## **Vascular Plants of Williamson County**

*Eragrostis lugens* – MOURNING LOVEGRASS [Poaceae]

Eragrostis lugens Nees, MOURNING LOVEGRASS. Perennial herb, lacking rhizomes (shoots early separated belowground), fibrous-rooted, cespitose, several-stemmed at base, ascending, in range to 40 cm tall; shoots with basal leaves and several cauline leaves, with straight pilose hairs on parts of shoot and inflorescence, lacking glands. Stems: cylindric and not ridged, to 1 mm diameter, striped green, smooth, usually somewhat bent (geniculate) at cauline nodes, glabrous. **Leaves:** alternate (distichous), simple with sheath; prophyll at base of each shoot 2-keeled, triangular in outline, to 10 mm long, with folded membranous margins but not keeled, glabrous, minutely scabrous along keels; sheath open, somewhat folded (of flag leaf cylindric), ridged, > internodes, mostly pilose-ciliate on membranous margins but of basal leaves often with appressed straight hairs, especially flag leaf with pilose hairs at top 2–4 mm long, without lobes (auricles) at top; collar piloseciliate; ligule fused at base and short-ciliate above, to 0.4 mm long; blade linear, in range to 110 × 3 mm, the widest near midblade becoming inrolled upward when water-stressed, minutely toothed on margins above midblade, long-tapered at tip, parallel-veined with veins finely raised on upper surface and midrib raised on lower surface, upper surface minutely scabrous along veins and with or without widely scattered (sparse) pilose hairs. **Inflorescence:** spikelets, in open, wispy, terminal panicles, panicle ellipsoid to ovoid, in range to 250 × 140 mm, lateral branches at nodes often 2–3, spreading mostly at 30–45°, spikelet in range with 2-6 florets, bracteate, lacking awns; axes having pulvinus in axil of each lateral branch and branchlet, pulvinus with pilose hairs 2–4.5 mm long; axes of inflorescence ridged and scabrous, stalk of spikelet slender, 3-ridged and somewhat wavy,  $1-10 \times 0.1-0.15$  mm, with green and white stripes, scabrous along ridges, lacking glands. **Spikelet:** narrowly ovate to lanceolate in outline compressed side-to-side, to  $5 \times < 1$  mm (to 1.3 mm wide during pollination), membranous, straight, rachilla zigzagged but short, remaining intact, having glumes abscising and lemma released with fruit and palea persistent on rachilla; **glumes** 2, unequal, keeled, lower glume 0.9–1 mm long, upper glume  $\pm$  1.5 mm long, 1-veined, minutely scabrous along keel, lacking glands; **lemma** ovate, keeled, ca. 1.5 mm long, 3-veined, veins green but lateral veins not reaching tip, scabrous along keel; palea arched, 2-keeled, 2-veined, ca. 1.4 mm long, folded along keels, concave on back, rounded at tip between vein ends, minutely scabrous along veins above midpoint. Flower: bisexual; perianth (lodicules) 2, broadly wedge-shaped,  $0.25 \times 0.25$ mm, white; **stamens** 3, free; filaments threadlike, 0.8–1 mm long, white; anthers dorsifixed, dithecal, in range 0.4–0.45 mm long, rose-purple, longitudinally dehiscent; pollen white; **pistil** 1, 1.2 mm long; ovary superior, ovoid, 0.3–0.35 mm long, white, 1chambered with 1 ovule; styles 2, exserted, stigmatic portion bottlebrushlike above midpoint (ca. 0.3 mm long). Fruit: achene (caryopsis), somewhat obovoid, ca.  $0.7 \times 0.4$ mm, opaque brownish, in range lacking groove. A. C. Gibson