# 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 limna (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

WARNING – family descriptions are only a layman's guide and should not be used as definitive

# POACEAE [GRAMINEAE] – MELICEAE TRIBE

**Fowl Manna [Meadow] Grass; *Glyceria striata* (Lam.) Hitchc. – Meliceae (Tribe)**
**Three-Flowered Melic Grass; *Melica nitens* (Scribn.) Nutt. ex Piper – Meliceae (Tribe)**

# Fowl Manna [Meadow] Grass – p1


***Glyceria striata*** **(Lam.) Hitchc.**
**Poaceae (Grass Family); Meliceae (Tribe)**
**Wire Road Conservation Area, Stone County, Missouri**

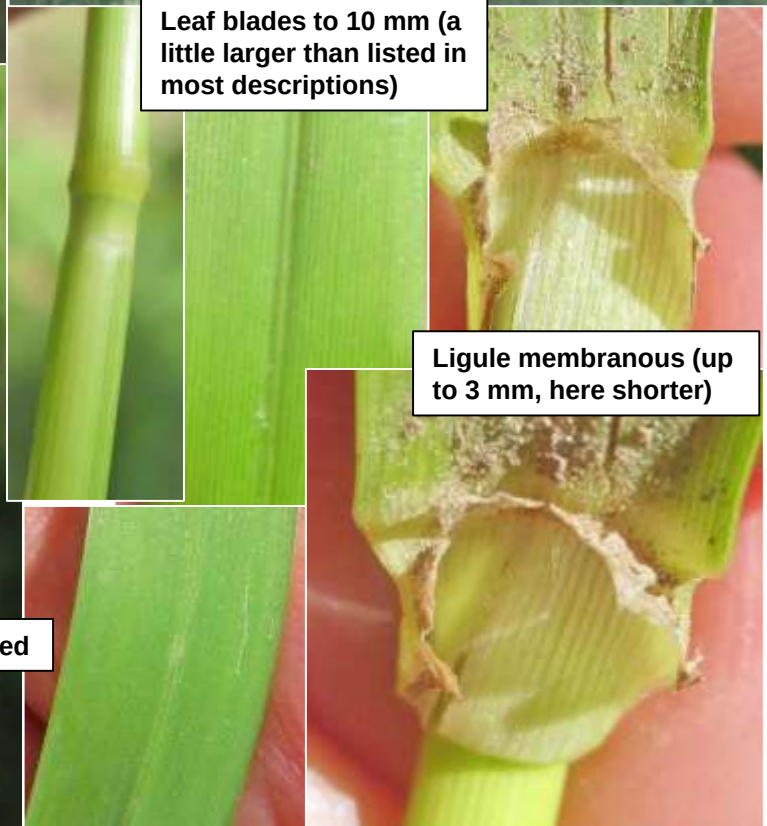
**Notes: Plant perennial, some clumping, mostly erect, up to 120-150 cm; Culm terete, with rhizomes; Roots fibrous; Leaf Blades mostly glabrous, mostly flat, up to10+ mm wide; Leaf sheath closed, mostly glabrous; Ligules membranous, up to 3+ mm; Inflorescence a panicle (up to 20+ cm), rebranching, spikelets usually overlapping, inflorescence spreading to mostly nodding at maturiy; spikelets to 4 mm, with 3 to 6 perfect florets; both glumes present, much shorter than florets; lemmas up to 2 mm; Palea present; most often in wet areas; late spring to summer**

*[V Max Brown, 2014]*

With rhizomes

Sheath closed

Leaf blades to 10 mm (a little larger than listed in most descriptions)



Ligule membranous (up to 3 mm, here shorter)

# Fowl Manna [Meadow] Grass – p2

***Glyceria striata* (Lam.) Hitchc.**

*[V Max Brown, 2014]*

**Terminal potion of a branch of inflorescence, some florets have disarticulated in this mature sample**

**Spikelet with 2 short glumes and 3 florets**

**3 florets disarticulated from glumes (may have been more than 3), florets about 2 mm long in this sample, (species can have up to 6 florets**

**Disarticulating above glumes, glumes about 0.8 mm in this sample**

**Both sides of a Floret**

# Three-Flowered Melic Grass – p1


***Melica nitens*** **(Scribn.) Nutt. ex Piper**
**Poaceae (Grass Family); Meliceae (Tribe)**
**Wire Road Conservation Area, Stone County, Missouri**

**Notes: Plant perennial, tufted (loosely), erect, up to 130-150 cm; Culm terete, short rhizomes; Roots fibrous; Leaf Blades mostly glabrous, mostly flat, up to10+ mm wide; Leaf sheath closed below midway, mostly glabrous; Ligules membranous, up to 5+ mm, truncate; Inflorescence a panicle (up to 25+ cm), branches with up to 20+ spikelets, often pendant at maturity; spikelets 8 to 12+ long, with 2-3 perfect florets at different levels and an apical sterile floret; both glumes present, upper much longer, parallel veins; lemmas up to 11 mm, sharp-pointed; Palea present and smaller; often in wet to dry wooded areas and rocky areas; late spring to summer**

*[V Max Brown, 2014]*

Ligule membranous, up to 6mm

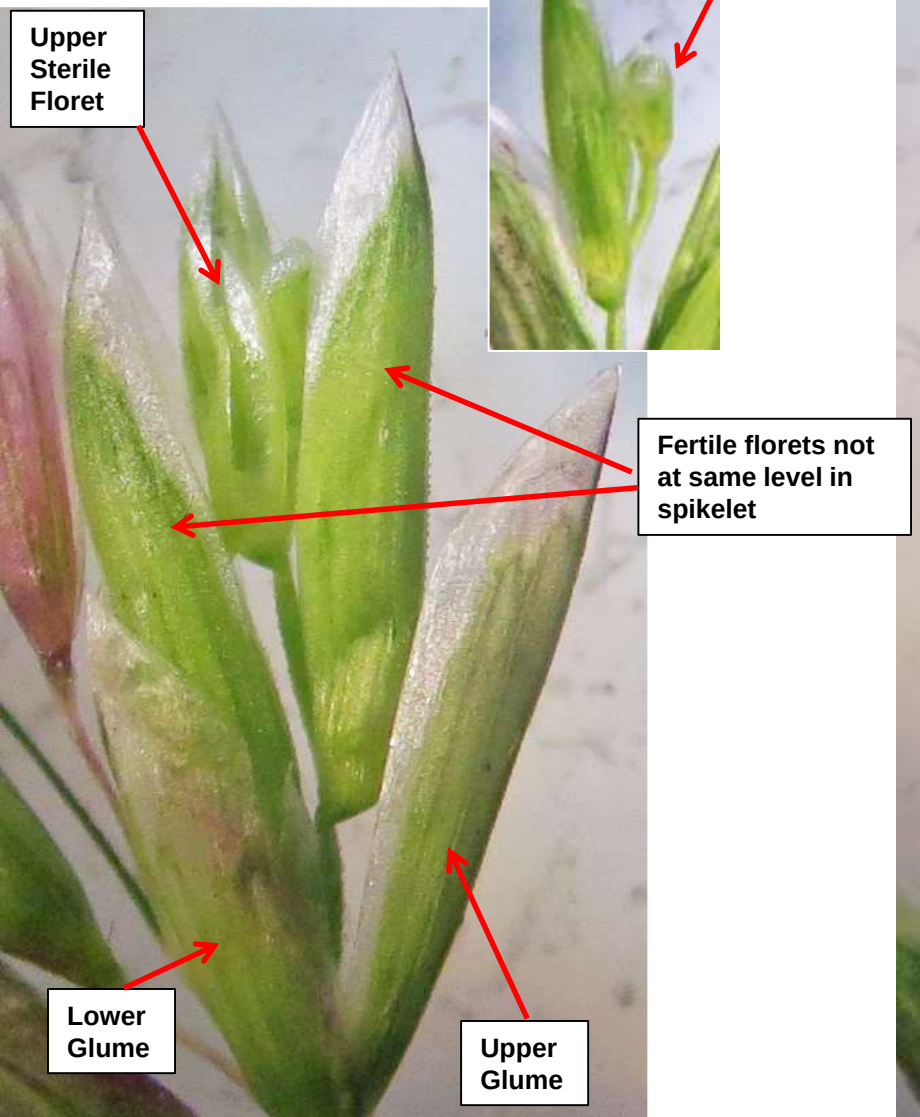


Spikelets usually pendant at maturity

# Three-Flowered Melic Grass – p2

***Melica nitens* (Scribn.) Nutt. ex Piper**

*[V Max Brown, 2014]*





Inflorescence up to 20-30 cm with spikelets pedant at maturity, 2-3 fertile florets, 1 sterile floret