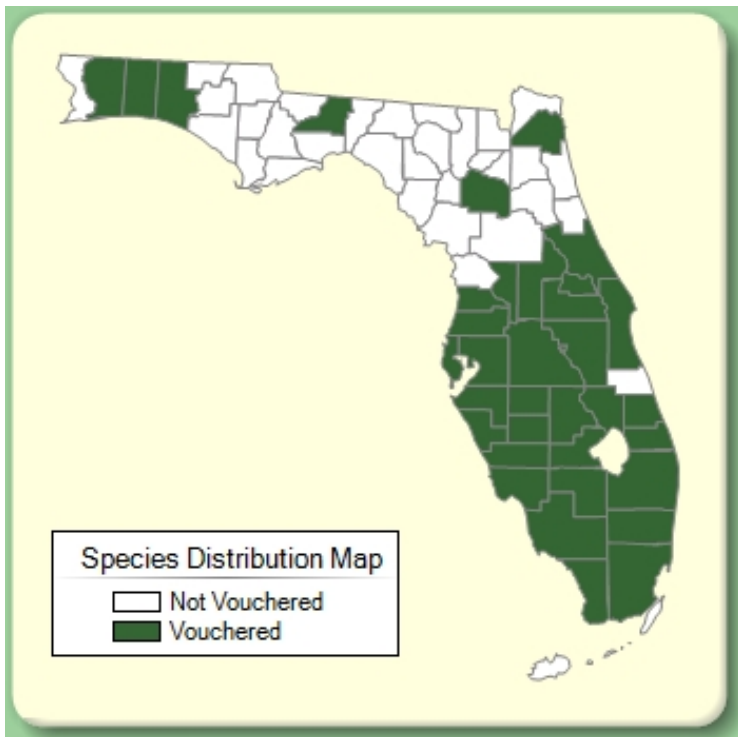
Phragmites australis



NAPIER GRASS

Pennisetum purpureum

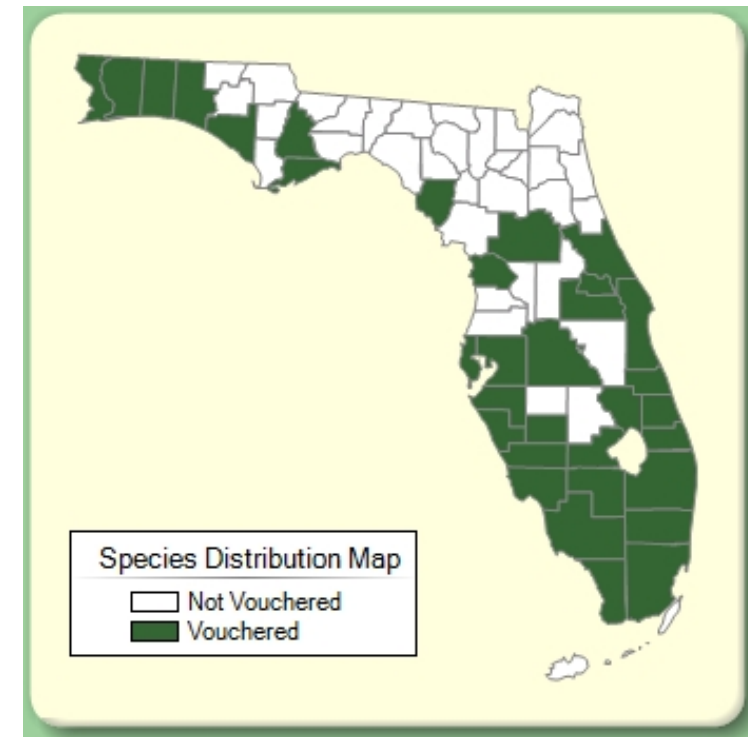
- Ligules 1.5 to 5 mm long
- Inflorescence a dense terminal panicle



COMMON REED

Phragmites australis

- Ligules about 1 mm long
- Inflorescence a bushy panicle



NAPIER GRASS

Pennisetum purpureum

Pennisetum purpureum
Photo by Shirley Denton



COMMON REED

Phragmites australis

Phragmites australis
Photo by Gilbert Fitzgerald



NAPIER GRASS
Pennisetum purpureum



Ligule on Napier grass

GOLDEN BAMBOO

Phyllostachys aurea



SWITCHCANE

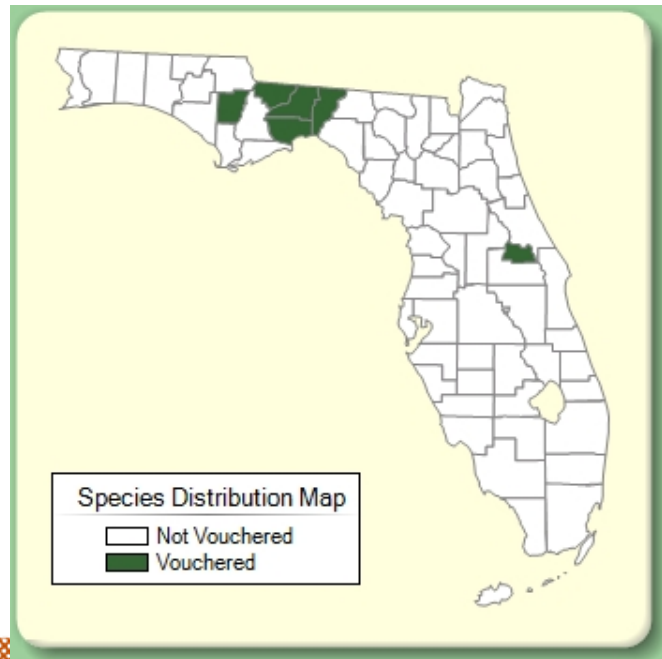
Arundinaria gigantea



GOLDEN BAMBOO

Phyllostachys aurea

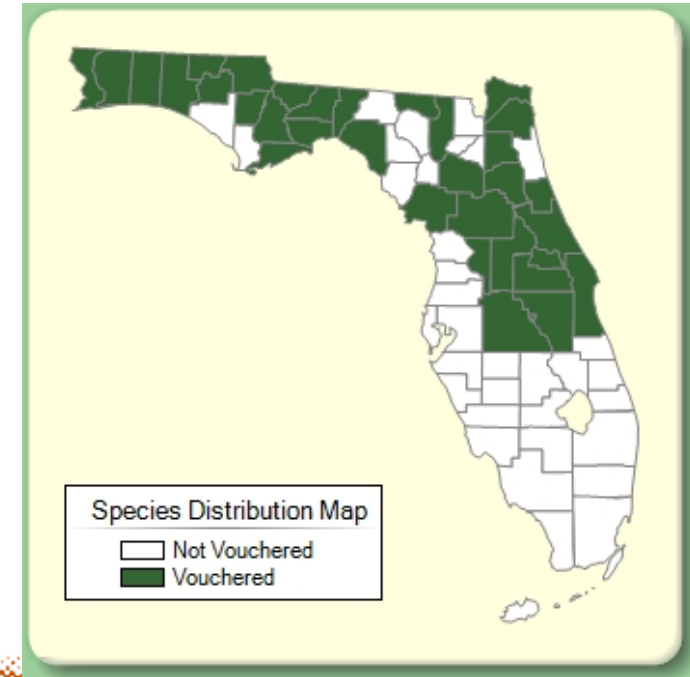
- Stem flattened or grooved on one side just above the node
- Swollen band just below node

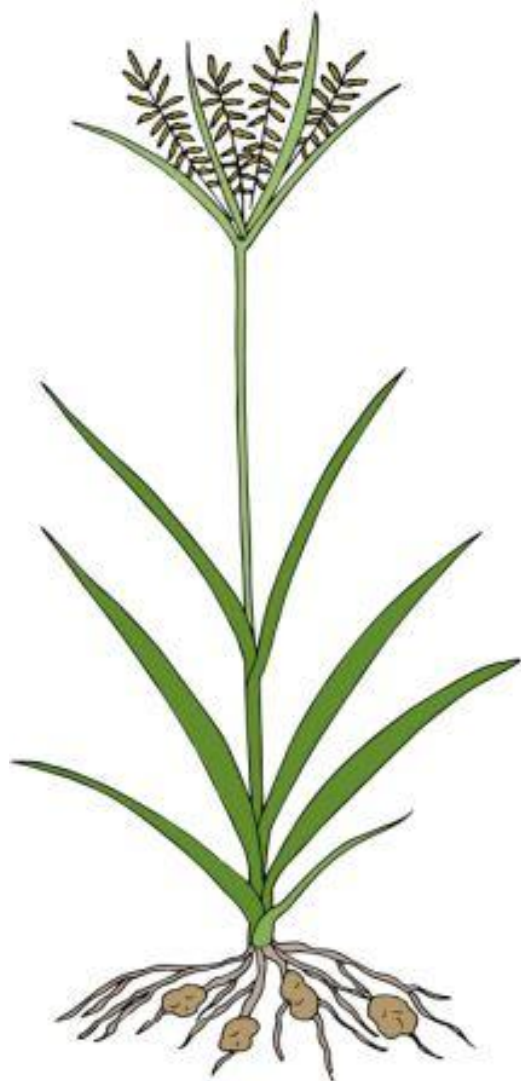


SWITCHCANE

Arundinaria gigantea

- Stem round
- Node may be swollen, but lacking a swollen band just below the node





Sedges- Cyperaceae

TROPICAL NUTRUSH

Scleria microcarpa

Scleria microcarpa

Photo by Alexandra Onisko



TALL NUTGRASS

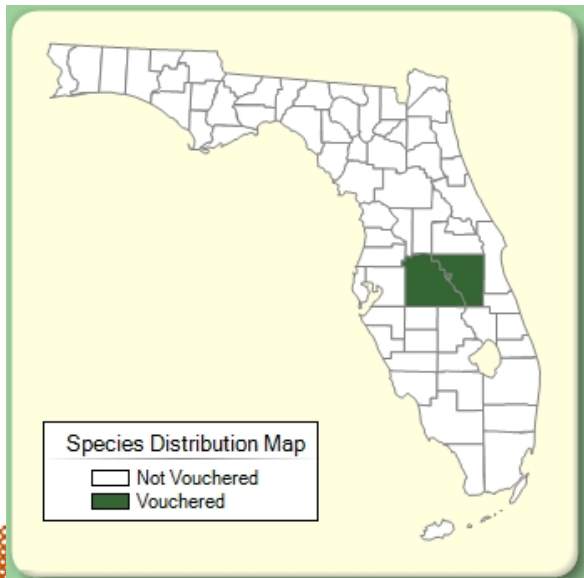
Scleria triglomerata



TROPICAL NUTRUSH

Scleria microcarpa

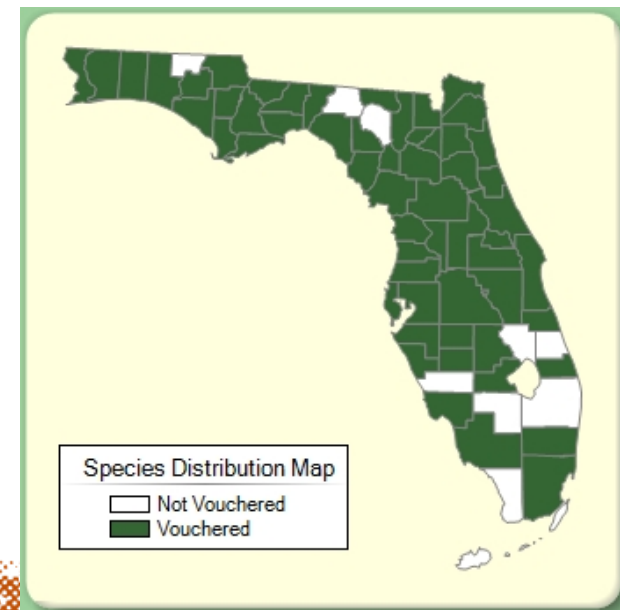
- Leaf sheath strongly winged
- Achenes in multiple lax racemes
- Achenes with a large “cupula” at base



TALL NUTGRASS

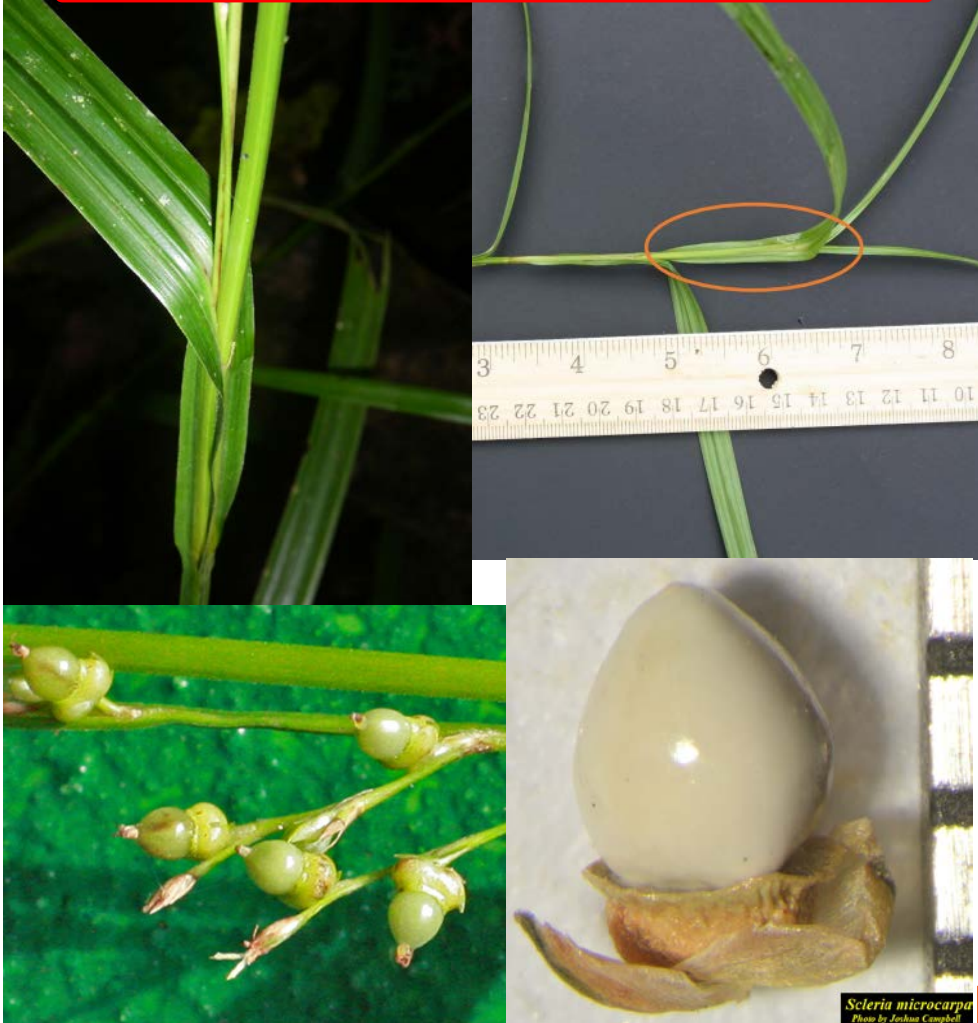
Scleria triglomerata

- Stem sharply angled, but leaf sheath not winged
- Achenes in 1 to several clusters
- Achenes with 3-lobed disk at base and subtended by bracts, but no “cupula”



TROPICAL NUTRUSH

Scleria microcarpa



TALL NUTGRASS

Scleria triglomerata



DWARF PAPYRUS

Cyperus prolifer



HASPAN FLATSEEDGE

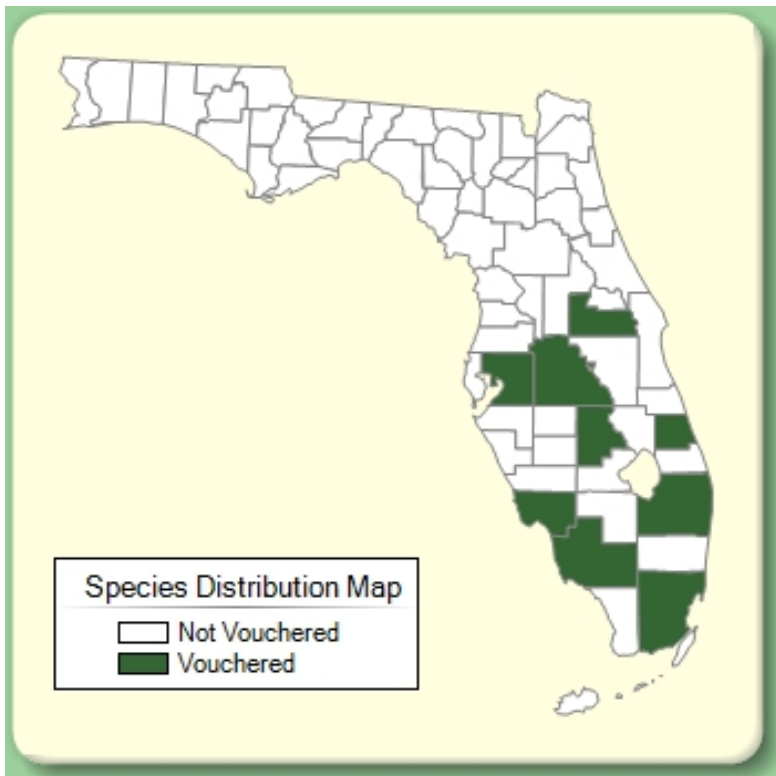
Cyperus haspan



DWARF PAPYRUS

Cyperus prolifer

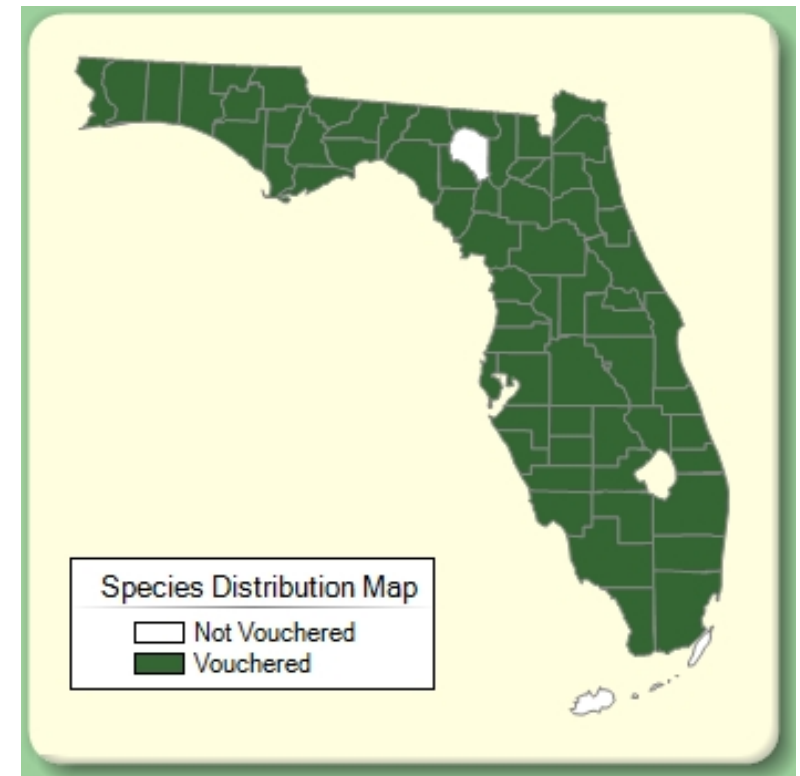
- 50-100 inflorescence rays
- Horizontal or slightly ascending brackets



HASPAN FLATSEGE

Cyperus haspan

- 10-15 inflorescence rays
- 30-60° brackets



PAPYRUS

Cyperus papyrus



papyrus
Cyperus papyrus
Photo by Ann Murray
© 2003 University of Florida

HASPAN FLATSEEDGE

Cyperus haspan

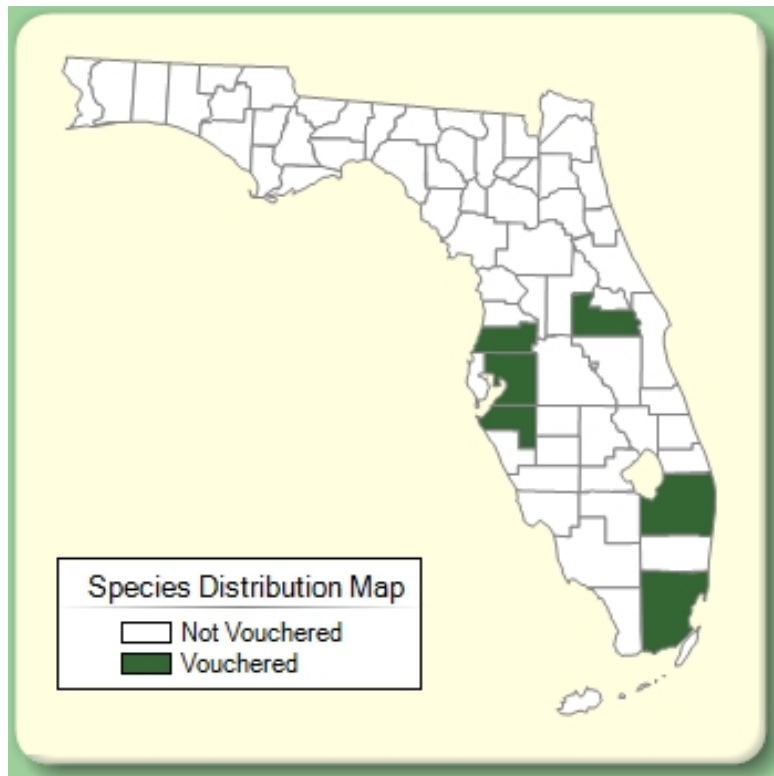


sharp edge sedge
Cyperus haspan
Photo by Ann Murray
© 1999 University of Florida

PAPYRUS

Cyperus prolifer

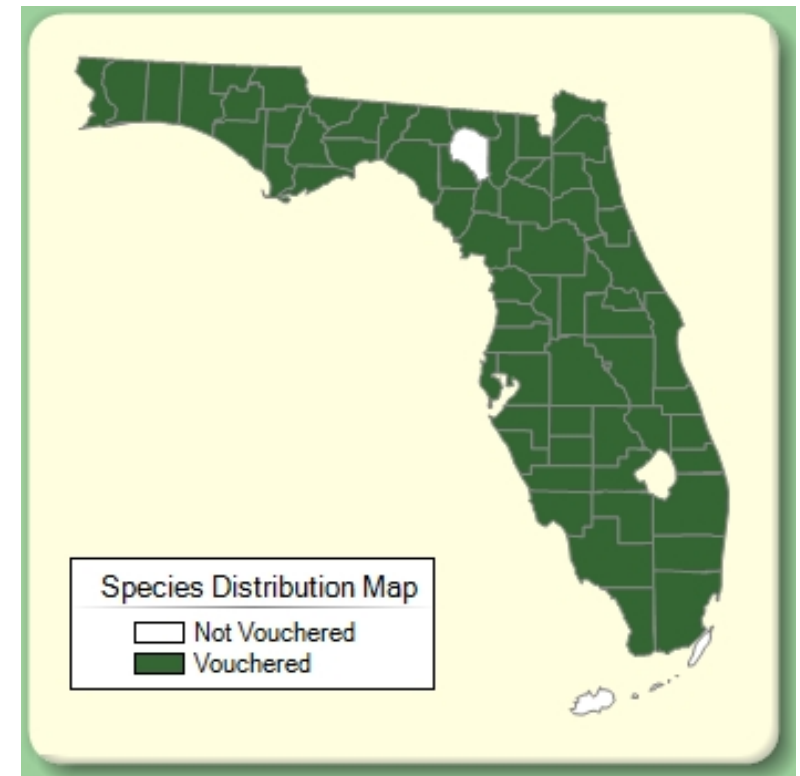
- 1-4.5 meters tall
- Over 100 inflorescence rays



HASPAN FLATSEGE

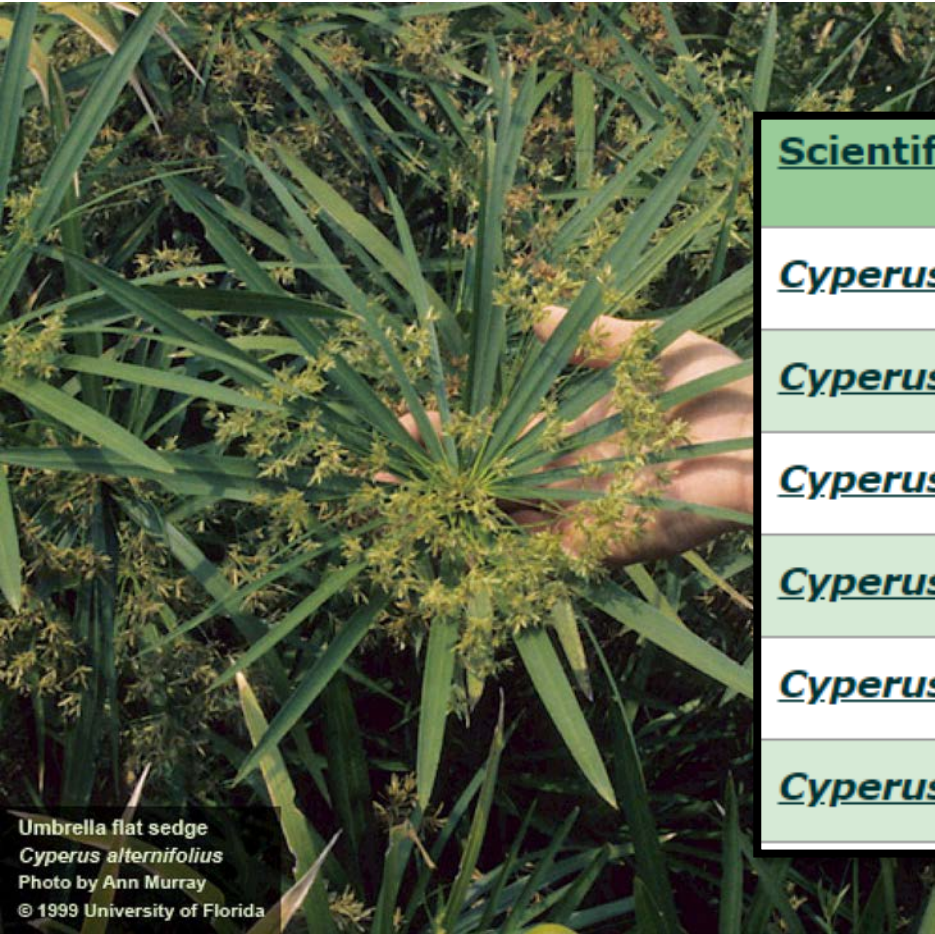
Cyperus haspan

- 0.7 meters tall
- 10-15 inflorescence rays



UMBRELLA FLATSEEDGE

Cyperus alternifolius



Umbrella flat sedge
Cyperus alternifolius
Photo by Ann Murray
© 1999 University of Florida

HASPAN FLATSEEDGE

Cyperus haspan



Haspan flat sedge
Cyperus haspan
Photo by Ann Murray
© 1999 University of Florida

Scientific Name

Cyperus alternifolius

Cyperus alternifolius subsp. *flabelliformis*

Cyperus alternifolius var. *albovariegatus*

Cyperus alternifolius var. *obtusangulus*

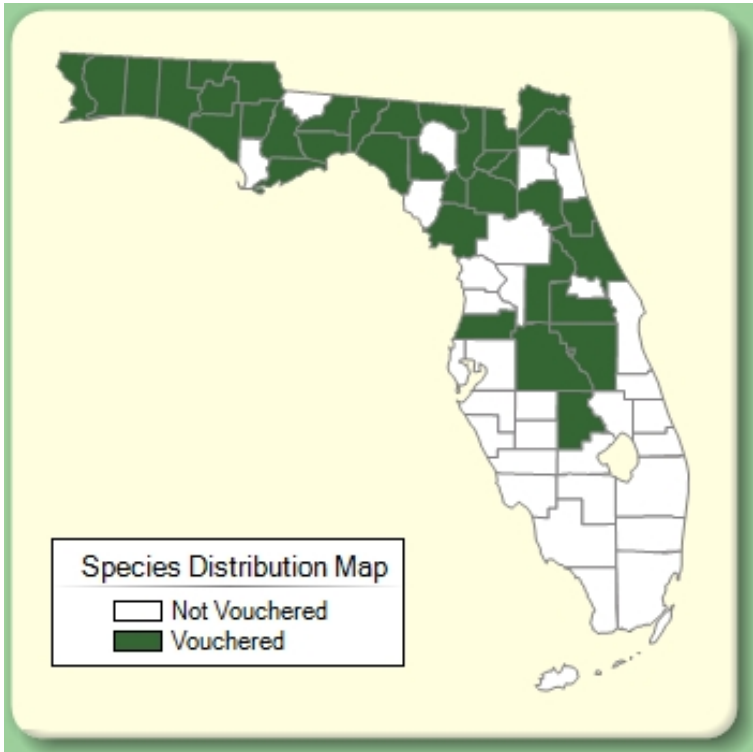
Cyperus alternifolius var. *petersianus*

Cyperus alternifolius var. *variegatus*

UMBRELLA FLATSEGE

Cyperus alternifolius

- 2 meters tall
- 12-25 umbrella shaped rays



HASPAN FLATSEGE

Cyperus haspan

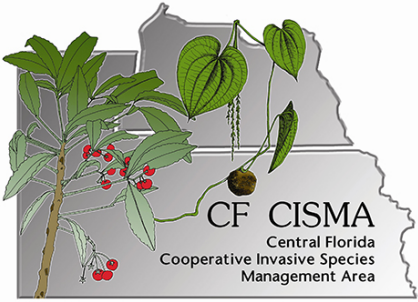
- 0.7 meters tall
- 10-15 inflorescence rays



Is it really that easy to identify stuff?

- Your plant will not always be flowering.
- Sometimes it is hard to see the characters you need.
- There might be natural variation in the population.





Questions?

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Tina McIntyre: K.mcintyre@ufl.edu

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