Vascular Plants of Williamson County

Melica nitens – SHINING MELIC, THREE-FLOWER MELIC, TALL MELIC [Poaceae]

Melica nitens (Scribn.) Piper, SHINING MELIC, THREE-FLOWER, TALL MELIC. Perennial herb, rhizomatous, firous-rooted, cespitose, many-stemmed at base, with ascending to suberect inflorescences, 70–120 cm tall; shoots with only widely spaced cauline leaves. **Stems:** cylindric, to 2.5 mm diameter, tough, internodes to 110 mm long, hollow, glabrous. Leaves: alternate distichous, simple with sheath; sheath closed most of length later splitting downward, > internode, conspicuously ridged especially to midrib of blade, margins not membranous, lacking lobes (auricles) at top; collar a narrow, white band; ligule opaque membranous, in range ± 1 mm long, splitting downward into triangular segments; blade linear, in range to 220 × 9 mm, minutely scabrous on margins, longtapered to tip, parallel-veined with veins somewhat raised upper surface and midrib conspicuously raised on lower surface, upper surface glabrate with fine, inconspicuous upward-appressed short hairs and minutely scabrous along veins. **Inflorescence:** spikelets, in terminal panicle with widely spreading lateral branchlets, to 260 mm long, lateral branches mostly 3 per node and unequal, each branchlet with 1-several spikelets, bracteate; peduncle strongly 8-ridged, at each node often unequally 3-branched, each with a purple-red pulvinus on the inner side, the thickest axis typically spreading or somewhat deflexed; lateral axes slender, to $50 \times 0.15 - 0.3$ mm, wiry, with pulvinus and expanded base, above pulvinus straight, angular, and minutely scabrous along ridges; stalk of spikelet ("pedicel"), not straight, purplish to reddish, flexible, scabrous, stiff short-hairy to nearly hirsute approaching spikelet. Spikelet pendent to modding on lower side of spreading lateral axes, 8–9 mm long, at base of spikelet nipplelike and several-ridged and green, breaking below the glumes; glumes 2, unequal, lower glume shallowly boat-shaped, acuteovate, ca. 7 × 3.5 mm, green with wide membranous margins and tip, 7-veined, upper glume > lower glume, lower glume acute-elliptic, ca. 8.5×2.2 mm, green with narrow membranous margins, (5)7-veined; rachilla ± 2.8 mm long; rudiment at end of rachilla inflated club-shaped, in straight line with rachilla; **lemma** of the lowest floret elliptic, ca. 9.2×3.3 mm, green with wide membranous margins above midpoint, with many closely spaced, fine veins and having 3 green veins extensions toward tip, of the second floret ca. 7.8 mm long, of the rudiment third floret ca. 3 mm long, ridged and minutely toothed to scabrous above midpoint; palea of the lowest floret 2-veined and 2-keeled, strongly folded along keels, oblanceolate, 5.5–6 mm long, < lemma, membranous with green veins, keels and tip short-ciliate, of second floret shorter. Flower: bisexual (the lowest flower) to pistillate and sterile; **perianth** (**lodicules**) 3 fused at base with fleshy tissue around lower portion of ovary, to 1 mm long, colorless; **stamens** 3 (at least the lowest flower), free; filaments threadlike, 2–3 mm long, white; anthers dorsifixed, dithecal, ca. 3.2 mm long, yellow, longitudinally dehiscent; pollen yellow; in pistillate flower often 3 stamens with flat, sterile anthers; **pistil** 1, to 6 mm long, with stigmas exserted from lemma near the base; ovary superior, ellipsoid, ca. 1 mm long, greenish but white where surrounded by perianth and white in fruit aging purplish at top, glabrous, 1-chambered with 1 ovule; style 2-branched with persistent base; exserted stigmas bottlebrushlike. Fruit: achene (caryopsis), oblanceoloid to narrowly ellipsoid, $2.8-3.2 \times 0.7-0.9$ mm, glossy golden with

fine brown midline (furrow) on 1 face, slippery and falling from floret when mature (mostly 1-2 achenes per spikelet).

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