

Vascular Plants of Williamson County
Panicum coloratum – KLEINGRASS [Poaceae]

Panicum coloratum L., KLEINGRASS. Perennial herb, with knotty rhizomes, fibrous-rooted, many-stemmed at base, not rosetted, cespitose, not branching above base, decumbent with erect inflorescences, < 50–135 cm tall; shoots with to 2 basal leaves and to 6 cauline leaves, unbranched from base or after flowering forming flowering branches downward; rhizome with short internodes 1–1.5 mm long. **Stems:** cylindrical, to 3.5 mm diameter, somewhat bent at lower nodes (geniculate), nodes or internode just above node often purple-red, node glabrous to puberulent, internodes to 140 mm long, glabrous; internodes hollow. **Leaves:** alternate distichous, sessile with sheath; prophyll strongly folded and conspicuously 2-keeled, to 85 mm long, 3 mm diameter folded, the keel winged and minutely scabrous, the folded margins 2.5 mm wide green-striped with a membranous margin, between keels colorless with parallel veins; sheath open, rounded on back, 1/2–2/3 internode, of basal leaves conspicuously pilose next to rhizome, without lobes (auricles) at top; ligule membranous ciliate, mostly 0.8–1.6 mm long (of flag leaf shorter); collar short-hairy behind ligule, on margins of flag leaf and sometimes the uppermost sheath often having several straight hairs to 6 mm long with enlarged bases; blade linear long-tapered to tip, < 90–390 × 4–9.5 mm, the widest 50+ mm above ligule, minutely toothed on margins not scabrous, parallel-veined, upper surface low-ridged and sometimes somewhat glaucous especially near ligule and midrib white, lower surface glabrous or with minute hairs along veins below midblade. **Inflorescence:** spikelets, in terminal, open panicle, panicle ovoid, fully spreading to 250 × 300 mm, with 4 orders of mostly alternate and less commonly 2 (rarely pseudowhorled), widely spreading to ascending lateral branches, nodes 6–12+ along rachis, primary branches to 200 mm long decreasing upward, with to 7 alternate secondary branches decreasing in length upward, ultimate branches on secondary branches mostly 2 per node and unequal, each with 2 spikelets, ± upward appressed to secondary branch axes, spikelet of 2 florets with upper one bisexual and chasmogamous opening first and lower one staminate and cleistogamous or opening after upper floret is pollinated, bracteate, glabrous, lacking awns; peduncle 150+ mm long; branch and branchlet axes slender, minutely scabrous, primary and secondary branches with axillary pulvinus, branchlet lacking axillary pulvinus, stalk of spikelet 0.5–3(–5) mm long. **Spikelet:** lower floret staminate and upper floret bisexual, in bud lanceoloid, 2.4–3.5 × 0.5 mm aging ovoid and 0.75–1.1 mm wide with anthers and in fruit, breaking below the glumes as 1 unit then below glossy upper floret; **glumes** 2, unequal, lower glume deltate-ovate, ca. 1.2 mm long, shorter than to midpoint, encircling at base, acute at tip, midvein conspicuous, raised, minutely scabrous, and often purple approaching tip, to 5-veined but minor veins inconspicuous and if visible not extending above midpoint and not raised, upper glume ovate, ca. 2.7 mm long, 7-veined, the veins raised and green, colorless between veins and purple approaching tip and on narrow membranous margins, middle 3 veins minutely scabrous above midpoint, **Lower floret lemma** (staminate) like upper glume, ca. 2.5 × 2 mm, upper glume 0.2–0.3 mm > lower lemma, 7-veined or 9-veined with green veins and colorless between veins, veins converging at tip, with minute hairs at tip, **palea** 2-keeled and 2-veined, 1.8–2 × 0.7–1 mm (folded), colorless, notched at tip. **Upper floret lemma** (bisexual) ovate, 1.9–2.4 mm long, colorless, finely 7-veined, rounded and smooth on

back; **palea** ovate without keels, ca. 1.5 mm long, colorless and lacking veins. **Staminate flower: perianth (lodicules)** 2, fan-shaped folded, 0.3–0.35 mm long, colorless; **stamens** 3, free; filaments threadlike, to 0.7 mm long, colorless; anthers included or partially exerted from gapping lemma and palea, dorsifixed, dithecal, 1.2–1.5 mm long, orange to dark orange or red-orange, longitudinally dehiscent or indehiscent; pollen light orange; **pistil** absent. **Bisexual flower: perianth (lodicules)** 2, fan-shaped folded, 0.3–0.35 mm long, colorless; **stamens** 3, free; filaments threadlike, to 3 mm long, white; anthers fully exerted from gapping lemma and palea, dorsifixed, dithecal, 1.2–1.5 mm long, orange to dark orange or red-orange, longitudinally dehiscent; pollen light orange; **pistil** 1; ovary superior, ellipsoid, 0.5 × 0.25 mm, translucent, 1-chambered with 1 ovule; styles 2, ca. 3 mm long, lower 2 mm colorless, exerted stigmatic portion spreading to ascending, bottlebrushlike, ca. 1 mm long, red-purple. **Fruit:** achene (caryopsis), tightly enclosed in hard-walled lemma and palea, lacking rachilla, floret ellipsoid slightly compressed front-to-back, 1.9–2.4 × 0.8–1 mm, glossy brown with lighter fine lines on lemma (veins), actually mottled with minute purple-red streaks, roundish at base and acute at tip, lemma surface smooth, palea face with overlapping margins of lemma; achene fitting tightly within bractlets, having a thin, weakly pigmented wall.

A. C. Gibson