

## CYPERACEAE – SEDGE FAMILY

**Plant:** annual or more commonly perennial

**Stem:** stem (solid) is termed a culm, simple, mostly erect, often angled (mostly triangular) but some round or angled; some with rhizomes or stolons

**Root:** fibrous

**Leaves:** mostly linear, alternate, parallel veins, often in 3 ranks (vertical rows), leaf sheath usually closed, leaf blade flat, folded, round or absent; a ligule is often present

**Flowers:** small, 2-ranked or spiraled on a spike stalk in 1 or more spikelets in simple to complex inflorescences, each flower in axil of a scale, the inflorescence itself may be subtended by a leaf-like and sometimes showy bracts; perianth usually represented by 1-6 bristles, scales or are absent; perfect or imperfect (monoecious); 3 (1-6) stamens; 1 pistil, 1 style, ovary superior, 2-3 carpels, 1-chambered ovary

**Fruit:** achene (lens-shaped to triangular in cross-section, achene enclosed in a sac – perigynium in the *Carex* genus)

**Other:** often occurring in bogs, swamps, or meadows along streams, but also in dry areas and forests; Monocotyledons Group

**Genera:** 100+ genera; locally many genera

2 slides per species

## CYPERACEAE – GENUS SCLERIA (A-Z)

Fringed Nutrush [Hairy Nut Grass]; *Scleria ciliata* Michx. var. *ciliata*

Littlehead [Few-Flowered] Nutrush; *Scleria oligantha* Michx.

Whip [Tall] Nutrush [Grass]; *Scleria triglomerata* Michx.

# Fringed Nutrush [Hairy Nut Grass] - p1



*Scleria ciliata* Michx. var. *ciliata*

Cyperaceae (Sedge Family)

Taum Sauk Mountain, Iron County, Missouri

Notes: plant perennial, to 70+ cm; Culm triangular, somewhat hairy, with well-developed rhizomes, roots fibrous; Leaves to 3.5 mm wide, green, somewhat hairy and ciliate; Leaf sheath hairy, contra-ligule sub-rounded to triangular; inflorescence of several terminal and axillary clusters of 2 to 4+ spikelets; spikelets staminate or perfect (see photos on P2 showing examples of scales and achene size and anatomy); this species has 3 tubercles (entire or lobed) with leaves up to 3.5 mm wide (separating it from *S. pauciflora*); various habitats, wet to dry, often in prairies or openings in upland areas; summer to fall

[V Max Brown, 2016]



Contra-ligule



Bracts ciliate



# Fringed Nutrush [Hairy Nut Grass] - p2

*Scleria ciliata* Michx. var. *ciliata*

[V Max Brown, 2016]

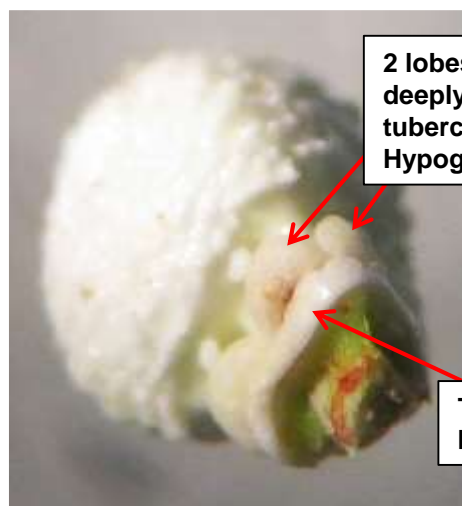


Immature achene



Mature achene

Body here  
2.1 mm



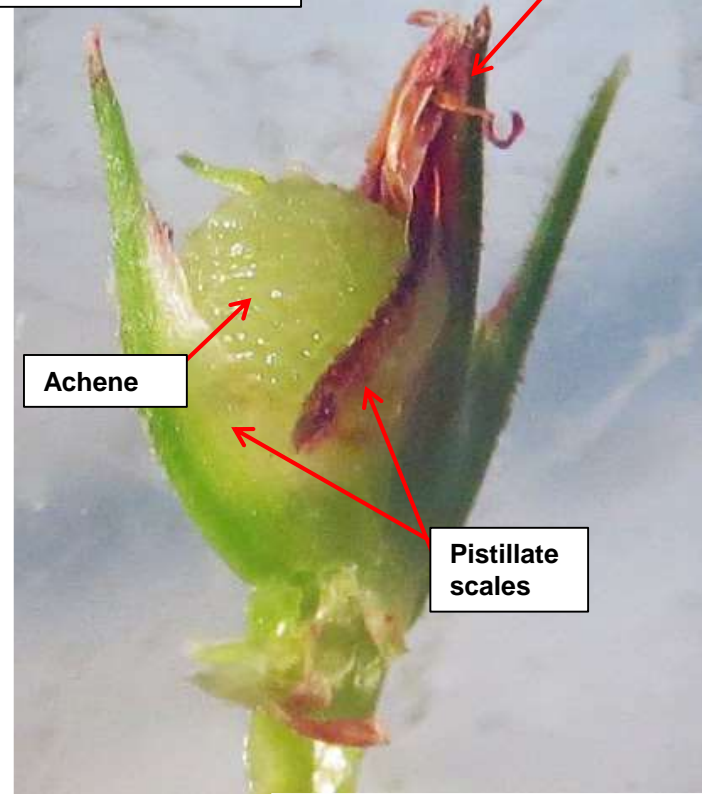
2 lobes of 3  
deeply lobed  
tubercles of  
Hypogynium

Trigonous  
base

Achene – mostly white to gray, surface rough (warty) with short ridges, small top nipple, globose (mostly circular in CX), 1.8 to 3 mm tall, base trigonous with 3 tubercles that are entire or deeply lobed (but not completely divided) – must check carefully as it may appear to be 6 tubercles. *S. pauciflora* has 6 distinct tubercles and has wider leaves.

Bisexual (perfect) spikelet  
removed from a cluster

Staminate scales



Achene

Pistillate  
scales

Inflorescence -  
Bisexual and  
Staminate  
spikelets in a  
head-like  
cluster, both  
terminal and  
axillary clusters  
present



# Littlehead [Few-Flowered] Nutrush – p1



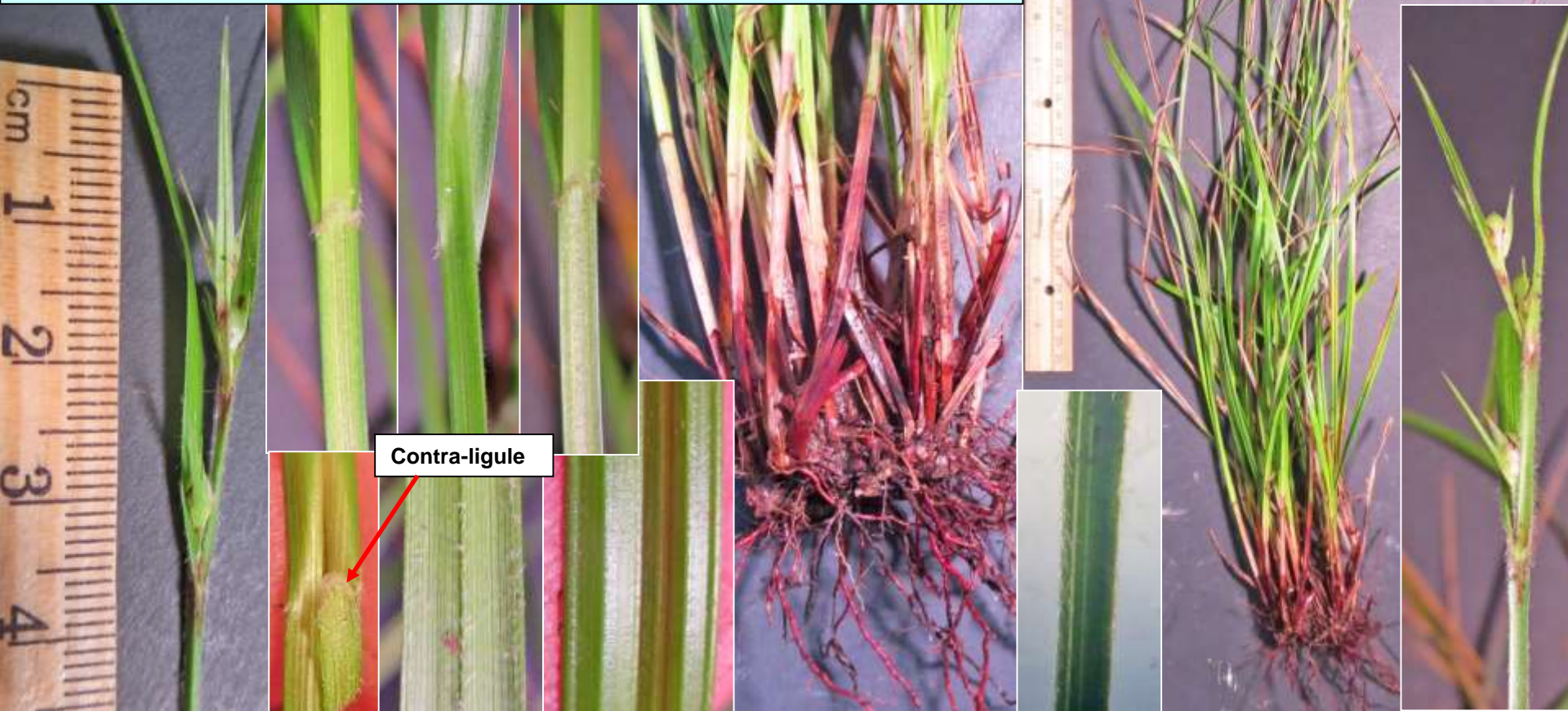
*Scleria oligantha* Michx.

Cyperaceae (Sedge Family)

Near Greers Ferry Lake, Heber Springs, Cleburne County, Arkansas

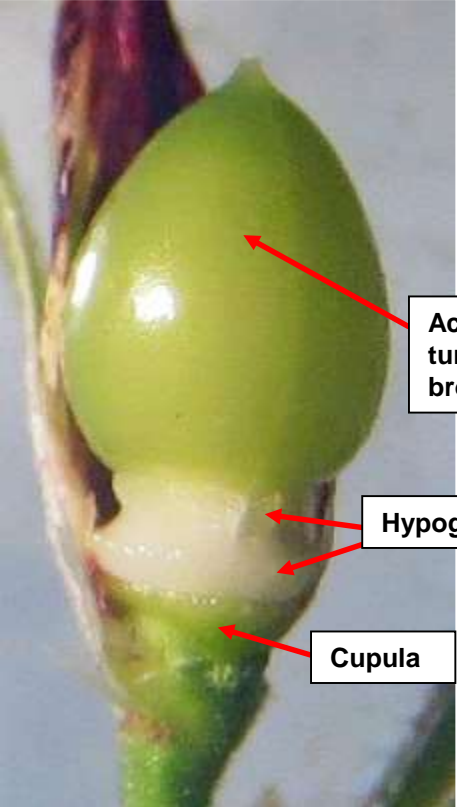
Notes: plant perennial, to 80+ cm; Culm triangular, glabrous or sometimes hairy, with well-developed rhizomes, bases tinged purple; roots fibrous; Leaves to 6+ mm wide, green but not glaucous, hairy or not, may be scabrous; Leaf sheath contra-ligule present; inflorescence of 2-5 clusters of 1 or more spikelets; spikelets staminate or perfect (see photos on P2 showing examples of scales and achene anatomy); various habitats, from prairies to upland forests and savannas; late spring to summer. (the contra-ligule is a rounded, convex structure like a normal ligule but is on the opposite side of the leaf sheath)

[V Max Brown, 2015]



# Littlehead [Few-Flowered] Nutrush – p2

*Scleria oligantha* Michx.  
[V Max Brown, 2015]



Achene (fruit), very hard and turns white to gray to brownish at maturity

Hypogynium

Cupula

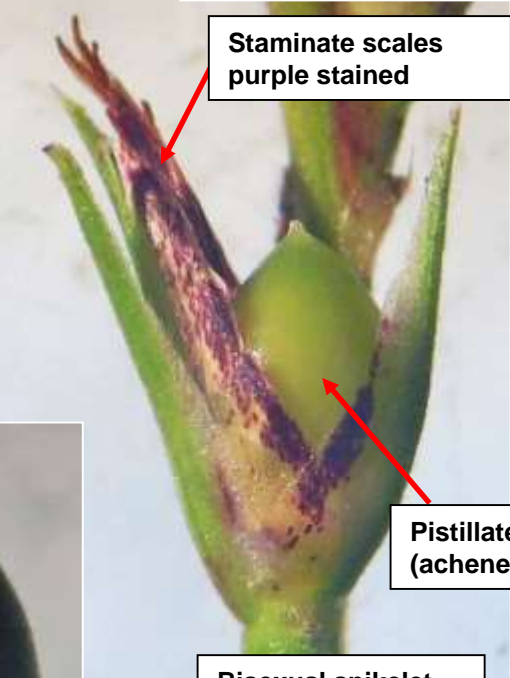
Achene is smooth, about 4 mm tall in this specimen (varies from 2.5 to 4.5 mm), and sits on a Hypogynium made up of 8-9 tubercles (small knobs) which sits on a smooth base – the smooth green base is the cupula and usually stays with the inflorescence when the achene is separated



Achene with Hypogynium (knobby above and smooth below)



Staminate scales purple stained



Bisexual spikelet above

Pistillate (achene)



Inflorescence may have both staminate and bisexual spikelets



# Whip [Tall] Nutrush [Grass] – p1

*Scleria triglomerata* Michx.

Cyperaceae (Sedge Family)

Near Bolivar, Polk County, Missouri

Notes: plant perennial, to 100+ cm; Culm pronounced triangular, glabrous, with well-developed rhizomes; roots fibrous; Leaves to 9+ mm wide, green but not glaucous, may be scabrous; Leaf sheath contra-ligule (oval) present; inflorescence of several clusters of spikelets; spikelets staminate or perfect (see photos on P2 showing examples of scale and achene anatomy for ID); this *Scleria* species is fairly common over a wide area in the Eastern US, various habitats often liking wet areas; late spring to summer.

[V Max Brown, 2015]

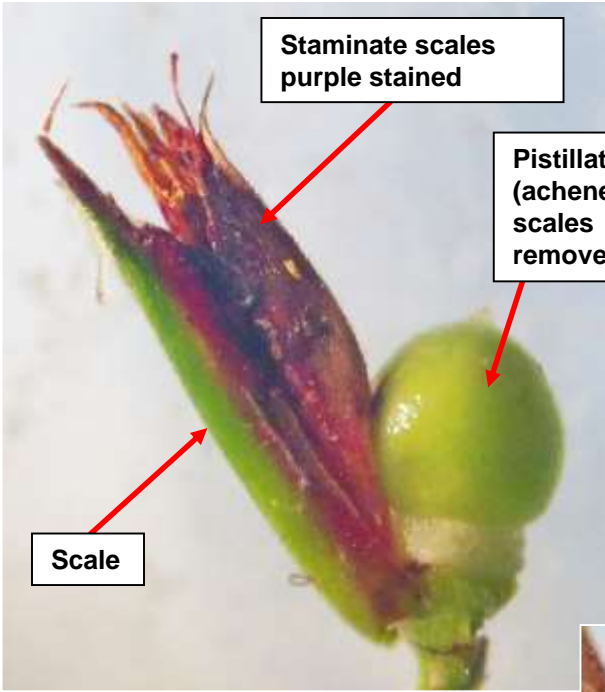


# Whip [Tall] Nutrush [Grass] – p2

*Scleria triglomerata* Michx.  
[V Max Brown, 2015]



Inflorescence of several clusters of spikelets, may have both perfect and staminate spikelets



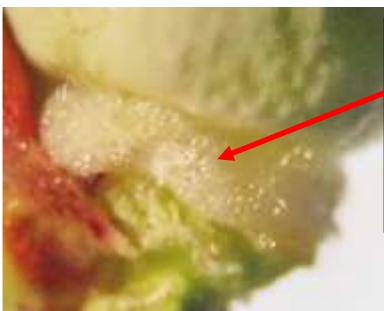
Staminate scales purple stained

Pistillate (achene), scales removed

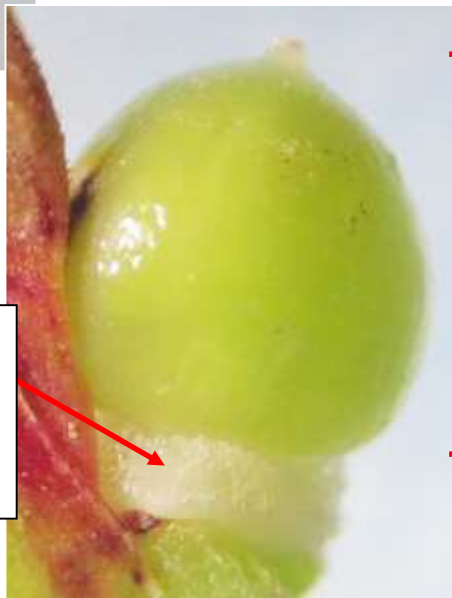
Scale



Achene turns white/gray to light brown with maturity



Hypogynium papillose/spiculose (fine pebble- or granular-looking)



Achene smooth, 2.2 mm tall in this specimen, may vary from 2 to 3.5+ mm

