

## Florida Department of Agriculture and Consumer Services Division of Plant Industry

### Rhynchospora of Florida

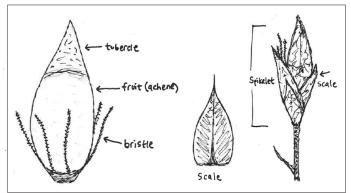
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#### INTRODUCTION

*Rhynchospora* is a genus of about 250 species in the Cyperaceae (sedge family), cosmopolitan in distribution, with the greatest diversity in tropical and sub-tropical regions. In Florida, there are 56 accepted species of *Rhynchospora*, all of which are native. *Rhynchospora* is noteworthy for being the vascular plant genus with the greatest number of taxa endemic to the southeastern North American Coastal Plain (Sorrie and Weakley, 2001). Species of *Rhynchospora*, and the Cyperaceae in general, tend to be key factors in the formation of important ecosystems such as grasslands and savannas, coastlines, pine flatwoods, swamps and margins of ponds, lakes and rivers throughout their range. About 500 species in the Cyperaceae worldwide, and specifically 10 taxa of *Rhynchospora*, have been identified to have some economic or ethnobotanical importance at the regional or local level (Simpson and Inglis, 2001). For example, there are several sedges that are used for food and fodder, while others are used in traditional medicine, or for making paper and weaving mats, baskets and screens due to their strong, fibrous stems and leaves. Based on divergence dates inferred using DNA data from across the family, evolution in the crown group of the tribe Rhynchosporeae started prior to the Oligocene (>34 mya) (Besnard *et al.*, 2009) when the climate shifted, and grasslands and savannas became more widespread globally (Buddenhagen, 2016; Edwards *et al.*, 2010). Although believed to be predominantly wind pollinated, a few species appear to have made reversals to insect pollination through modifications to the inflorescence (Buddenhagen, 2016). Species of *Rhynchospora* also provide food for migratory waterfowl and nests for many insect species.

Plants are perennial, sometimes annual, cespitose or rhizomatous, grass-like herbs commonly occurring in damp to wet habitats, except for a few taxa found in dry areas. The flowers are reduced and inconspicuous, typically consisting of a superior ovary with a bifid style, three stamens and six perianth bristles, but there are exceptions to this morphological model with some species having from one to 12 stamens and zero to 20 perianth bristles. The flowers are arranged in spikelets, composed of an axis with several spirally arranged scales each subtending a single flower (Fig. 1). The spikelets are often arranged in terminal and axillary fasciculate clusters, but the inflorescence can also be paniculate, corymbose, racemose, or capitate. The fruit is an achene and is typically lenticular (sometimes flattened or nearly terete) in shape. The base of the style is persistent

on the achene and is termed the "tubercle". The intricate microscopic details of the fruit (most notably the achene shape and body surface texture, the shape of the tubercle and the perianth bristle number, type and length) are essential in the identification of *Rhynchospora*. Therefore, to identify most species of *Rhynchospora* confidently, the achene must be carefully dissected from the spikelet and then examined under high magnification. The seemingly infinite variation of achene morphology is what makes *Rhynchospora* so truly interesting and special to those who admire the morphological complexity and beauty of the natural world. [From Greek *rhynchos*, a"snout" and *spora*, a"seed"]. Note: This is a conservative treatment that mostly follows *Guide to the vascular plants of Florida* (3rd edition), Wunderlin and Hansen (2011).



**Fig. 1: Rhynchospora achene and spikelet morphology.** Illustration by Alex de la Paz, FDACS, DPI



## Rhynchospora baldwinii A. Gray – Baldwin's Beaksedge

#### DISTRIBUTION

Peninsula, central and western panhandle

#### HABITAT

Mesic to wet flatwoods and wet prairies

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Spring

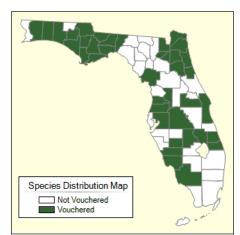
#### DESCRIPTION

Perennial, cespitose herb, 40-100 cm; culms sharply trigonous, minutely scabrous; basal leaves forming rosette, blades linear, 3-5 mm wide, shorter than culm, cauline leaves widely spaced, narrower; spikelet clusters 1-2, terminal cluster mostly dense, hemispheric; scales dark red-brown; spikelets 1-2 fruited; achene body broadly ellipsoid, lenticular, surface smooth; perianth bristles 12, antrorsely barbed, equaling or exceeding tubercle; tubercle conical.



**Fig. 2: Rhynchospora baldwinii achene.** Photo by Joshua Campbell

**Fig. 3: Rhynchospora baldwinii, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



All species distribution maps within this circular indicate the counties in which each *Rhynchospora* species has been documented with a specimen deposited in a public herbarium.

## Rhynchospora caduca Elliott – Anglestem Beaksedge

#### DISTRIBUTION

Northern and central peninsula, panhandle, Santa Rosa County

#### HABITAT

Swamps, hydric hammocks and wet flatwoods

#### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

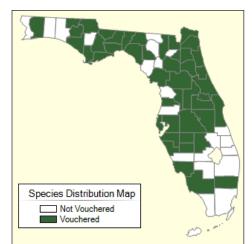
Perennial, cespitose herb, 70-150 cm; often shortly rhizomatous; culms erect, trigonous; leaves shorter than culm, blades linear, 4-7 mm wide; spikelet clusters 3-6, mostly dense, narrowly to broadly turbinate; scales rich brown; spikelets 3-4 fruited; achene body broadly obovoid to suborbicular, lenticular, surface transversely rugulose; perianth bristles mostly 6, antrorsely barbed, exceeding tubercle; tubercle deltoid, the margins setose.





Fig. 4: Rhynchospora caduca achene. Photo by Joshua Campbell

**Fig. 5: Rhynchospora caduca, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora cephalantha A. Gray – Bunched Beaksedge

#### DISTRIBUTION

Northern and central peninsula, panhandle, Collier County

#### HABITAT

Marshes, wet flatwoods, and lake, stream and swamp margins

#### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Fall

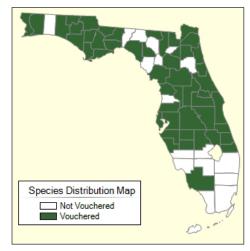
#### DESCRIPTION

Perennial, cespitose herb, 40-150 cm; culms obscurely trigonous, 1.5-2.5 mm thick at midculm; leaves shorter than culm, blades linear, 1.5-3 mm wide; spikelet clusters 3-several, hemispheric to globose, 1-2 mm wide; scales dark red-brown; spikelets 1-fruited; achene body 1.8-2.6 mm long, obovoid distal to the stipe, lenticular, surface smooth, brown with pale center; perianth bristles 6, retrorsely barbed, equaling tubercle; tubercle triangular-subulate.



**Fig. 6: Rhynchospora cephalantha achene**. Photo by Joshua Campbell

**Fig. 7: Rhynchospora cephalantha, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora chalarocephala Fernald & Gale – Loosehead Beaksedge

#### DISTRIBUTION

Northern and central peninsula, central and western panhandle

#### HABITAT

Bogs, marshes and wet flatwoods

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

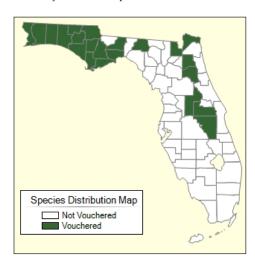
Summer

#### DESCRIPTION

Perennial, cespitose herb, 30-100 cm; culms slender, nearly terete; leaves shorter than culm, blades linear, 1-2 mm wide; spikelet clusters 3-7, loosely turbinate to hemispheric; scales pale red-brown; spikelets 1-fruited; achene body 1.6-1.8 mm long, broadly oblong-obovoid distal to the stipe, lenticular, surface smooth, brown with pale center; perianth bristles 6, retrorsely barbed, equaling tubercle; tubercle narrowly triangular-subulate.



**Fig. 8: Rhynchospora chalarocephal achene**. Photo by Joshua Campbell



**Fig. 9: Rhynchospora chalarocephala, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora chapmanii M. A. Curtis – Chapman's Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Mesic to wet flatwoods, bogs, and wet prairies

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

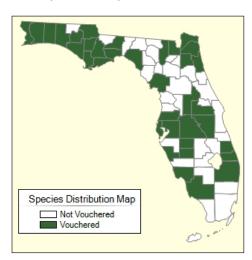
Spring-Summer

#### DESCRIPTION

Perennial, cespitose herb, 30-70 cm; culms filiform, erect to arching; leaves slightly shorter than culm, basal and cauline, blades +/- filiform, to 1 mm wide; spikelet clusters 1-2, dense, broadly turbinate to hemispheric; involucral bracts 1-2, overtopping inflorescence; scales light brown; spikelets 1-fruited; achene body broadly ellipsoid, ca. 1.3 mm long, lenticular, surface smooth; perianth bristles absent; tubercle broadly deltoid.



**Fig. 10: Rhynchospora chapmanii achene**. Photo by Joshua Campbell



**Fig. 11: Rhynchospora chapmanii, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora ciliaris (Michx.) C. Mohr – Fringed Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Mesic to wet flatwoods and bogs

#### **RELATIVE ABUNDANCE** Frequent

### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

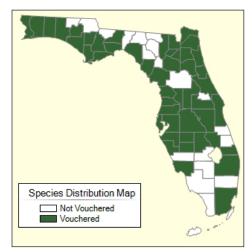
Perennial, cespitose herb, 30-90 cm; culms erect, nearly terete; basal leaves forming rosette, blades linear, 4-6 mm wide, cauline leaves widely spaced, narrower, all ciliate; spikelet cluster 1, terminal, crowded, hemispheric; scales dark red-brown, the midrib ciliate; bracts ciliate; spikelets 1-2 fruited; achene body broadly ellipsoid to orbicular, lenticular, surface smooth/minutely pitted; perianth bristles 6, antrorsely barbed, less than half the length of the achene body; tubercle deltoid.





**Fig. 13: Rhynchospora ciliaris, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants





## Rhynchospora colorata (L.) H. Pfeiff. – Starrush Whitetop

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Moist flatwoods and prairies, bogs and ditches

### **RELATIVE ABUNDANCE**

Common

### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

Perennial, rhizomatous herb, 10-70 cm; rhizomes slender, scaly; culms erect, slender, trigonous; leaves shorter than culm, blades narrowly linear, 0.5-3 mm wide; spikelet cluster 1, terminal, headlike; involucral bracts 3-7, basally white, apically green; scales white; spikelets several-fruited; achene body broadly pyriform-obovoid, tumidly lenticular, surface transversely undulate rugose; perianth bristles absent; tubercle deltoid.



**Fig. 14: Rhynchospora colorata achene**. Photo by Alex de la Paz, FDACS-DPI



**Fig. 15: Rhynchospora colorata, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora compressa J. Carey ex Chapm. - Flatfruit Beaksedge

#### DISTRIBUTION

Central and western panhandle

#### HABITAT

Bogs and wet flatwoods

## RELATIVE ABUNDANCE

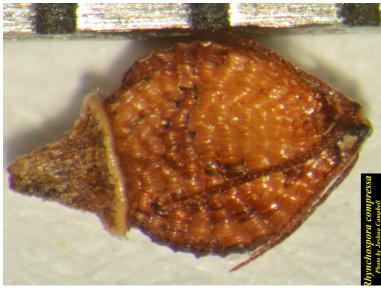
Occasional

#### **REPRODUCTIVE SEASONS**

Spring-Summer

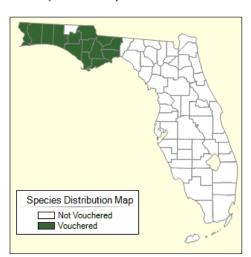
#### DESCRIPTION

Perennial, cespitose herb, 70-150 cm; culms erect, trigonous; leaves shorter than culm, blades linear, 3-5 mm wide; spikelet clusters 3-5, compact, turbinate to hemispheric; scales red-brown; spikelets 1-2 fruited; achene body broadly elliptic, flattened, surface strongly transversely wavy rugose; perianth bristles 6, antrorsely barbed, ca. half the length of the achene body to tubercle; tubercle low-conic, with basal rim extending over apex of achene.





**Fig. 16: Rhynchospora compressa achene**. Photo by Joshua Campbell



**Fig. 17: Rhynchospora compressa, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora corniculata (Lam.) A. Gray – Shortbristle Horned Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Marshes, swamps, and pond and lake margins

#### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Fall

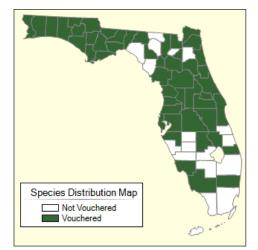
#### DESCRIPTION

Perennial, cespitose herb, 100-200 cm; culms erect, trigonous; leaves shorter than culm, blades flat, 3-20 mm wide; spikelets in diffuse clusters of corymbs, few to many per cluster, clusters turbinate to hemispheric; scales red-brown; spikelets 1-2 fruited; achene body oblong-ellipsoid, compressed, surface concave, striate, minutely cancellate; perianth bristles 5-6, antrorsely barbed, ca. half the length of the achene body; tubercle subulate, 10-20 mm long.



**Fig. 18: Rhynchospora corniculata achene.** Photo by Joshua Campbell

**Fig. 19: Rhynchospora corniculata, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora crinipes Gale – Mosquito Beaksedge, Hairy Peduncled Beakrush

#### DISTRIBUTION

Central and western panhandle

#### HABITAT

Peaty, wet stream banks

## RELATIVE ABUNDANCE

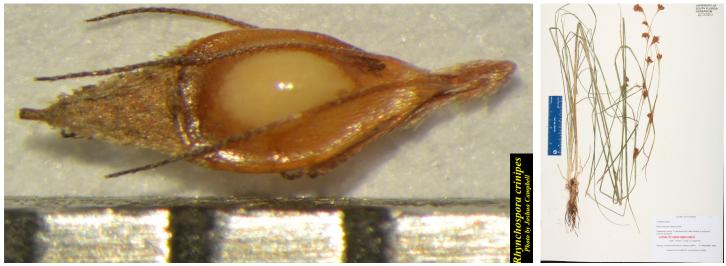
Rare [State Endangered]

### REPRODUCTIVE SEASONS

Summer

#### DESCRIPTION

Perennial, cespitose herb, 60-100 cm; culms slender, drooping; leaves shorter than culm, blades linear, 2-5 mm wide; spikelet clusters 3-10, widely spaced, broadly turbinate to hemispheric; scales light red-brown; spikelets 2-4 fruited; achene body narrowly obovoid-lenticular, surface minutely striate; achene stipe persistent, pubescent; perianth bristles 6, antrorsely barbed, equaling tubercle; tubercle narrowly triangular, the margins setose.



**Fig. 20: Rhynchospora crinipes achene**. Photo by Joshua Campbell

**Fig. 21: Rhynchospora crinipes, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora curtissii Britton ex Small - Curtiss' Beaksedge

#### DISTRIBUTION

Central and western panhandle

#### HABITAT

Flatwoods and bogs

## RELATIVE ABUNDANCE

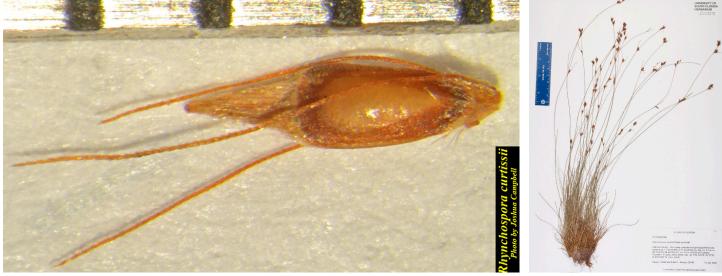
Occasional

#### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

Perennial, cespitose herb, 10-30 cm; culms filiform, erect to drooping; leaves shorter than culm, blades filiform, involute, to 1 mm wide; spikelet clusters 1-3, narrowly turbinate, ellipsoid or ovoid; scales red-brown; spikelets 2-5 fruited; achene body narrowly obovoid-ellipsoid, lenticular, surface smooth, light brown with pale center; perianth bristles 6, antrorsely barbed, exceeding tubercle; tubercle deltoid-subulate, flattened, the margins serrulate.



**Fig. 22: Rhynchospora curtissii achene**. Photo by Joshua Campbell



**Fig. 23: Rhynchospora curtissii, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora debilis Gale – Savannah Beaksedge

#### DISTRIBUTION

Northern counties south to Volusia County

#### HABITAT

Marshes, wet flatwoods and bogs

### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

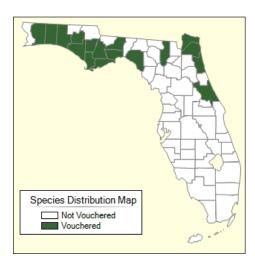
Perennial, cespitose herb, 20-50 cm; culms filiform, terete, erect to drooping; leaves shorter than culm, blades filiform, 1 mm wide; spikelet clusters 1-2, turbinate to hemispheric; scales dark red-brown; spikelets 1-2 fruited; achene body broadly obovoid to orbicular, lenticular, surface smooth/minutely reticulate, brown with pale center; perianth bristles 5-6, antrorsely barbed, less than half the length of the achene body; tubercle deltoid, depressed-flattened, concave sided.







Fig. 25: Rhynchospora debilis, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora decurrens Chapm. – Swampforest Beaksedge

#### DISTRIBUTION

Northern counties and central peninsula

#### HABITAT

Swamps and marsh margins

## RELATIVE ABUNDANCE

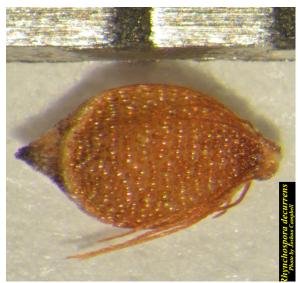
Occasional

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

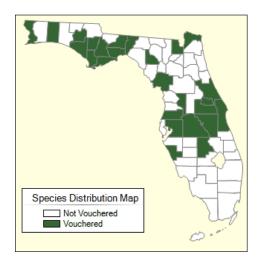
Perennial, cespitose herb, 50-100 cm; culms erect, terete, slender; leaves exceeded by inflorescence, blades flat, 2-4 mm wide; spikelet clusters 4-6, widely spaced, broadly to narrowly turbinate, paniculate, spikelets solitary or paired on capillary pedicels; scales brown; spikelets 2-3 fruited; achene body obovoid, lenticular, surface transversely rugulose; perianth bristles 6, antrorsely barbed, equaling achene body; tubercle deltoid, the base decurrent.





**Fig. 26: Rhynchospora decurrens achene**. Photo by Joshua Campbell

**Fig. 27: Rhynchospora decurrens, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora divergens Chapm. ex M. A. Curtis – Spreading Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Wet flatwoods, interdune swales, wet prairies and ditches

#### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

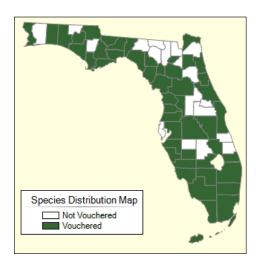
Perennial, cespitose herb, 10-60 cm; culms erect, terete, filiform; leaves shorter than culm, blades filiform, involute, 0.3-0.5 mm wide; spikelet clusters 1-4, dense to open, broadly to narrowly turbinate, spikelets on capillary pedicels of unequal lengths; scales brown; spikelets 1-8 fruited; achene body obovoid, less than 1 mm long, lenticular, surface smooth, pale, glassy; perianth bristles absent; tubercle button depressed-triangular or patelliform, whitish, blunt-apiculate.





**Fig. 28: Rhynchospora divergens achene**. Photo by Joshua Campbell

**Fig. 29: Rhynchospora divergens, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora elliottii A. Dietr. – Elliott's Beaksedge

#### DISTRIBUTION

Northern counties and central peninsula

#### HABITAT

Wet flatwoods, bogs and swamps

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

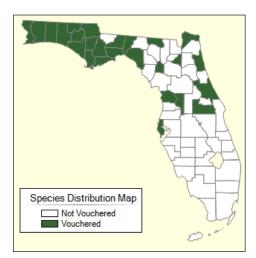
Spring-Summer

#### DESCRIPTION

Perennial, cespitose herb, 80-150 cm; culms erect with arching apex, slender; leaves exceeded by inflorescence, blades linear, 3-5 mm wide; spikelet clusters 4-6, crowded to spaced, broadly to narrowly turbinate; scales red-brown; spikelets 2-4 fruited; achene body obovoid-orbicular, strongly flattened, surface transversely wavy rugose; perianth bristles 6, antrorsely barbed, exceeding the tubercle, spreading; tubercle deltoid, flat.



**Fig. 30: Rhynchospora elliottii achene**. Photo by Joshua Campbell



**Fig. 31: Rhynchospora elliottii, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora eximia (Nees) Boeck. – Florida Beaksedge

#### DISTRIBUTION

Polk, Charlotte and Lee counties

#### HABITAT

Flatwoods, pond margins and brackish marshes

#### **RELATIVE ABUNDANCE**

Rare

#### **REPRODUCTIVE SEASONS**

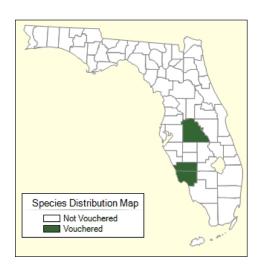
Summer

#### DESCRIPTION

Perennial or annual, cespitose or solitary herb, 10-50 cm; culms spreading to erect, obtusely trigonous; leaves exceeding inflorescence, blades narrowly linear, 1-3 mm wide; inflorescences terminal and axillary, clusters of 1–5 corymbs, spikelets few to several on branches; scales brown; spikelets > 10-fruited; achene body tumidly lenticular, nearly orbicular, surface transversely wavy rugose; perianth bristles absent; tubercle curved upward at the edges.









**Fig. 33: Rhynchospora eximia, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora fascicularis (Michx.) Vahl – Fascicled Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Moist to wet flatwoods, savannas and lake margins

#### **RELATIVE ABUNDANCE**

Common

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

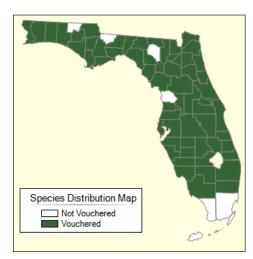
Perennial, cespitose herb, 100-150 cm; culms erect, obtusely trigonous; leaves shorter than culm, blades linear, 1-4 mm wide; spikelet clusters 1-4, dense, broadly turbinate to hemispheric; scales red-brown; spikelets 1-3 fruited; achene body broadly ellipsoid to orbicular, lenticular, surface smooth, dull, dark brown with pale center; perianth bristles 5-6, antrorsely barbed, rudimentary to equaling or exceeding the achene body; tubercle triangular.





Fig. 34: Rhynchospora fascicularis achene. Photo by Joshua Campbell

**Fig. 35: Rhynchospora fascicularis, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora fernaldii Gale - Fernald's Beaksedge

#### DISTRIBUTION

Nearly throughout

**HABITAT** Scrubby to mesic flatwoods

#### **RELATIVE ABUNDANCE** Frequent

#### **REPRODUCTIVE SEASONS**

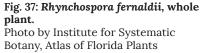
Summer-Fall

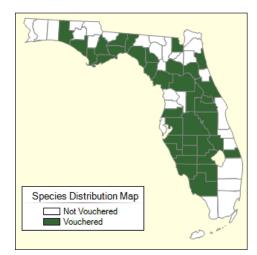
#### DESCRIPTION

Perennial, cespitose herb, 10-50 cm; culms erect, slender; leaves shorter than culm, blades filiform, to 1 mm wide; spikelet clusters 1-2, dense, broadly turbinate to hemispheric; scales red-brown; spikelets 2-3 fruited; achene body broadly obovoid to broadly ellipsoid, lenticular, ca. 1 mm long, surface smooth, dull, dark brown with pale center; perianth bristles 6, antrorsely barbed, equaling the achene body; tubercle deltoid.



**Fig. 36: Rhynchospora fernaldii achene**. Photo by Joshua Campbell





## Rhynchospora filifolia A. Gray – Threadleaf Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Wet flatwoods, bogs, pond margins, swamps and marshes

#### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Summer

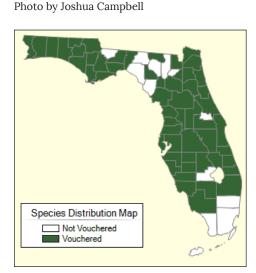
#### DESCRIPTION

Perennial, cespitose herb, 30-100 cm; culms erect, filiform, subterete; leaves shorter than culm, blades narrowly linear to involute, 1-2 mm wide; spikelet clusters 2-4, distant, broadly turbinate to hemispheric; scales red-brown; spikelets 2-4 fruited; achene body obovate, lenticular, ca. 1 mm long, surface smooth, red-brown with pale glassy center; perianth bristles 6, antrorsely barbed, usually slightly exceeding tubercle; tubercle deltoid, the margins scabrous.





**Fig. 39: Rhynchospora filifolia, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora floridensis (Britton ex Small) H. Pfeiff. – Florida Whitetop

#### DISTRIBUTION

Collier, Highlands, Miami-Dade and Monroe counties

HABITAT

Pine rocklands

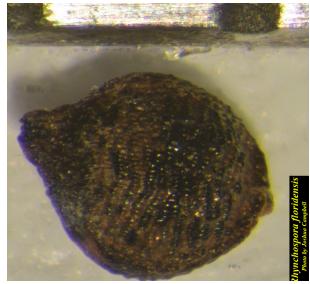
RELATIVE ABUNDANCE Rare

#### **REPRODUCTIVE SEASONS**

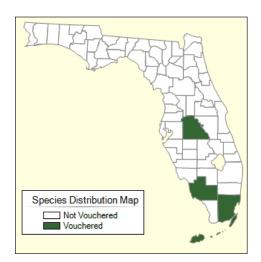
All year

#### DESCRIPTION

Perennial, cespitose herb, 20-50 cm; culms erect, filiform, trigonous; leaves basally crowded, some cauline, shorter than culm, blades filiform to linear; spikelet cluster 1, terminal, headlike; involucral bracts several, basally white, apically green; scales white, basal ones with the keel ciliolate; spikelets several-fruited; achene body nearly orbicular, tumidly lenticular, surface transversely rugose; perianth bristles absent; tubercle deltoid, lunate.



**Fig. 40: Rhynchospora floridensis achene**. Photo by Joshua Campbell





**Fig. 41: Rhynchospora floridensis, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora galeana Naczi et al. – Shortbristle Beaksedge – [Rhynchospora breviseta (Gale) Channell]

#### DISTRIBUTION

Northern and central peninsula, central and western panhandle

#### HABITAT

Mesic to wet flatwoods, wet prairies and bogs

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

Perennial, cespitose herb, 20-40 cm; culms erect, filiform; leaves equaling or shorter than culm, blades filiform; spikelets borne singly or a few together in loose clusters, some or all spikelets on slender stalks; inflorescence bract appearing as continuation of culm; scales pale red-brown; spikelets 3-8 fruited; achene body obovoid, tumidly lenticular, surface finely rugose; perianth bristles 6, plumose, less than half the length of the achene body; tubercle low conic.

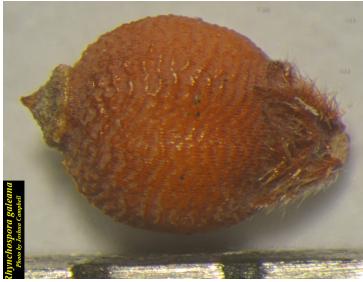




Fig. 42: Rhynchospora galeana achene. Photo by Joshua Campbell

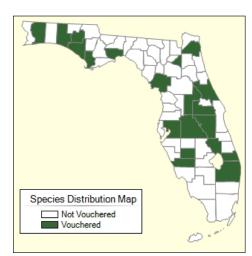


Fig. 43: Rhynchospora galeana, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants

## Rhynchospora globularis (Chapm.) Small – Globe Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Marshes, wet flatwoods and pond margins

#### **RELATIVE ABUNDANCE**

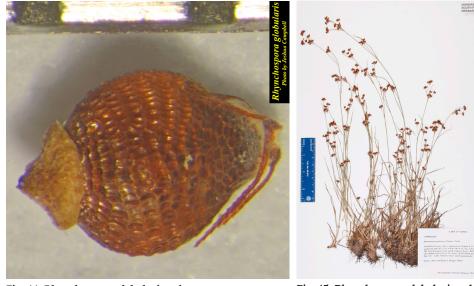
Common

#### **REPRODUCTIVE SEASONS**

Spring-Fall

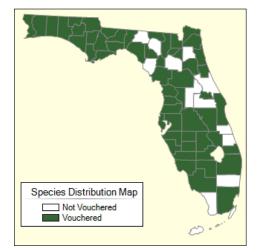
#### DESCRIPTION

Perennial, cespitose herb, 30-80 cm; culms erect to excurved, slender to wiry; leaves shorter than culm, blades linear, 1-3 mm wide; spikelet clusters 1-4, widely spaced, turbinate to compact hemispheric; scales dark brown; spikelets 1-3 fruited; achene body tumidly biconvex, 1.6-2 mm long, surface transversely rugose, chestnut brown; perianth bristles 6, antrorsely barbed, shorter than the achene body; tubercle conic.



**Fig. 44: Rhynchospora globularis achene**. Photo by Joshua Campbell

**Fig. 45: Rhynchospora globularis, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora glomerata (L.) Vahl – Clustered Beaksedge

#### DISTRIBUTION

Nassau and Duval counties, central and western panhandle

#### HABITAT

Bogs, flatwoods and marshes

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer

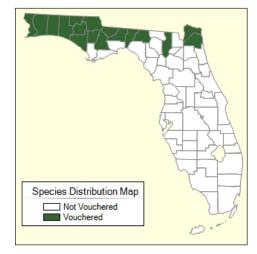
#### DESCRIPTION

Perennial, cespitose herb, 80-150 cm; culms excurved nodding, trigonous, slender; leaves shorter than culm, blades linear, 2.5-5 mm wide; spikelet clusters 2-6, compact, turbinate to hemispheric; scales deep red-brown; spikelets 1-3 fruited; achene body lenticular, obovoid or orbicular, stipitate, surface smooth, dark red-brown with pale center; perianth bristles 6, retrorsely barbed, exceeding tubercle; tubercle triangular-subulate.



**Fig. 46: Rhynchospora glomerata achene**. Photo by Joshua Campbell

**Fig. 47: Rhynchospora glomerata, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora gracilenta A. Gray – Slender Beaksedge

#### DISTRIBUTION

Northern peninsula, central and western panhandle

#### HABITAT

Flatwoods, bogs and swamps

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer

#### DESCRIPTION

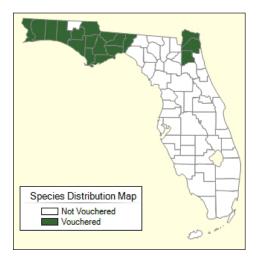
Perennial, cespitose herb, 10-100 cm; culms ascending to excurved, filiform, terete; leaves shorter than culm, blades filiform to linear, 0.5-2.5 mm wide, ascending; spikelet clusters 1-4, distant, narrowly turbinate to hemispheric; scales red-brown; spikelets 1-3 fruited; achene body lenticular, broadly ellipsoid to suborbicular, surface smooth, dark brown with pale center; perianth bristles 6, antrorsely barbed, equaling or exceeding tubercle; tubercle triangular-subulate.





**Fig. 49: Rhynchospora gracilenta, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

Fig. 48: Rhynchospora gracilenta achene. Photo by Joshua Campbell



## Rhynchospora grayi Kunth – Gray's Beaksedge

#### DISTRIBUTION

Nearly throughout

**HABITAT** Sandhills and dry flatwoods

#### **RELATIVE ABUNDANCE** Occasional

## REPRODUCTIVE SEASONS

Spring-Fall

#### DESCRIPTION

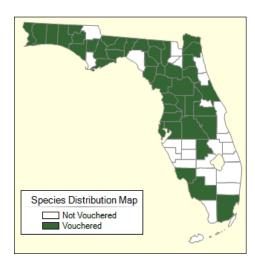
Perennial, cespitose herb, 10-100 cm; culms erect to excurved, slender, firm; leaves shorter than culm, blades linear, 2-4 mm wide; spikelet clusters 1-4, loose to dense, broadly turbinate to hemispheric; scales light red-brown; spikelets 1-2 fruited; achene body broadly and tumidly obovoid, surface finely transversely rugulose, dark brown; perianth bristles 6, antrorsely barbed, ca. half the length of the achene body to tubercle; tubercle low conic with rim at base.





**Fig. 50: Rhynchospora grayi achene**. Photo by Joshua Campbell

**Fig. 51: Rhynchospora grayi, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora harperi Small – Harper's Beaksedge

#### DISTRIBUTION

Northern and central peninsula, central and western panhandle

#### HABITAT

Pineland ponds, cypress strands and cypress domes

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer

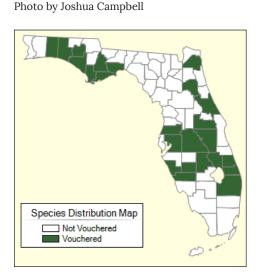
#### DESCRIPTION

Perennial, cespitose herb, 50-70 cm; culms erect with the terminal internode strongly excurved, terete; leaves shorter than culm, blades linear, 0.5-2 mm wide; spikelet clusters 1-3, turbinate to hemispheric; scales red-brown; spikelets 3-4 fruited; achene body obovoid-lenticular, surface smooth, glossy, brown with pale center; perianth bristles 6, antrorsely barbed, equaling or exceeding tubercle; tubercle triangular-subulate, the margins setose.





**Fig. 53: Rhynchospora harperi, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora harveyi W. Boott – Harvey's Beaksedge

#### DISTRIBUTION

Northern counties

**HABITAT** Upland longleaf pine savannas

## RELATIVE ABUNDANCE

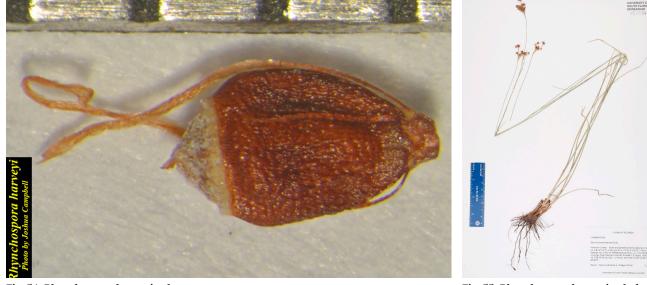
Occasional

## REPRODUCTIVE SEASONS

Spring

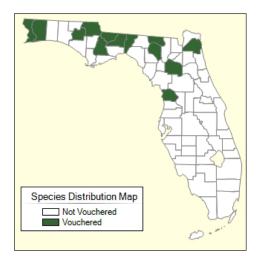
#### DESCRIPTION

Perennial, cespitose herb, 70-110 cm; culms erect to excurved, slender, obscurely trigonous; leaves basally crowded, some cauline, shorter than culm, blades linear, 1-3 mm wide; spikelet clusters 1-4, irregularly turbinate; scales light red-brown; spikelets mostly 1-fruited; achene body obovoid, lenticular, surface transversely rugose, dark brown; perianth bristles 6, antrorsely barbed, half the length of the achene body or less; tubercle low conic with rim at base.



**Fig. 54: Rhynchospora harveyi achene**. Photo by Joshua Campbell

**Fig. 55: Rhynchospora harveyi, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora inexpansa (Michx.) Vahl – Nodding Beaksedge

#### DISTRIBUTION

Northern peninsula, central and western panhandle

#### HABITAT

Wet flatwoods, pond margins and disturbed sites

#### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

Perennial, cespitose herb, 30-120 cm; culms arching, slender, terete; leaves shorter than culm, blades narrowly linear, 2-3.5 mm wide; spikelet clusters 3-6, widely spaced, narrow, elongate; scales red-brown; spikelets 1-4 fruited; achene body narrowly oblong-ellipsoid, flattened, surface transversely rugose, brown; perianth bristles 6, antrorsely barbed, exceeding tubercle; tubercle compressed, narrowly triangular-subulate.



**Fig. 56: Rhynchospora inexpansa achene**. Photo by Joshua Campbell



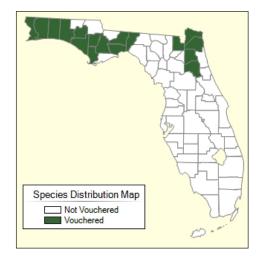


Fig. 57: Rhynchospora inexpansa, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants

# *Rhynchospora intermedia* (Chapm.) Britton – Pinebarren Beaksedge – [*Rhynchospora pineticola* C. B. Clarke]

#### DISTRIBUTION

Peninsula, eastern panhandle, Franklin County

#### HABITAT

Sandhills and scrub

## RELATIVE ABUNDANCE

Frequent

#### **REPRODUCTIVE SEASONS**

All year

#### DESCRIPTION

Perennial, cespitose herb, 20-70 cm, base deep rich red-brown; culms erect, stiff; leaves shorter than culm, blades narrowly linear, 1-3 mm wide, involute; spikelet clusters 1-2, broadly turbinate to hemispheric; scales light to dark red-brown; spikelets 1-2 fruited; tumidly obovoid, surface transversely rugulose, brown; perianth bristles 6, plumose, shorter than or equaling tubercle; tubercle broadly conic, basally 2 lobed.

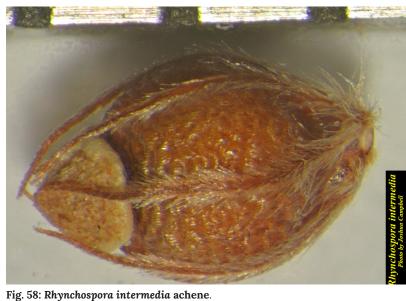




Fig. 59: Rhynchospora intermedia, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants

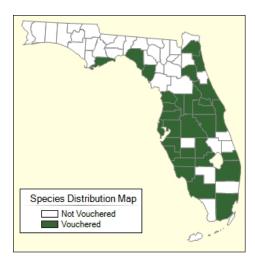


Photo by Joshua Campbell

## Rhynchospora inundata (Oakes) Fernald – Narrowfruit Horned Beaksedge

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Bogs, marshes, wet flatwoods, cypress swamps, and lake and pond margins

#### **RELATIVE ABUNDANCE**

Common

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

Perennial, rhizomatous herb, 50-100 cm; rhizomes slender, scaly; culms erect, trigonous; leaves erect, longer than culm, blades linear, 3-10 mm wide; spikelets in loose clusters in an open, diffuse-paniculate array; scales pale red-brown; spikelets 1-2 fruited; achene body obovoid to oblong, compressed, surface concave, horizontally finely striate, minutely cancellate; perianth bristles 5-6, antrorsely barbed, exceeding achene body; tubercle stout based, grooved, subulate, setulose.



**Fig. 61: Rhynchospora inundata, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



Fig. 60: Rhynchospora inundata achene.

Photo by Joshua Campbell

## Rhynchospora latifolia (Baldwin) W. W. Thomas - Giant Whitetop

#### DISTRIBUTION

Nearly throughout

#### HABITAT

Marshes, bogs and wet flatwoods

## RELATIVE ABUNDANCE

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

Perennial, rhizomatous herb, 80-100 cm; rhizomes scaly, 3-4 mm thick; culms erect, terete, solitary; leaves shorter than culm, blades linear, ca. 2.5-5 mm wide; spikelet cluster 1, terminal, headlike; involucral bracts 5-8, basally white, apically green; scales white; spikelets several-fruited; achene body broadly obovoid to orbicular, tumidly lenticular, surface transversely papillose; perianth bristles absent; tubercle depressed-triangular, decurrent on the sides of the achene.



**Fig. 62: Rhynchospora latifolia achene**. Photo by John R. Gwaltney, <u>Southeastern Flora</u>

**Fig. 63: Rhynchospora latifolia, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora leptocarpa (Chapm. ex Britton) Small – Brownish Beaksedge

#### DISTRIBUTION

Nassau County, central and western panhandle

#### HABITAT

Bogs, wet flatwoods, and pond and stream margins

#### **RELATIVE ABUNDANCE**

Rare

#### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

Perennial, cespitose herb, 20-100 cm; culms arching-ascending, slender; leaves shorter than inflorescence, blades narrowly linear, 2-3 mm wide; spikelet clusters 1-5 or more, compact, turbinate or hemispheric; scales rich deep brown; spikelets 1-5 fruited; achene body lenticular, obovoid, stipitate, surface smooth; perianth bristles 6, retrorsely barbed, equaling tubercle; tubercle triangular-subulate.



**Fig. 64: Rhynchospora leptocarpa achene**. Photo by Joshua Campbell

**Fig. 65: Rhynchospora leptocarpa, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora macra (C. B. Clarke ex Britton) Small – Large Beaksedge

#### DISTRIBUTION

Nassau and Clay counties, central and western panhandle

HABITAT Bogs

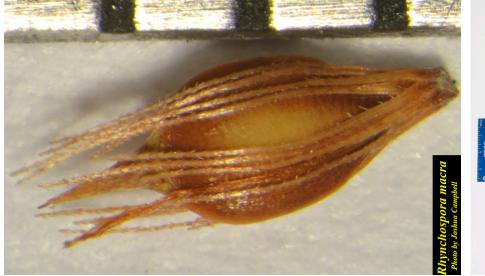
**RELATIVE ABUNDANCE** Occasional

#### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

Perennial, cespitose herb, 40-80 cm; culms erect, trigonous, stiff; leaves shorter than culm, blades narrowly linear, 2-3.5 mm wide; spikelet clusters 1-3, turbinate to hemispheric; scales pale brown to nearly white; spikelets 1-fruited; achene obovoid distal to short stipe, lenticular, surface slightly rugulose; perianth bristles 15-20, retrorsely barbed, equaling tubercle; tubercle narrowly triangular-subulate.





**Fig. 67: Rhynchospora macra, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



Fig. 66: Rhynchospora macra achene.

Photo by Joshua Campbell

## Rhynchospora macrostachya Torr. ex A. Gray – Tall Horned Beaksedge

#### DISTRIBUTION

Nassau and Baker counties

#### HABITAT

Lake, pond and stream margins

#### RELATIVE ABUNDANCE Rare

#### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

Perennial, cespitose herb, 80-170 cm; culms erect, stiff, trigonous; leaves shorter than inflorescence, blades linear, 3-15 mm wide; spikelets in dense clusters of corymbs, clusters broadly turbinate; scales brown; spikelets 1-2 fruited; achene body pyriform-obovoid, compressed, surface finely striate, minutely cancellate; perianth bristles 6, antrorsely barbed, exceeding achene body; tubercle attenuate, 15-20 mm long.



Fig. 68: Rhynchospora macrostachya achene. Photo by John R. Gwaltney, Southeastern Flora



**Fig. 69: Rhynchospora macrostachya, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora marliniana Naczi, W. M. Knapp, & W. W. Thomas – Marlins' Beaksedge

#### DISTRIBUTION

Central and western panhandle

#### HABITAT

Wet pine savannas and wet prairies

## RELATIVE ABUNDANCE

Rare

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

Perennial, cespitose herb, 15-60 cm; culms erect, slender, terete; leaves shorter than inflorescence, blades filiform, 0.3-1 mm wide; spikelets in 4-7 bracteate fascicles, congested, spiciform, terminal; scales red-brown; spikelets 1-fruited; achene body tumidly lenticular, ovoid, surface transversely rugulose; perianth bristles 6, plumose basally, equaling to exceeding tubercle; tubercle compressed-deltoid.



**Fig. 70: Rhynchospora marliniana achene**. Photo by Joshua Campbell



**Fig. 71: Rhynchospora marliniana, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora megalocarpa A. Gray – Sandyfield Beaksedge

### DISTRIBUTION

Peninsula, central and western panhandle

### HABITAT

Xeric sandhills and scrub

## RELATIVE ABUNDANCE

Common

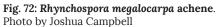
#### **REPRODUCTIVE SEASONS**

Spring-Summer

### DESCRIPTION

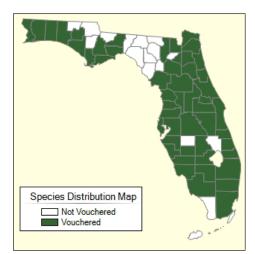
Perennial, rhizomatous herb, 80-130 cm; rhizomes scaly, stoloniferous, stout; culms erect to arching, trigonous, firm; leaves shorter than culm, blades linear, 3-7 mm wide; spikelet clusters 2-6, widely spaced, turbinate; scales red-brown; spikelets 1-2 fruited; achene broadly obovoid, tumid, surface obscurely pitted, brown-black; perianth bristles 6-12, antrorsely barbed, ca. half the length of the achene body to tubercle; tubercle low conic with rim at base.







**Fig. 73: Rhynchospora megalocarpa, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora megaplumosa E. L. Bridges & Orzell – Longbristle Beaksedge

## DISTRIBUTION

Polk, Hillsborough, Manatee and Sarasota counties

### HABITAT

Scrubby flatwoods

### **RELATIVE ABUNDANCE**

Rare [State Endangered, Endemic]

### **REPRODUCTIVE SEASONS**

Spring-Fall

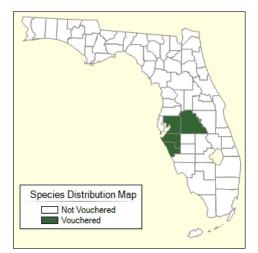
#### DESCRIPTION

Perennial, cespitose herb, 20-90 cm; rhizomes stout, knotty, scaly when present; culms erect to arching, stiff, wiry; leaves basally crowded, some cauline, blades narrowly linear, 1-3 mm wide; spikelet clusters 1-2, dense, broadly turbinate to hemispheric; scales light brown; spikelets 1-2 fruited; achene body turnidly obovoid, subterete, surface transversely rugulose; perianth bristles 6, plumose, exceeding tubercle, excurved, exserted from spikelet; tubercle conic.



**Fig. 74: Rhynchospora megaplumosa achene.** Photo by Joshua Campbell

**Fig. 75: Rhynchospora megaplumosa, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora microcarpa Baldwin ex A. Gray – Southern Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Wet flatwoods, bogs, swamps, marshes and pond margins

### **RELATIVE ABUNDANCE**

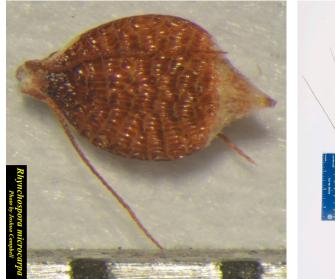
Common

#### **REPRODUCTIVE SEASONS**

Spring-Fall

### DESCRIPTION

Perennial, cespitose herb, 60-100 cm; culms erect to arching, slender, trigonous; leaves shorter than inflorescence, blades linear, 1-3 mm wide; spikelet clusters 4-6, dense, narrowly turbinate to ellipsoid; scales dark brown; spikelets 2-3 fruited; achene body obovoid to globose, lenticular, surface strongly transversely rugose; perianth bristles 6, antrorsely barbed, rudimentary to equaling tubercle; tubercle short, deltoid, compressed.



**Fig. 76: Rhynchospora microcarpa achene.** Photo by Joshua Campbell



**Fig. 77: Rhynchospora microcarpa, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora microcephala (Britton) Britton ex Small – Bunched Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Wet flatwoods, bogs and marshes

# RELATIVE ABUNDANCE

Common

### **REPRODUCTIVE SEASONS**

Summer-Fall

### DESCRIPTION

Perennial, cespitose herb, 30-90 cm; culms erect, nearly terete, ca. 1 mm thick at midculm; leaves shorter than culm, blades linear, 1-3 mm wide; spikelet clusters 2-6, widely spaced, dense, hemispheric to globose, ca. 1 cm wide; scales dark red-brown; spikelets 1-fruited; achene body 1.4-1.6 mm long, obovoid distal to the stipe, lenticular, surface smooth, light brown with pale center; perianth bristles 6, retrorsely barbed, equaling tubercle; tubercle triangular-subulate.



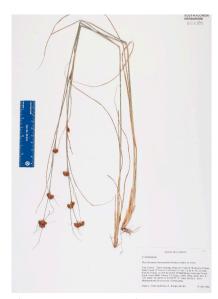


Fig. 79: Rhynchospora microcephala, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants

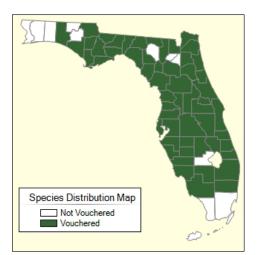


Photo by Joshua Campbell

# Rhynchospora miliacea (Lam.) A. Gray – Millet Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Hydric hammocks and swamps

# RELATIVE ABUNDANCE

Common

## **REPRODUCTIVE SEASONS**

Spring-Fall

### DESCRIPTION

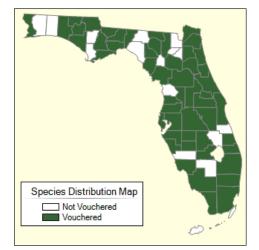
Perennial, rhizomatous herb, 80-150 cm; rhizomes stoloniferous, slender; culms erect to arching, terete, slender; leaves shorter than inflorescence, blades linear, 4-10 mm wide; spikelet clusters 4-6, diffuse; inflorescence branches divaricate, capillary; scales light brown; spikelets 2-6 fruited; achene body broadly obovoid, tumidly biconvex, surface transversely rugulose; perianth bristles 6, antrorsely barbed, exceeding tubercle; tubercle conic, depressed.



**Fig. 80: Rhynchospora miliacea achene.** Photo by Joshua Campbell



**Fig. 81: Rhynchospora miliacea, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora mixta Britton ex Small – Mingled Beaksedge

### DISTRIBUTION

Northern counties and central peninsula

## HABITAT

Hydric hammocks and swamps

## **RELATIVE ABUNDANCE**

Occasional

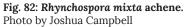
### **REPRODUCTIVE SEASONS**

Spring-Summer

### DESCRIPTION

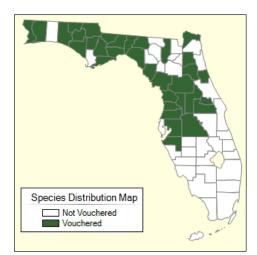
Perennial, rhizomatous herb, 80-100 cm; rhizomes stoloniferous, slender; culms erect, slender, trigonous; leaves shorter than culm, blades linear, 3-5 mm wide; spikelet clusters 4-6, widely spaced; inflorescence branches divergent, capillary; scales brown; spikelets 2-10 fruited; achene ellipsoid-obovate, lenticular, surface transversely rugulose; perianth bristles 6, antrorsely barbed, exceeding tubercle; tubercle triangular-subulate, flat, the margins setose.







**Fig. 83: Rhynchospora mixta, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora nitens (Vahl) A. Gray – Shortbeak Beaksedge

## DISTRIBUTION

Nearly throughout

### HABITAT

Wet flatwoods, pond margins and ditches

# RELATIVE ABUNDANCE

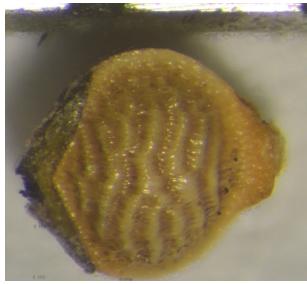
Frequent

### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

Annual, cespitose herb, 10-100 cm; culms erect, nearly terete; midculm leaves exceeding inflorescence, blades linear, 1-5 mm wide; inflorescences terminal and axillary, clusters of 1–5 diffuse corymbs; scales dark brown; spikelets > 10-fruited; achene body tumidly lenticular, nearly orbicular, surface transversely wavy rugose; perianth bristles absent; tubercle depressed-triangular, flat or curved downward at the edges.



**Fig. 84: Rhynchospora nitens achene.** Photo by Joshua Campbell



Fig. 85: Rhynchospora nitens, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora odorata C. Wright ex Griseb. - Fragrant Beaksedge

## DISTRIBUTION

Peninsula west to central panhandle

## HABITAT

Wet flatwoods, swamps and marshes

## **RELATIVE ABUNDANCE**

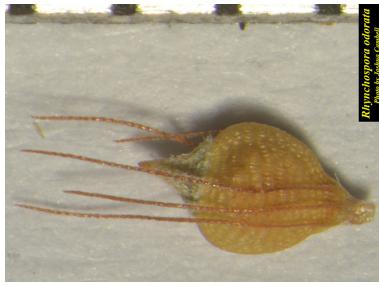
Occasional

#### **REPRODUCTIVE SEASONS**

All year

#### DESCRIPTION

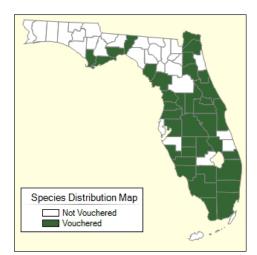
Perennial, rhizomatous herb, 100-180 cm; rhizomes short, scaly; culms erect, angular, slender; leaves shorter than culm, blades linear, 3-6 mm wide; spikelet clusters 3-5, widely spaced, turbinate or lobed, fascicles dense; scales rich red-brown; spikelets 5-7 mm long, 3-7 fruited; achene body obovoid, lenticular, surface transversely rugulose; pedicellar joint ca. 0.3-0.6 mm long; perianth bristles 6, antrorsely barbed, exceeding tubercle; tubercle compressed, triangular-acuminate.



**Fig. 86: Rhynchospora odorata achene.** Photo by Joshua Campbell



**Fig. 87: Rhynchospora odorata, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora oligantha A. Gray – Featherbristle Beaksedge

## DISTRIBUTION

Northern peninsula, central and western panhandle

### HABITAT

Wet flatwoods and bogs

## **RELATIVE ABUNDANCE**

Occasional

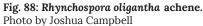
#### **REPRODUCTIVE SEASONS**

Spring

#### DESCRIPTION

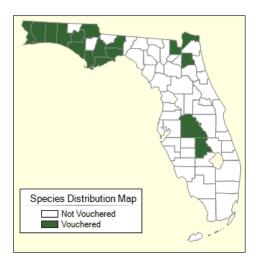
Perennial, cespitose herb, 20-40 cm; culms ascending, filiform, wiry; leaves shorter than inflorescence, blades filiform, nearly terete; spikelet clusters 2-6, simple or reduced to one spikelet, branches ascending to divaricate; scales pale red-brown; spikelets 1-3 fruited; achene ellipsoid-obovoid, distally necked, tumidly lenticular, surface smooth to minutely transversely rugulose; perianth bristles 6, plumose, equaling to exceeding tubercle; tubercle conic-subulate, the base flaring.







**Fig. 89: Rhynchospora oligantha, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora perplexa Britton ex Small – Pineland Beaksedge

## DISTRIBUTION

Northern counties, Pasco County

## HABITAT

Swamps, bogs, marshes and wet flatwoods

### **RELATIVE ABUNDANCE**

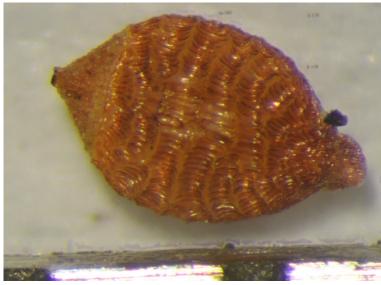
Occasional

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

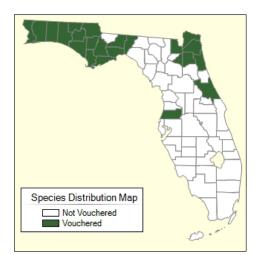
Perennial, cespitose herb, 50-110 cm; culms arching, slender, terete to trigonous; leaves shorter than culm, blades linear, 1.5-2.5 mm wide; spikelet clusters 3-4, widely spaced, turbinate, compact to diffuse; scales deep red-brown; spikelets 2-4 fruited; achene orbicular to broadly obovoid, ca. 1 mm long, strongly flattened, surface transversely rugulose; perianth bristles 0-3, vestigial when present; tubercle triangular, depressed, flattened.



**Fig. 90: Rhynchospora perplexa achene.** Photo by Joshua Campbell



Fig. 91: Rhynchospora perplexa, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora pleiantha (Kük.) Gale – Coastal Beaksedge

## DISTRIBUTION

Central peninsula, central and western panhandle

### HABITAT

Sandy pond margins

## **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer

#### DESCRIPTION

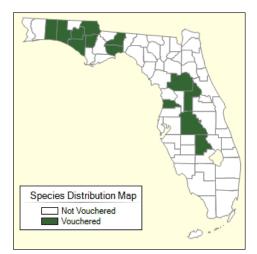
Perennial, rhizomatous herb, 10-50 cm; rhizomes stoloniferous, slender; culms erect to excurved, filiform; leaves shorter than culm, blades filiform, 1 mm wide; spikelet clusters 1-3, turbinate, few flowered, ascending; scales red-brown; spikelets 2-5 fruited; achene body obovoid, lenticular, ca. 1 mm long, surface smooth; perianth bristles 6, antrorsely barbed, exceeding achene body; tubercle triangular-subulate, the margins setulose.





**Fig. 92: Rhynchospora pleiantha achene.** Photo by Joshua Campbell

**Fig. 93: Rhynchospora pleiantha, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora plumosa Elliott – Plumed Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Bogs, mesic to wet flatwoods and pond margins

#### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Summer

#### DESCRIPTION

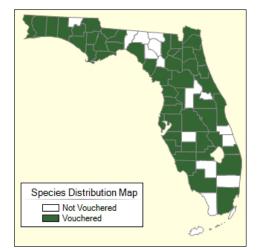
Perennial, cespitose herb, 10-80 cm; culms erect to excurved, filiform to linear; leaves shorter than inflorescence, blades filiform to linear, to 1.5 mm wide, margins involute; spikelet clusters 1-several, widely spaced or close together; scales light red-brown; spikelets 1-2 fruited; achene tumidly obovoid to ellipsoid, surface transversely rugulose; perianth bristles 6, plumose, shorter than to equaling tubercle; tubercle conic, the base flaring.



**Fig. 94: Rhynchospora plumosa achene.** Photo by Joshua Campbell



Fig. 95: Rhynchospora plumosa, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants



## Rhynchospora punctata Elliott – Dotted Beaksedge

**DISTRIBUTION** Nassau and St. Johns counties

Nassau and St. Johns Cot

HABITAT

Wet flatwoods

RELATIVE ABUNDANCE Rare

## **REPRODUCTIVE SEASONS**

Summer

### DESCRIPTION

Perennial, cespitose herb, 60-80 cm; culms erect, slender, trigonous; leaves shorter than culm, blades linear, 3-5 mm wide; spikelet clusters 3-5, broadly turbinate to hemispheric; scales red-brown; spikelets 1-3 fruited; achene broadly obovoid, ca. 2 mm long, strongly flattened, surface transversely rugulose; perianth bristles 6, antrorsely barbed, equaling to exceeding tubercle; tubercle triangular, flat, the base lunate with a white ridge.





Fig. 97: *Rhynchospora punctata*, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants

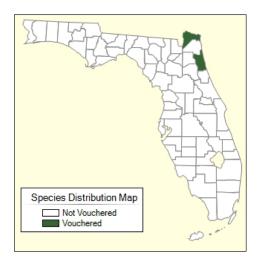


Photo by Joshua Campbell

# Rhynchospora pusilla Chapm. ex M. A. Curtis – Fairy Beaksedge

## DISTRIBUTION

Peninsula, central and western panhandle

## HABITAT

Bogs, wet flatwoods and pond margins

### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

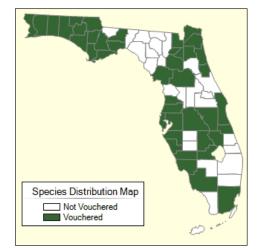
Perennial, cespitose herb, 10-60 cm; culms erect to arching, filiform, terete; leaves shorter than culm, blades linear to filiform, 0.3-0.5 mm wide, margins involute; spikelet clusters 1-3, turbinate, dense to open; scales brown; spikelets 2-3 fruited; achene body obovoid, lenticular, ca. 0.8 mm long, surface transversely rugulose; perianth bristles absent; tubercle small, buttonlike, depressedtriangular.



**Fig. 98: Rhynchospora pusila achene.** Photo by Joshua Campbell



**Fig. 99: Rhynchospora pusilla, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora rariflora (Michx.) Elliott – Fewflower Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Wet flatwoods, bogs, marshes and pond margins

### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

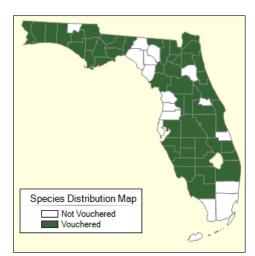
Perennial, cespitose herb, 15-60 cm, rhizomes compact, branching, slender; culms erect to excurved, filiform, terete; leaves shorter than inflorescence, blades filiform, margins involute; spikelets in 1-4 cymose clusters, widely spaced, turbinate; scales light redbrown; spikelets 1-4 fruited; achene tumidly obovoid, lenticular, surface transversely rugulose; perianth bristles 6, antrorsely barbed, shorter than the achene body; tubercle triangular, flat.



**Fig. 100: Rhynchospora rariflora achene.** Photo by Joshua Campbell



**Fig. 101: Rhynchospora rariflora, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora scirpoides (Torr.) A. Gray – Longbeak Beaksedge

## DISTRIBUTION

Northern peninsula, central panhandle, Marion and Sumter counties

### HABITAT

Lake shores and drying lake margins, marshes and swamps

#### **RELATIVE ABUNDANCE**

Rare

#### **REPRODUCTIVE SEASONS**

Summer

#### DESCRIPTION

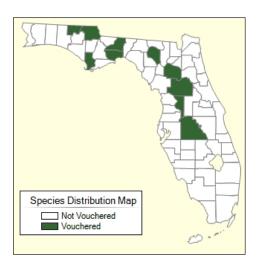
Annual, cespitose herb, 20-100 cm; culms erect, nearly terete, stiff; leaves exceeding or exceeded by inflorescence, blades linear, 1-5 mm wide; inflorescences terminal and axillary, clusters of 1–5 diffuse corymbs; scales dark brown; spikelets > 10-fruited; achene body tumidly lenticular, nearly orbicular, surface smooth with underlying undulations/cancellations; perianth bristles absent; tubercle flat, narrowly triangular, about as long as the achene body.





Fig. 102: Rhynchospora scirpoides achene. Photo by Joshua Campbell

**Fig. 103: Rhynchospora scirpoides, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora stenophylla Chapm. – Coastalplain Beaksedge

### DISTRIBUTION

Panhandle

HABITAT Bogs and wet flatwoods

## RELATIVE ABUNDANCE

Rare [State Threatened]

## **REPRODUCTIVE SEASONS**

Spring

## DESCRIPTION

Perennial, cespitose herb, 30-90 cm, rhizomes forking, compact; culms erect to arching, filiform, terete; leaves shorter than culm, blades filiform, to 0.5 mm wide, margins involute; spikelets in 1-2 cymose clusters, turbinate; scales red-brown; spikelets 1-fruited; achene body obovoid-pyriform, tumidly lenticular, surface transversely wavy rugose; perianth bristles 6, antrorsely barbed, exceeding the achene body; tubercle flat, narrowly triangular-subulate.





**Fig. 105: Rhynchospora stenophylla, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

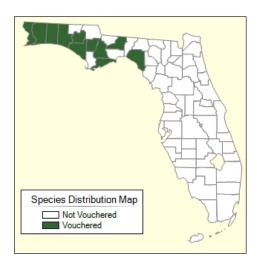


Photo by Joshua Campbell

# Rhynchospora sulcata Gale – Dixie Beaksedge

## DISTRIBUTION

Eastern and central panhandle, Hernando and Osceola counties

### HABITAT

Pond margins and marshes

### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer

#### DESCRIPTION

Perennial, cespitose herb, 30-70 cm; culms erect, slender, terete; leaves shorter than culm, blades linear, 1-2.5 cm wide; spikelet clusters 4-6, turbinate, diffuse; scales dark brown; spikelets 2-3 fruited; achene subglobose, tumidly lenticular, ca. 1 mm long, surface strongly transversely ridged; perianth bristles 6, antrorsely barbed, shorter than the achene body; tubercle compressed, deltoid.

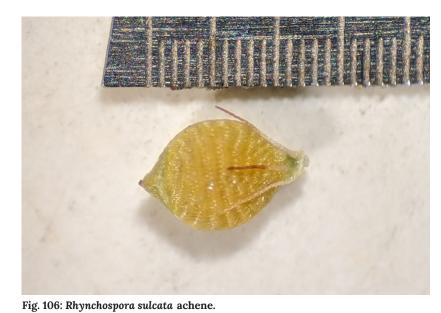




Fig. 107: Rhynchospora sulcata, whole plant. Photo by Institute for Systematic Botany, Atlas of Florida Plants

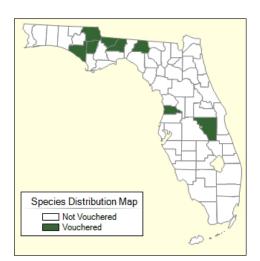


Photo by Alex de la Paz, FDACS-DPI

# Rhynchospora thornei Kral – Thorne's Beaksedge

## DISTRIBUTION

Calhoun, Jackson, Putnam, St. Johns and Wakulla counties

### HABITAT

Pond and lake margins

#### RELATIVE ABUNDANCE Rare

## **REPRODUCTIVE SEASONS**

Spring-Fall

### DESCRIPTION

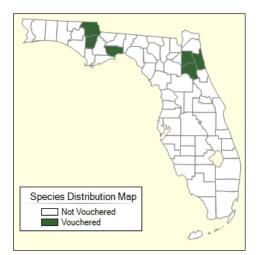
Perennial, cespitose herb, 10-20 cm, rhizomes slender, short; culms erect to arching, filiform; leaves exceeding or exceeded by culm, blades filiform, 0.2-0.3 mm wide, margins involute; spikelets in 1-2 cymose clusters, widely spaced, turbinate; scales brown; spikelets 1-2 fruited; achene body ellipsoid, lenticular, ca. 1 mm long, transversely rugulose; perianth bristles 4-6, antrorsely barbed, shorter than the achene body; tubercle short-conic.





**Fig. 108: Rhynchospora thornei achene.** Photo by Joshua Campbell

**Fig. 109: Rhynchospora thornei, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



# Rhynchospora tracyi Britton – Tracy's Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Marshes, swamps, pond margins and wet prairies

### **RELATIVE ABUNDANCE**

Frequent

#### **REPRODUCTIVE SEASONS**

Spring-Fall

#### DESCRIPTION

Perennial, rhizomatous herb, 70-120 cm, rhizomes scaly, slender; culms erect, nearly terete; leaves nearly equaling culm, blades linear, 2-8 mm wide; spikelets in 1-4 compact globose clusters (heads); scales green-brown; spikelets 1-fruited; achene body obovate, flat, surface minutely cancellate; perianth bristles 6, antrorsely barbed, exceeding the achene body; tubercle linear, angled, 4-6 mm long, much narrower than the fruit apex, margins setulose.





**Fig. 111: Rhynchospora tracyi, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants

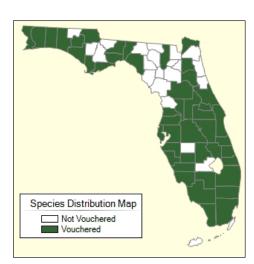


Photo by Alex de la Paz, FDACS-DPI

# Rhynchospora wrightiana Boeck. - Wright's Beaksedge

## DISTRIBUTION

Nearly throughout

## HABITAT

Marshes, swamps, wet flatwoods and pond margins

### **RELATIVE ABUNDANCE**

Occasional

#### **REPRODUCTIVE SEASONS**

Summer-Fall

#### DESCRIPTION

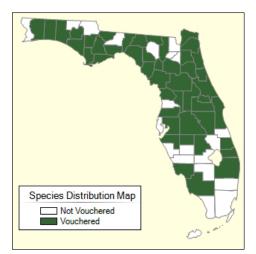
Perennial, cespitose herb, 10-50 cm; culms erect, slender, filiform, terete; leaves shorter than culm, blades filiform, 0.5-1.5 mm wide; spikelet clusters 1-3, turbinate to hemispheric, loose to dense; scales dark red-brown; spikelets 1-2 fruited; achene broadly ellipsoid, lenticular, surface smooth; perianth bristles 6, antrorsely barbed, equaling the achene body; tubercle flat, triangular with short-oblong, blunt tipped nose (strap-like beak).



**Fig. 112: Rhynchospora wrightiana achene.** Photo by Alex de la Paz, FDACS-DPI



**Fig. 113: Rhynchospora wrightiana, whole plant.** Photo by Institute for Systematic Botany, Atlas of Florida Plants



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RHYNCHOSPORA OF FLORIDA			
R. baldwinii	R. elliottii	R. intermedia	R. odorata
R. caduca	R. eximia	R. inundata	R. oligantha
R. cephalantha	R. fascicularis	R. latifolia	R. perplexa
R. chalarocephala	R. fernaldii	R. leptocarpa	R. pleiantha
R. chapmanii	R. filifolia	R. macra	R. plumosa
R. ciliaris	R. floridensis	R. macrostachya	R. punctata
R. colorata	R. galeana	R. marliniana	R. pusilla
R. compressa	R. globularis	R. megalocarpa	R. rariflora
R. corniculata	R. glomerata	R. megaplumosa	R. scirpoides
R. crinipes	R. gracilenta	R. microcarpa	R. stenophylla
R. curtissii	R. grayi	R. microcephala	R. sulcata
R. debilis	R. harperi	R. miliacea	R. thornei
R. decurrens	R. harveyi	R. mixta	R. tracyi
R. divergens	R. inexpansa	R. nitens	R. wrightiana

#### **GLOSSARY:**

GLOSSARY:	
Achene	A small, dry, indehiscent fruit with a single locule and a single seed (ovule), and with the seed attached to the ovary wall at a single point
Annual	A plant which germinates from seed, flowers, sets seed and dies in the same year
Antrorse	Directed forward or upward
Apiculate	Ending abruptly in a small, slender point
Bristle	A short, stiff hairlike structure
Cancellate	Latticed with a fine, regular, reticulate pattern
Cespitose	Growing in dense tufts
Ciliate	With a marginal fringe of hairs
Culm	A hollow or pithy stalk or stem, as in the grasses, sedges and rushes
Decurrent	Extending downward from the point of insertion
Depressed	Flattened down from above
Excurved	Curving outward, away from the axis
Filiform	Thread-like
Head	A dense cluster of sessile or subsessile flowers
Inflorescence	The flowering part of a plant; a flower cluster
Lenticular	Biconvex, lentil-shaped
Lunate	Crescent-shaped
Obovoid	Inversely ovoid (egg-shaped), with the attachment at the narrower end
Patelliform	Shaped like a kneecap
Perennial	A plant that lives three or more years
Perianth	The calyx and corolla of a flower, collectively, especially similar in appearance
Perianth bristle	The perianth has been modified into bristles instead of typical looking sepals and petals, as in some genera of the Cyperaceae (e.g., <i>Rhynchospora</i> )
Pyriform	Pear-shaped
Raceme	An unbranched, elongated inflorescence with pedicellate flowers maturing from the bottom upwards
Racemiform/ racemose	An inflorescence with the general appearance, but not necessarily the structure, of a true raceme
Retrorse	Directed downward or backward
Rhizome	A horizontal underground stem
Rhizomatous	With rhizomes present
Rugose	Wrinkled
Rugulose	Slightly wrinkled
Scabrous	Rough to the touch, due to the structure of the epidermal cells, or the presence of short stiff hairs
Scale	Any thin, flat, scarious structure
Setose	Covered with bristles
Setulose	Covered with minute bristles
Spiciform	An inflorescence with the general appearance, but not necessarily the structure, of a true spike
Spike	An unbranched, elongated inflorescence with sessile or subsessile flowers or spikelets maturing from the bottom upwards
Spikelet	A small spike or secondary spike; the ultimate flower cluster of grasses and sedges, consisting of one to many flowers subtended by two bracts
Stipe	A stalk supporting a structure
Stipitate	Borne on a stipe or stalk
Striate	Marked with fine, usually parallel lines or grooves
Subulate	Awl-shaped; short and narrowly triangular
Terete	Cylindrical; round in cross section
Trigonous	Three-angled; triangular in cross section
Tubercle	The base of the style which is persistent at the apex of the achene
Turbinate	Top-shaped; inverted cone
Undulate	Wavy