

Field ID for Common Lake Grasses

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DEP Standards and Assessment Section

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Cyperaceae (Sedges)	Poaceae (Grasses)	Juncaceae (Rushes)
Stems usually 3-angled (or round, 4-angled, lenticular)	Stems round (terete)	Stems round (terete)
Stems usually with solid pith	Stems with solid nodes and hollow internodes	Stems with solid pith
Leaf sheaths closed	Leaf sheaths open	Leaf sheaths open
Leaves 3-ranked or spiral	Leaves 2-ranked	Leaves 2-ranked
Fruit an achene with bristles, bracts, may have tubercle	Fruit a grain with papery palea, lemma, and glumes	Fruit a capsule with tiny dust-like seeds

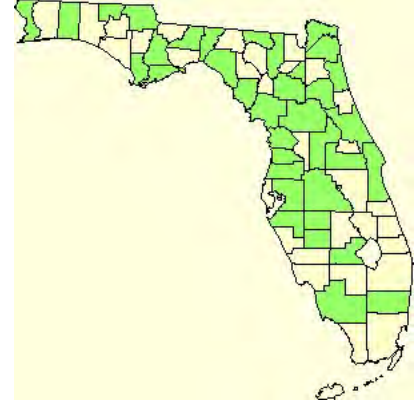
Common Grasses in lake or fringe

- Submersed/Floating
 - *Luziola fluitans*
- Emergent – Low
 - *Leersia hexandra*
 - *Panicum repens**
 - *Paspalum repens*
- Emergent - Mid
 - *Panicum hemitomon*
 - *Sacciolepis striata*
 - *Paspalidium geminatum*
 - *Urochloa mutica**
 - *Hymenachne amplexicaulis**
 - *Luziola subintegra**
- Fringe
 - *Amphicarpum muhlenbergium*
 - *Panicum dichotomiflorum*

*Invasive exotic

Luziola fluitans – Water Grass

- Slender grass growing in shallow water
- Leaves float



Paspalum repens

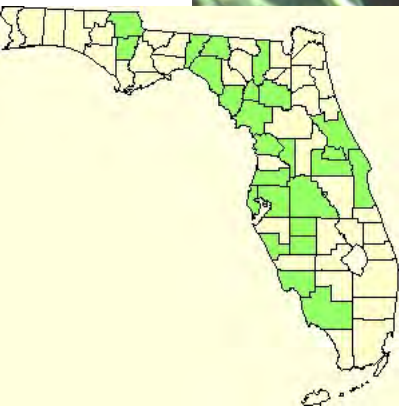
Water Paspalum

- Fruits on winged rachis (leafy)
- Sprawling and floating
- Purple spots on sheaths
- Stems spongy, roots dark



Paspalum repens

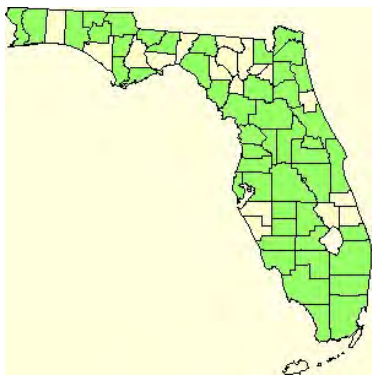
Paspalum repens
Water paspalum
Photo by Ann Murray
1999 University of Florida



Water paspalum
Photo by Ann Murray
1999 University of Florida



Paspalum repens
Photo by Shirley Denton



Leersia hexandra

Southern Cut Grass

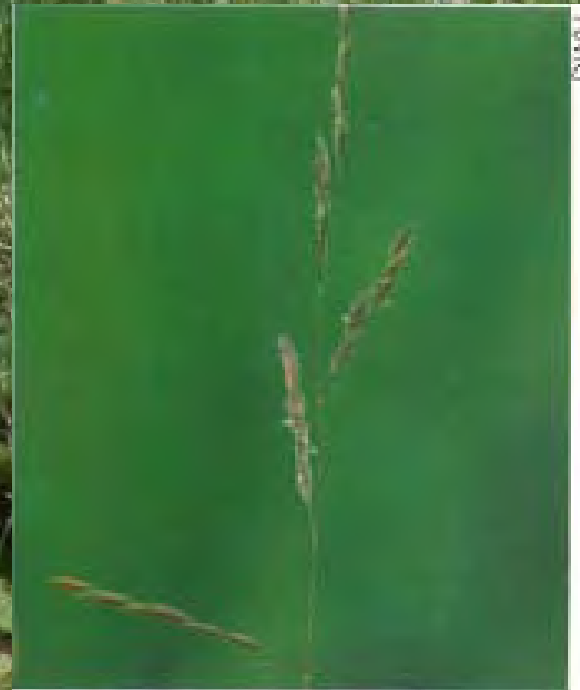
- Forms mats on water surface
- Even leaf heights, “hair cut” grass
- “stiffly ascending leaves < 9 mm wide”
- Leaf blades scabrous
- Fruits flattened, peach-colored (good photo in FL Wetland book)
- Ring of white hairs at nodes



Leersia hexandra
Photo by Shirley Denton

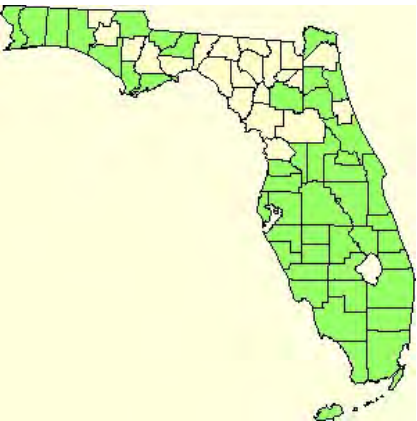


Leersia hexandra with *Panicum repens*



Panicum repens - Torpedograss **Exotic**

- Floating mats
- Bluish-green color
- Flowers purple and orange
- Rhizome tip pointed and white (torpedo-like)
- Sits fairly low to the water, but not regular like *Leersia*



Panicum repens

Torpedograss

- Perennial, rhizomatous
- Stems rigid, decumbent at base, roots at lower nodes
- Nodes, internodes, sheaths glabrous or hairy
- Panicles open
- Leaves to 30 cm long and **8 mm** wide
- Leaves flat to folded, tips sharp, linear, **grayish**
- Ligules membranous, ciliate, 1 mm long

Panicum hemitomon

Maidencane

- Flowers/fruits appressed to stem, each seed has stalk
- Stems and nodes sometimes hairy
- Can create large stands of varying thickness
- Plants come higher out of the water than *P. repens*
- Ligule of long hairs, more obvious than in *Sacciolepis striata*
- Nodes may grow roots in water, but not typically in soil



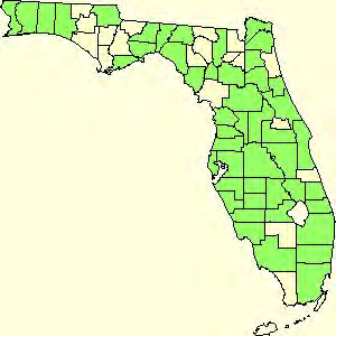
Panicum hemitomom

Maidencane

- Perennial, rhizomatous
- Stems erect, may roots at nodes in water, but **not decumbent**
- Nodes, internodes, sheaths glabrous or hairy
- Panicles elongated and tight (not open)
- Leaves to 35 cm long and 15 mm wide
- Leaf margins scabrous
- **Ligules membranous, ciliate, to 1 mm long**

Panicum hemitomon – typical habit





Sacciolepis striata

American cupscale

- Can form dense stands
- Conspicuous nerves on leaves
- Short hairs on sheath
- Short ligule
- Spikelets not close against central axis of inflorescence



Sacciolepis striata

American cupscale

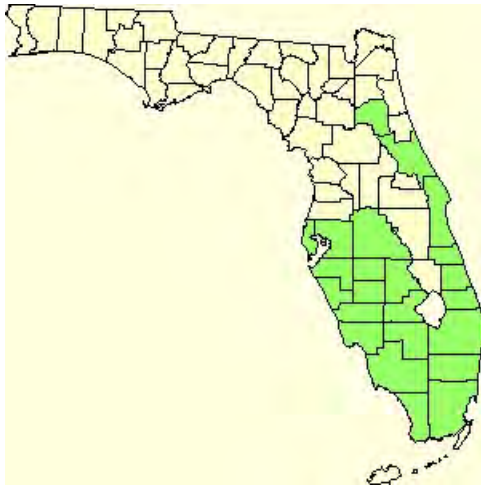
- Perennial, stoloniferous
- Stems **decumbent**, roots at nodes
- Nodes, internodes, sheaths glabrous or hairy
- Sheaths often purplish
- Flowers in dense appressed spikes
- Leaves to 23 cm long and 20 mm wide
- **Ligule hairs 2-3 mm long**

Urochloa (Brachiaria) mutica

Pará grass

Exotic

- Sprawling, medium-height, mat-forming grass
- Swollen nodes with dense hairs
- Sheaths loose, overlapping
- Inflorescence an open panicle, 8-20 alternate branches
- Spikelets purplish



Urochloa mutica

Paragrass

- Not native, Perennial, stoloniferous
- Stems erect or decumbent, roots at nodes
- **Nodes densely haired**, internodes glabrous
- Lower leaf sheaths densely hairy, may be purplish
- Flowers in terminal open branches
- Leaves to 35 cm long and 20 mm wide
- Ligule membranous with hairs, to 2 mm long

Urochloa mutica



Photos from Curtis Porterfield

A photograph of a field of Urochloa mutica grass. The grass is green and dense, filling the foreground and middle ground. In the background, there is a line of trees, including several tall, thin, light-colored trunks, possibly cypresses, under a blue sky with some clouds. The text "Urochloa mutica" is written in a large, bold, yellow font, and "Photo by Shirley Denton" is written in a smaller, italicized, yellow font below it, both on a black rectangular background in the upper right corner.

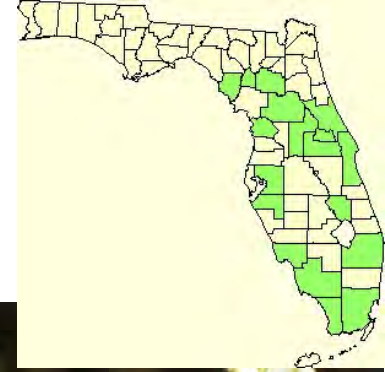
Urochloa mutica

Photo by Shirley Denton

Paspalidium geminatum

Egyptian paspalidium, Kissimmeeegrass

- Leaf blades can be involute or folded, appearing thin
- Tufted stems, long leaves
- Seeds on one side of rachis
- Sheaths longer than internodes
- Ligule a fringe of short hairs



Paspalidium geminatum

Photo by Shirley Denton



Paspalidium geminatum

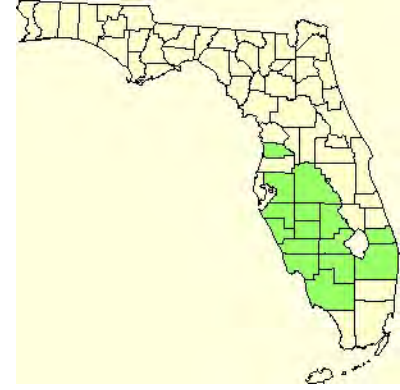
Photo by Shirley Denton

Hymenachne amplexicaulis

West Indian Marsh Grass

Trompetilla

Exotic



- 1-2.5 m high
- Perennial, stoloniferous
- Leaf blades up to 4 cm wide, cordate at the base
- Stems glabrous, white pith
- Panicles narrow, pressed against axis, VERY DENSE



West Indian marsh grass
Hymenachne amplexicaulis
Photo by A. Murray
Copyright 2000 Univ. Florida



West Indian marsh grass
Hymenachne amplexicaulis
Photo by A. Murray
Copyright 2000 Univ. Florida

Hymenachne amplexicaulis

Trompetilla or West Indian Marsh Grass

- Not native, Perennial, stoloniferous
- Stems decumbent, roots at nodes
- Leaf blade margins at the base with long hairs
- Leaves **cordate clasping**
- Flowers in dense cylindric spikes
- Leaves to 33 cm long and **25 mm wide**
- **Ligule a brownish membrane**, to 2.5 mm long



Luziola subintegra

- New aggressive exotic
- Robust emergent grass
- Thick spongy leaf sheaths
- Leaves > 7 mm wide, ligules 1-4 cm long
- Occurs in Fisheating Bay



From Kunzer & Bodle, 2008
J. Bot. Res. Inst. Texas 2(1)

Luziola subintegra

Photo by John Kunzer



Panicum dichotomiflorum

Fall Panicum

- Annual or short lived perennial, clumped
- Stems erect or decumbent, roots at nodes
- Nodes and internodes glabrous (not hairy), sheaths may be hairy
- Flowers in open panicle
- Leaves to 50 cm long and 25 mm wide
- **Leaf midrib whitish**, margins scabrous
- **Ligules membranous, densely ciliated, to 2.5 mm long**

Amphicarpum muhlenbergianum

Blue Maidencane

- Leaves bluish-green, **evenly spaced on stem**
- Leaf margins with **white hyaline margin**
- Flowers in panicle



Echinochloa

- 6 species in Florida
 - 3 non-native (*colona*, *crusgalli*, *cruspavonis*)
 - 3 native (*walteri*, *muricata*, *paludigena*)
- **No ligule**
- Awns are variable
 - Long awns (*walteri*)
 - No awns (*colona*)
 - Either *with or without* awns (*crusgalli*, *muricata*, *paludigena*)
- Leaf sheaths compressed

Echinochloa walteri

- No ligule
- Nodes hairy
- Leaf midveins white, margins scabrous
- 2 awns/spikelet, awns to 4 cm
- Bases and plant parts often purple





Echinochloa crusgalli

- No ligule
- Nodes not hairy
- 1 awn/spikelet, awns usually present and to 2 cm
- Edges of leaves scabrous, hairs on edges of sheath

The image shows a herbarium specimen of Echinochloa crusgalli, commonly known as Barnyard Grass. The specimen is mounted on a light-colored paper. It consists of several long, narrow, green leaves and a single, upright, brownish seed head (panicle) at the top. The seed head is composed of many small, dark, spikelets. The stem is thin and green, with a small, reddish-brown node visible. The specimen is labeled with its scientific name and a collection number.

Echinochloa crusgalli
Barnyard Grass

Flora of Florida

Echinochloa crusgalli (L.) Beauv.
Gadsden County: Lake Tallavanna

Echinochloa # 231

Saccharum giganteum (*Erianthus giganteus*)

Sugarcane plumegrass

- Common grass, occurs in range of habitats
- Large silky inflorescence
- Leaves to 50 cm long and 20 mm wide; may be pubescent; scabrous margins
- Leaf sheaths glabrous, longer than internodes
- Ligules membranous, ciliate, to 6 mm long



Big Grasses



Flora of Florida

Erianthus giganteus (Wall.) Muhl.

County 5, Florida

Saccharum (Erianthus) giganteus
Sugarcane Plumegrass

Andropogon glomeratus
Bushy Broom Grass

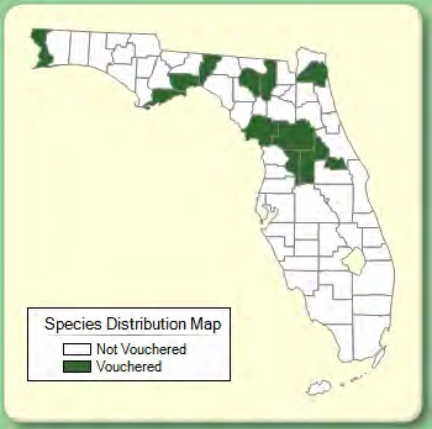
Echinochloa walteri
Coast Cockspur-grass

Phragmites australis

Common reed

- Large grass of fresh and brackish water
- Large silky inflorescence
- Leaves alternate along stem
- Fringe-like ligule of short bristles





Zizania aquatica

Wild rice

- Large clumping grass
- Basal leaves to 1.5 m long or more and 5.5 cm wide
- Blades & sheaths glabrous, margins sharply scabrous
- Male and female clearly separate on inflorescence
- **Stem of inflorescence round and spongy**
- Ligules membranous, 15 mm

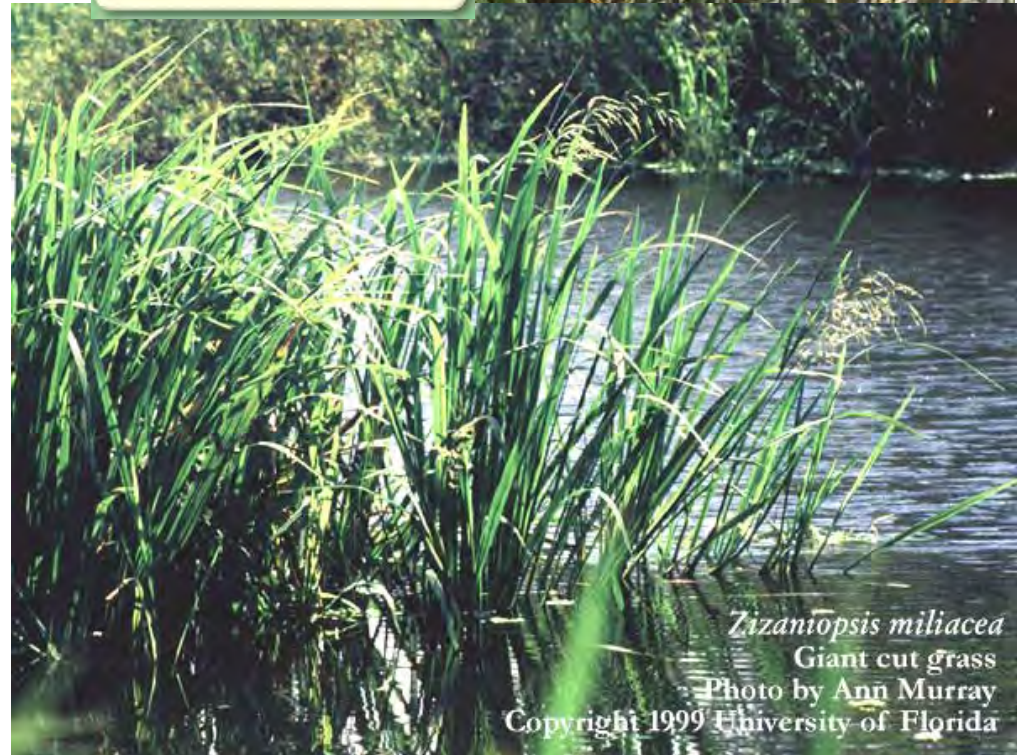
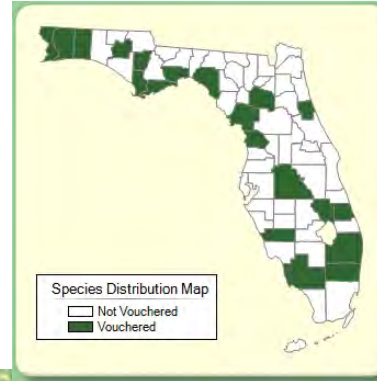


Photo by Ann Murray
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Zizaniopsis miliacea

Giant cutgrass

- Basal leaves only
- Leaves to 1 m long and 4 cm wide
- Leaves & sheaths smooth, sharp margins
- Large inflorescence, all drooping
- Base of inflorescence stem flat
- Ligules membranous, with tips frayed, to 2 cm



Dichanthelium vs. *Panicum*

- Until recently, *Dichanthelium* was a genus within *Panicum*
- Most species of *Dichanthelium* have short shoots from leaf axes (spring and summer)



Flora of Florida

Dichanthelium scabrisculum (Ell.) Gould and Clark
Walton County: NW4-SL-2056 Lakeshore

Latitude: 30° 48' 50.22" Longitude: 86° 07' 7.34"