

Sedges

- Habitats: wet or dry; mostly wet
- Weeds in Agriculture, urban, and natural areas
- Dominant species in some habitats
- Valuable food source for wildlife
- FL: 17 genera and 280 species

Cyperaceae in Florida

Genus	Common Name	Taxa Count
<u>Abildgaardia</u>	FLATSPIKE SEDGE	1
<u>Bolboschoenus</u>		1
<u>Bulbostylis</u>	HAIRSEDGE	5
<u>Carex</u>	SEDGE	74
<u>Cladium</u>	SWAMP SAWGRASS	2
<u>Cyperus</u>	FLATSEDGE	67
<u>Dulichium</u>	THREEWAY SEDGE	1
<u>Eleocharis</u>	SPIKERUSH	32
<u>Fimbristylis</u>	FIMBRY	9
<u>Fuirena</u>	UMBRELLASEDGE	5
<u>Isolepis</u>	BULRUSH 1	
<u>Rhynchospora</u>	BEAKSEDGE	56
<u>Schoenoplectiella</u>		1
<u>Schoenoplectus</u>	NAKED-STEMMED BULRUSH	7
<u>Schoenus</u>	BOGRUSH	1
<u>Scirpus</u>	BULRUSH	4
<u>Scleria</u>	NUTRUSH	13

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Sedges, Rushes, or Grasses?

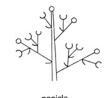
Sedges have edges, rushes are round, grasses have knees that bend to the ground.

Characteristic	Sedge	
Culm (Stem)	Filled with pith, rarely	
	hollow, usually 3 sided	
Nodes	Absent	
Leaf Blade	Flat or pleated	
	(V or W shaped)	
Leaf Margins	Usually scabrous	saw-grass Cladium jamaicense Photo by Vic Ramey © 2001 University of Florida

Adapted from: Budd's Flora of the Canadian Prairie Provinces, Looman and Best, 1979

Sedge ID Terminology

• Inflorescences (flowers):



• <u>Panicle</u>: multi-branched inflorescence

• <u>Spikelet</u>: small spike with reduced flowers on a central axis

• <u>Umbel</u>: flower stalks arise from a common point



Sedge ID Terminology

• <u>Subtending bracts</u>: modified leaf arranged on plant just below the inflorescence

• Ray: branches of a compound umbel



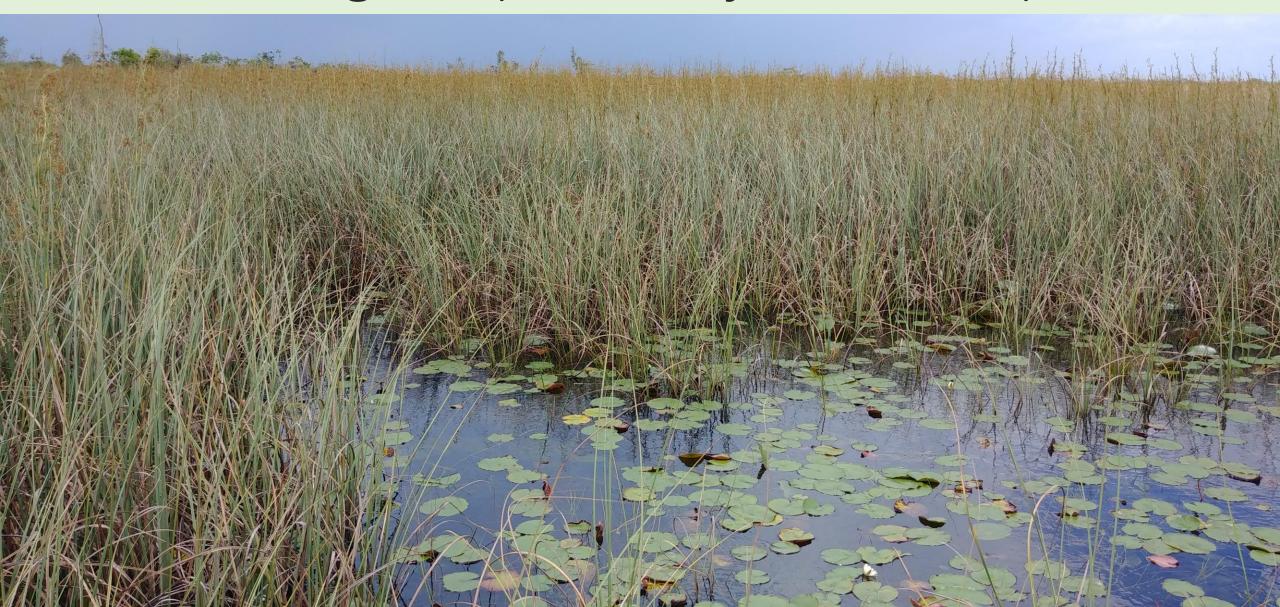
Achenes: small single seeded hard fruit

• <u>Contra-ligule:</u> membrane on the leaf sheath opposite the leaf



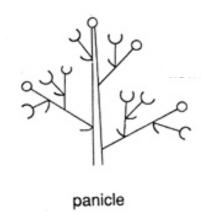
Illustration by Frank Prince

Sawgrass (Cladium jamaicense)



Sawgrass (Cladium jamaicense)

- Native
- Fresh & brackish swamps, marshes, and lakeshores
- Spreads by rhizome and seed
- Forms dense stands







Sawgrass (Cladium jamaicense)

- 3 m tall
- Stems: hollow, slightly angled
- Leaves: grey/green, saw-toothed margins
- Inflorescences: Reddish/brown, drooping
- Achenes: wrinkled, near-spherical, pointed end



Cuban Bulrush (Cyperus blepharoleptos)



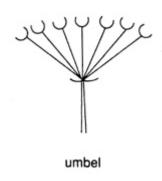
Cuban Bulrush (Cyperus blepharoleptos)

- Syn. Oxycaryum cubense, Scirpus cubensis
- Non native invasive
- Lakes, streams, marshes, ditches,
- Spreads vegetatively and by seeds
- Forms extensive floating mats



Cuban Bulrush (Cyperus blepharoleptos)

- 1 m tall
- Stems: strongly angled
- Leaves: thin, growing from base
- Inflorescences: umbel-like 1-13 heads, subtended by bracts





Haspan Flatsedge (Cyperus haspan)



Haspan Flatsedge (Cyperus haspan)

- Native
- Marshes, pond shores, moist soils, swales

Spreads by seeds and short rhizomes



Haspan Flatsedge (Cyperus haspan)

- 0.7 m tall
- Stems: strongly angled
- Leaves: flat to V shaped, reduced to sheaths
- Inflorescences: 10-15 rays
- Ascending bracts at 30° -60°



Dwarf Papyrus (Cyperus prolifer)



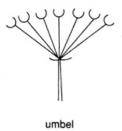
Dwarf Papyrus (*Cyperus prolifer*)

- Non native invasive
- FLEPPC: Cat II
- Lakes, ponds, marshes
- Forms floating mats
- Spreads by rhizome, seeds
- Ornamental in water gardens



Dwarf Papyrus (*Cyperus prolifer*)

- 1 m tall
- Stems: strongly angular
- Leaves: reduced to sheaths at base
- Inflorescences: 50-100 shiny rays
- Spikelets: light brown 12 mm long
- Thick rhizome





Haspan Flatsedge Vs Dwarf Papyrus

- Haspan Flatsedge native
 - Ascending bracts at 30° -60°



- Dwarf Papyrus non native invasive
 - Bracts are horizontal or slightly ascending





Papyrus (Cyperus papyrus)



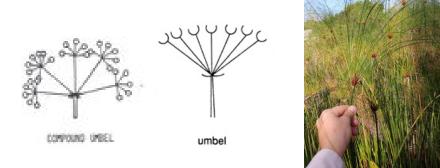
Papyrus (Cyperus papyrus)

- Non native invasive
- Disturbed swamps with low biodiversity
- Spreads by fragments, seed, rhizome
- Use by ancient Egyptians to make paper
- Ornamental in water gardens
- Forms dense stands in native range



Papyrus (Cyperus papyrus)

- 1- $4^{1/2}$ m tall
- Stems: slightly angled
- Leaves: reduced to papery sheaths, reddish brown
- Inflorescences: umbel-like, >100 thin shiny rays





Umbrella Flat Sedge (Cyperus involucratus)



Umbrella Flat Sedge (Cyperus involucratus)

- Non native invasive
- FLEPPC: Cat. II
- Wetlands, lakes, rivers
- Spreads by rhizomes, seeds, fragments
- Ornamental in water gardens, landscaped on lake shores



Umbrella Flat Sedge (Cyperus involucratus)

- 2 m tall
- Stems: rounded edges
- Leaves: reduced to basal sheaths
- Inflorescences: stalked spikelet clusters, subtended by 12-25 umbrella shaped bracts



Swamp Flatsedge (Cyperus ligularis)



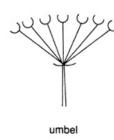
Swamp Flatsedge (Cyperus ligularis)

- Native
- Fresh and brackish swamps, marshes, disturbed areas
- Spread by seed
- Grows solitary or in clumps
- Not tolerant of prolonged cold



Swamp Flatsedge (Cyperus ligularis)

- 1.3 m tall
- Stems: thickened at base
- Leaves: 3 vertical ranks at base of stem, margins and midveins rough
- Inflorescences: 5-12 rays, 4-8 bracts up to 50 cm long
- Spikes: oblong-cylindric red/brown





Inundated Beakrush (Rhynchospora inundata)



Inundated Beakrush (Rhynchospora inundata)

- Native
- Common throughout FL
- Marshes, bogs, wet flatwoods, cypress swamps, lake margins
- Spreads by rhizome and seeds







Inundated Beakrush (Rhynchospora inundata)

- Height : 1 m
- Leaves: upright, arise from base
- Spikelets: pale reddish/brown lance shaped
- Achenes: 4-6 mm, surrounded by bristles
- Rhizomes: thin, covered with scales



Wright's Nutrush (Scleria lacustris)



Wright's Nutrush (Scleria lacustris)

- Non native invasive
- FLEPPC: Cat I
- Annual
- Marshes, lakes, seasonal wetlands
- Spreads by seed









Wright's Nutrush (Scleria lacustris)

- Height: 2 m
- Stems: angular, spongy & red at base
- Leaves: scabrous, 1-2^{1/2} cm wide, contra-ligule triangular
- Inflorescences: axillary and terminal panicles
- Achenes: smooth, ovoid, subtended by bracts



Tropical Nutrush (Scleria microcarpa)



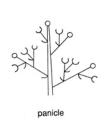
Tropical Nutrush (Scleria microcarpa)

- Non native invasive
- EDRR Orange, Polk, Osceola, Palm Beach Co.
- FLEPPC 2019: Cat I
- Forested wetlands & cypress swamps
- Spreads by seed & short rhizome



Tropical Nutrush (Scleria microcarpa)

- Height: approx. 1 m
- Stems: slender, do not branch
- Leaves: scabrous, winged sheaths, lanceolate contra-ligule
- Inflorescences: axillary & terminal panicles
- Achenes: 1-2 mm, smooth, roundish









Eggers Nutrush (Scleria eggersiana)



Eggers Nutrush (Scleria eggersiana)

- Non native invasive
- EDRR Species Hendry Co.
- Cypress swamps
- Spreads by seed & short rhizome







Eggers Nutrush (Scleria eggersiana)

- Height 3 m
- Stems: dense pith
- Leaves: scabrous, winged sheaths, triangular/lanceolate contra-ligule
- Inflorescences: terminal & axillary panicles
- Achenes: 2^{1/2} -3 mm, smooth, oval/round



Thank You!











Questions? Need help with ID? aonisko@sfwmd.gov

References

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