Vascular Plants of Williamson County

Panicum dichotomiflorum subsp. **dichotomiflorum** – FALL PANICGRASS [Poaceae]

Panicum dichotomiflorum Michx. subsp. dichotomiflorum, FALL PANICGRASS. Annual, in range rhizomes not observed, fibrous-rooted, many-stemmed at base, tufted with principal shoots decumbent and spreading, in range to 30 cm tall; shoots with basal leaves and cauline leaves, appearing completely glabrous from ground level upward. Stems (culms): slightly compressed-cylindric, to 4 mm diameter, internodes 20–80 mm long, glabrous; solid. **Leaves:** alternate distichous, simple with sheath; prophyll present belowground in axil of each branch, membranous aging papery, broadly triangular strongly flattened, to 9 mm long, broadly 2-keeled, acute at tip, keel to 0.8 mm wide and shortciliate, margins to 2 mm wide; sheath open, to 110 mm long, low-ridged, bases of basal leaf sheaths with appressed straight hairs to 1.5 mm long, without lobes (auricles) at top; ligule membranous at base and ciliate, 1–2 mm long; blade linear, 30–250 × 3.5–11 mm, flat, minutely serrate-scabrous on margins, long-tapered at tip, parallel-veined with many fine veins raised on surfaces. **Inflorescence:** spikelets, in terminal and axillary, wispy, open panicles, panicle ovoid, in range 120–250 mm, 100+ mm across, with 3–5+ orders of mostly alternate, lateral branches, the lowest node with 1 branch, nodes 2–3 with 1–5 branches (pseudowhorl and unequal), the longest branch to 110 mm long, with an axillary pulvinus and pulvini for subsequent branchlets, spikelet typically with 2 florets, lower floret sterile and reduced and upper floret bisexual, bracteate, lacking awns; peduncle exserted from sheath of flag leaf and blade of flag leaf < node of the lowest branch; rachis ± cylindric or somewhat angled, smooth and glabrous (lacking pilose hairs), upper portion scabrous; axes cylindric becoming angled and minutely scabrous approaching the lowest fork, smaller axes angled and scabrous along edges, stalk of spikelet 1–3 mm long, scabrous. **Spikelet:** narrowly ovate, in range $2.3-2.6 \times 0.7-1$ mm, breaking below the glumes as 1 unit; glumes 2, unequal, dimorphic, lower glume ovate, in range (0.35–)0.5–0.8 mm long (to 1/3 length of spikelet), encircling at base but not overlapping, ± obtuse at tip, 1 or faintly 3-veined with midvein somewhat raised and sometimes also with several scabrous teeth, upper glume ovate, in range ca. 2.2 mm long, colorless but purple-red at tip and tinged purple-red on margins, with 9 green veins, acute at tip; lemma of lower floret like upper glume, subequal, ovate, in range ca. 2.1 mm long, colorless but purple-red at tip and tinged purple-red on margins, with 9 green veins, acute at tip scarcely gapped from upper glume at tip; palea of lower floret membranous, narrowly 2-folded, to $1.7 \times 0.4 - 0.45$ mm, 2-veined close to margins; lemma of upper floret elliptic, ca. 1.7 mm long, with margins incurved around palea, smooth, glossy, colorless and glabrous at anthesis drying whitish and stiff; palea of upper floret broadly elliptic, ± 1.5 mm long with inrolled margins, smooth, glossy, colorless and glabrous at anthesis drying whitish and stiff. Flower: bisexual; perianth (lodicules) 2, conic, ca. 0.35 mm long, translucent; stamens 3, free; filaments threadlike, ca. 1.5 mm long; anthers dorsifixed, dithecal, 1–1.3 mm long, orange, longitudinally dehiscent; pollen orange; **pistil** 1, 1/9–2.1 mm long; ovary superior, ellipsoid, ca. 0.5×0.25 mm, pale green to orangish, glabrous, 1-chambered with 1 ovule; styles 2, colorless to midpoint, above midpoint feathery stigmas (plumose) exserted and ascending within 1 mm from tip of lemma. Fruit: achene (caryopsis), firmly enclosed in indurate lemma and palea unit and dispersed within brown, shredded glumes

and sterile floret, unit $1.6-1.7 \times 0.6-1$ mm, glossy brown with paler veins of; achene (caryopsis), tightly packed within lemma + palea, broadly ellipsoid, ca. 1.3 mm long, whitish.

A. C. Gibson