

# POACEAE [GRAMINEAE] – GRASS FAMILY

**Plant:** annuals or perennials

**Stem:** jointed stem is termed a culm – internodial stem most often hollow but always solid at node, mostly round, some with stolons (creeping stem) or rhizomes (underground stem)

**Root:** usually fibrous, often very abundant and dense

**Leaves:** mostly linear, sessile, parallel veins, in 2 ranks (vertical rows), leaf sheath usually open or split and often overlapping, but may be closed

**Flowers:** small in 2 rows forming a spikelet (1 to several flowers), may be 1 to many spikelets with pedicels or sessile to stem; each flower within a spikelet is between an outer lemma (bract, with a midrib) and an inner palea (bract, 2-nerved or keeled usually) – these 3 parts together make the floret – the 2 bottom bracts of the spikelet do not have flowers and are termed glumes (may be reduced or absent), the rachilla is the axis that hold the florets; sepals and petals absent; 1-6 but often 3 stamens; 1 pistil, 1-3 but usually 2 styles, ovary superior, 1 ovule – there are exceptions to most everything!!

**Fruit:** seed-like grain (seed usually fused to the pericarp (ovary wall) or not)

**Other:** very large and important family; Monocotyledons Group

**Genera:** 600+ genera; locally many genera

2 slides per species

# POACEAE [GRAMINEAE] – ARISTIDEAE TRIBE

**Slimspike Three Awn; *Aristida longespica* Poir. - Aristideae (Tribe)**

**Prairie [Old Field] Three Awn; *Aristida oligantha* Michx. - Aristideae (Tribe)**

# Slimspike Three Awn – p1

*Aristida longespica* Poir.

Poaceae (Grass Family); Aristideae (Tribe)

La Petite Gemme Prairie, Polk County, Missouri

Notes: Plant annual, mostly erect (up to 60+ cm), tuft forming;  
Culm terete, mostly glabrous; Roots fibrous; Leaf blades mostly  
less than 3 cm wide, up to 30+ cm long, mostly glabrous, flat to  
involute; Leaf Sheaths mostly glabrous; Ligules membranous,  
short; Inflorescence a somewhat panicle – like, terminal, 20+ cm,  
branches ascending; 2-5 spikelets per branch; 1 perfect floret per  
spikelet; Glumes present (see photos on p2); Lemmas to 10 mm,  
with 3 awns, central awn longest (to 25+ mm), lateral awns shorter  
(to 16+ mm), awns often bent at base (not twisted or flattened);  
many habitats; summer to fall (very similar to *A. purpurascens*)

[V Max Brown, 2013]



# Slimspike Three Awn – p2

*Aristida longespica* Poir.  
[V Max Brown, 2013]

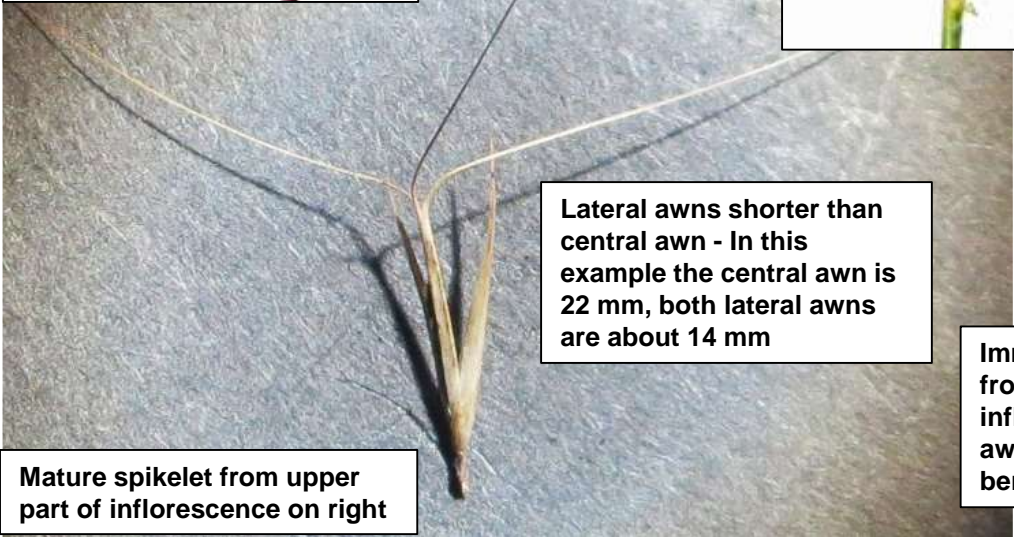
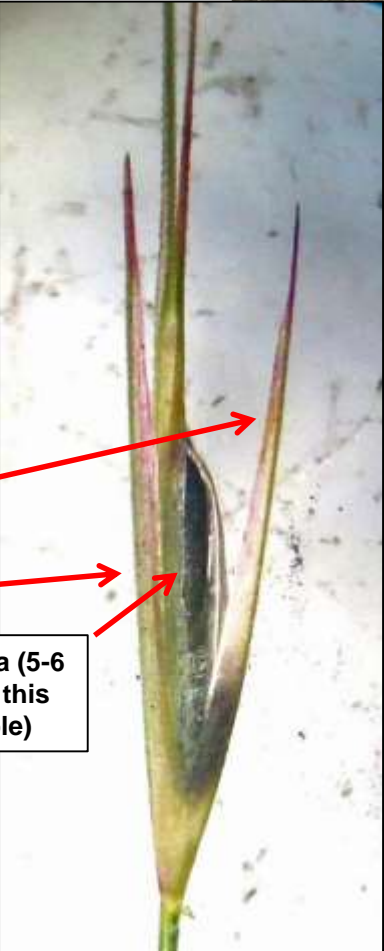


Awns bent but not twisted (spiraled) or overly flattened at base

Upper Glume

Lower Glume

Lemma (5-6 mm in this example)



Lateral awns shorter than central awn - In this example the central awn is 22 mm, both lateral awns are about 14 mm

Mature spikelet from upper part of inflorescence on right

Immature spikelet from lower part of inflorescence, awns not dried and bent yet



# Prairie [Old Field] Three Awn – p1

*Aristida oligantha* Michx.

Poaceae (Grass Family); Aristideae (Tribe)

Fellow lake area, Greene County, Missouri

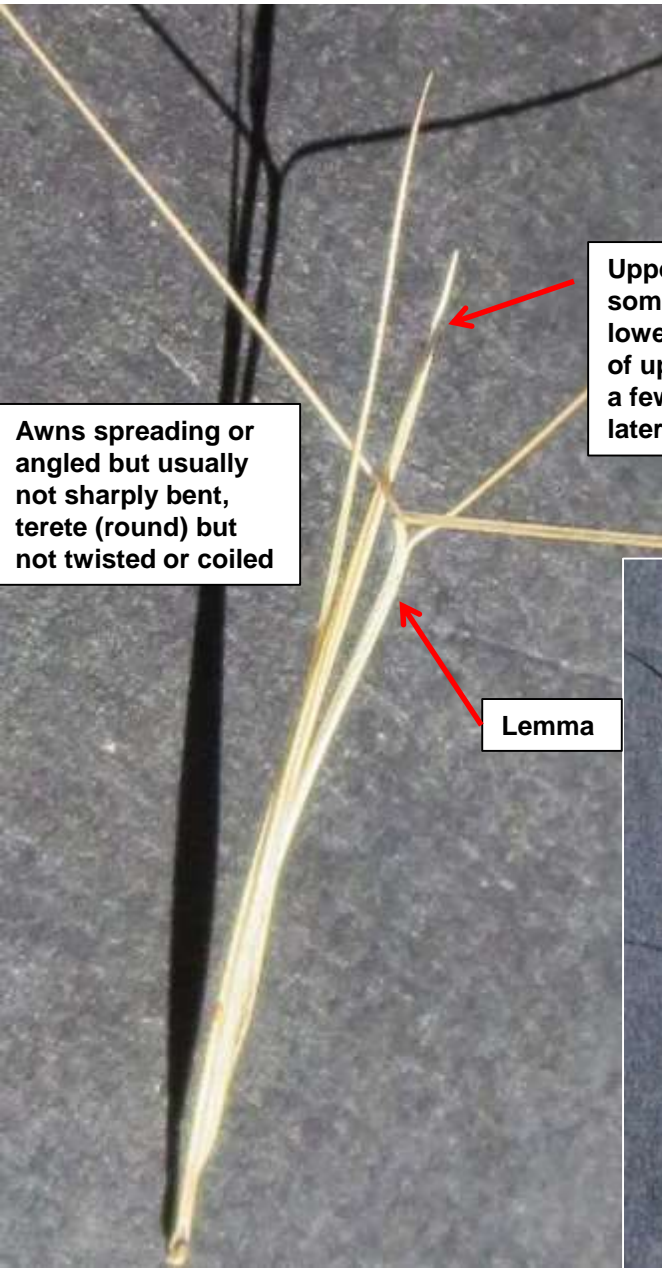
Notes: Plant annual, mostly erect (up to 60+ cm), tuft forming;  
Culm terete, mostly glabrous; Roots fibrous; Leaf blades  
mostly less than 2 cm wide, up to 15+ cm long, mostly  
glabrous, flat to somewhat involute; Leaf Sheaths mostly  
glabrous; Ligules membranous, short; Inflorescence spike-like  
to racemose to 20+ cm, few branches; spikelets spreading; 1  
perfect floret per spikelet; Glumes present, upper usually a  
little shorter (to 25+ mm), upper with 1 vein, lower 3-7 veined ;  
Lemmas to 20+ mm, with 3 awns, central awn slightly longer to  
subequal, up to 60+ mm, awns spreading but not twisted,  
coiled or flattened; many habitats; summer to fall

[V Max Brown, 2013]



# Prairie [Old Field] Three Awn – p2

*Aristida oligantha* Michx.  
[V Max Brown, 2013]



Awns spreading or angled but usually not sharply bent, terete (round) but not twisted or coiled

Upper Glume, usually somewhat longer than lower glume. Short awn of upper glume extends a few mm beyond small lateral teeth

Lemma

All 3 lemma awns approximately equal in length (central awn sometimes slightly longer), in this sample all awns about 55 mm

Inflorescence spike-like or racemose, spikelets spreading from axis on small pedicel

