

Vascular Plants of Williamson County

Chloris virgata – FEATHER FINGERGRASS, FEATHER WINDMILLGRASS [Poaceae]

Chloris virgata Swartz, FEATHER FINGERGRASS, FEATHER WINDMILLGRASS. Annual, fibrous-rooted, many-stemmed at base, cespitose, decumbent to ascending, unbranched aboveground or with lateral branches, terminating in a long-stalked, initially erect, umbel-like (digitate) compound inflorescence, 25–55+ cm tall; shoots with 1 basal leaf and to 5 cauline leaves, frequently branched or rooting at nodes. **Stems (culms):** ± cylindric, to 2.5 mm diameter, often bent from a lower node (geniculate), internodes to 105 mm long and greenish, nodes scarlet, smooth, glabrous; internodes solid; belowground on robust individual with nodes to 5 mm long. **Leaves:** alternate distichous, simple with sheath; prophyll conspicuous at ground level and on lateral branches, strongly 2-keeled, to 70 mm long, deeply concave and green between keels, keel margins pink and rose and minutely scabrous, sides mostly green with membranous margins to 0.9 mm wide; sheath open, folded and keeled nearly to base (of flag leaf rounded), smooth, overlapping at base, in range without pilose hairs near collar, lacking lobes (auricles) at top; ligule membranous, truncate, in range < 1 mm long, minutely puberulent on surface, short-fringed and short-ciliate on margin; the collar to 1 mm long, white, in range glabrous; blade linear, in range 50–220 × 3–6 mm, the widest near the base, often strongly folded and keeled, minutely scabrous above midblade on margins, glabrous or coarsely long-hairy at base (hairs to 3.5 mm long), parallel-veined with midrib sunken and translucent on upper surface and conspicuously raised (keeled) on lower surface, minutely scabrous, glabrous or upper surface with several, widely spaced hairs to 3.5 mm long near base, lower (outer) surfaces somewhat glaucous. **Inflorescence:** spikelets, in terminal, umbel-like panicle, panicle of 5–12 erect, spikelike branches, the branches ascending to suberect at anthesis, (40–)50–95 mm long, 1-sided, with 2 rows of overlapping, spikelets, each row having spikelets inclined 45° and closely spaced with ca. 9 per 10 mm in each row, each spikelet having 2 florets with the lower floret bisexual (rarely functionally pistillate) and upper floret sterile, bracteate, awned; peduncle scapelike, glabrous; flag leaf blade spreading, folded, to 75 mm long; branch axis tomentose at base, somewhat wavy, triangular in ×-section, short-barbed along exposed edge, green, short-hairy but short stalk subtending spikelet silky-hairy, whitish, and ca. 0.3 mm long. **Spikelet:** strongly compressed side-to-side and appearing somewhat saclike (not inflated), breaking above glumes, awned, in fruit turning dark gray or black; **glumes** 2, unequal, membranous and 1-veined, keeled, minutely scabrous along green keel, narrowly lanceolate, lower glume ca. 1.7 mm long, lacking an awn, upper glume ca. 3 mm long + terminal awn 0.4–1.1 mm long with minute, upward-pointing (antrorse) purple barbs; callus with tuft of hairs below lower lemma; **lemma** of fertile floret strongly folded appearing elliptic from side, ca. 3 mm long + awn arising from sinus of a pair of triangular lobes, faces pale greenish with 3 green veins and a longitudinal groove bisecting each surface, lobes membranous, 0.3–0.5 mm long, midvein (keel) with short hairs around midpoint and lateral veins close to margins with straight, silky hairs from midpoint to top to 2.1 mm long, bases of hairs often purple, margin (outside) lateral veins narrow, the awn straight to wavy, in range 4–7 mm long; **palea** of fertile floret membranous, enclosed by and ≤ lemma, strongly 2-keeled and depressed between keels and folded membranous edges, ca. 3 mm long, minutely scabrous on keels to purple

minutely ciliate approaching tip; **lemma** of sterile floret appearing narrowly wedge-shaped from side when folded but inversely triangle (truncate at top) when flattened, 3 mm long, < upper glume, with 3 green veins having lateral veins sharply converging but not reaching base of awn, upper margin tinged purplish, typically glabrous, the awn shorter than awn of lower lemma, aging with purple retrorse barbs; **palea** of upper floret vestigial to linear or spatulate and inrolled, < 2 mm long, membranous. **Flower:** bisexual (rarely functionally pistillate when anthers sterile); **perianth (lodicules)** 2, linear, 0.5 mm long, white; **stamens** 3, free; filaments threadlike, 2–2.5 mm long, white; anthers exerted at top of palea or included, dorsifixed, dithecal, 0.6–0.7 mm long, rose-red, longitudinally dehiscent; pollen whitish; **pistil** 1, \pm 2 mm long; ovary superior, fusiform, ca. 0.3–0.35 \times 0.25 mm, translucent, glabrous, 1-chambered with 1 ovule; styles 2, exerted laterally, ascending or appressed, lower portion ca. 0.7 mm long, colorless, exerted upper portion short-bottlebrushlike, red-purple. **Fruit:** achene (caryopsis), fusiform, 1.5–2 mm long, glossy and translucent-amber, glabrous; dispersed as unit of the 2 awned lemmas + paleas, dark gray to blackish and showing long hairs of lemmas and shorter hairs of callus at base.

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