

Vascular Plants of Williamson County
Bromus pubescens – CANADA BROME [Poaceae]

Bromus pubescens Willd., CANADA BROME. Perennial herb, rhizomatous (highly condensed and inconspicuous), fibrous-rooted, 1-stemmed at base, with ascending or arching shoots, in range to 150 cm long; shoots typically with to 9 basal leaves and to 8 cauline leaves, individuals with leaves, especially lower axis with leaf sheath pilose and short-pilose, foliage at flowering glabrous or essentially so. **Stems (culms):** cylindrical, in range to 5 mm diameter, mostly smooth, especially at nodes with downward-pointing hairs (not along veins), nodes green and short-hairy; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath closed, of cauline leaves closed about 90% with throat 6–10 mm long, ridged most of length and extremely so when dried, with a raised midvein or somewhat keeled above midpoint, throat neither membranous and nor ciliate, lacking lobes (auricles) at top; ligule membranous but thickish, truncate sometimes jagged on margin, in range 2–4 mm long, with faint greenish veins, glabrous or with some short hairs near base; collar to 3 mm long, often with short hairs along base; blade linear, in range cauline leaves 200–300 × 9.5–13.5 mm (of flag leaf shorter and to sometimes only 2 mm wide), the widest approaching midblade, flat, minutely toothed on margins, parallel-veined with veins slightly raised on both surfaces and midrib raised on lower surface, short-pilose on pubescent on basal leaves and mostly glabrous on cauline leaves, not glaucous. **Inflorescence:** spikelets, in terminal, open, drooping panicles, panicle with widely spaced nodes, in range to 250 mm long, branching nodes alternate distichous, at each node often with 2 spreading to drooping branches on slender, flexible stalks, branches to 170 mm long, with 1–3 spikelets above midpoint, spikelet with 5–10 florets, most florets fertile and bisexual but terminal floret typically sterile (= reduced lemma); rachis ca. 10-ridged, sparsely short-hairy near nodes and but many portions glabrous, bract subtending the lowest node ± ledgeline, whitish and short-hairy; axes of branches wiry and lax, with pulvinus at base, weakly scabrous. **Spikelet:** linear-lanceoloid (closed) but at anthesis florets spreading and having exerted anthers, cylindrical (not compressed), in range mostly 25–34 mm long (excluding awns), conspicuously short-hairy, breaking above glumes and between fertile florets; **glumes** 2, unequal, lanceolate and ridged (principal veins), not notched at tip, lower glume in range 3.7–5.5 mm long and 1-veined or 3-veined, upper glume in range 9–10.5 mm long and 3-veined or 5-veined, lower glume < upper glume, glumes to 1/3 spikelet (excluding awns) and < lower lemma, lateral veins not converging at tip, green with membranous margins, raised veins scabrous, not awnlike at tip, short-ciliate on margins, short-hairy on green tissue; rachilla pale green, segments 2.6–3 mm long, short-hairy on convex face and glabrous on flat face; **lemma** awned, body lanceolate, rounded on back (never keeled), in range 10–12 mm long on fertile floret, 9–11-veined (on sterile florets shorter and having fewer veins), with principal veins not raised, tip notched 1 mm with acute lobes, exposed tissue short-hairy, concealed tissue minutely textured (convex cells), narrowly membranous to midpoint; the awn arising from notch as extension of midvein, straight, in range 5.5–7.5 mm long; **palea** on only fertile florets, elliptic, ca. 9–10.5 × 1.5 mm (folded), to 2 mm < lemma, 2-veined, 2-keeled but strongly folded flat along keels, flat between keels, acute at tip (not notched), membranous with keel veins green and ascending short-ciliate, membranous surface inconspicuously

short-hairy between green. **Flower:** bisexual, fully exposed at anthesis; **perianth (lodicules)** 2, ovate often with smaller lower lobe, ca. 1 mm long with bulbous base, opaque at base translucent above midpoint, persistent; **stamens** 3; filaments threadlike, ca. 3 mm long, translucent-white; anthers basifixed, dithecal, 4.5–5.3 mm long, pale light yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, at anthesis ca. 2 mm long; ovary superior, 3-sided top-shaped, 1 × 0.7 mm, translucent, concealed by ascending short hairs, with 2 sterile, colorless flaps extending beyond tip, flaps persistent and increasing in fruit, densely short-hairy on top of ovary and on flaps; styles 2, arising separately from near top of ovary (subapical) and somewhat hidden by hairs on top of ovary, colorless, with numerous branchlets (plumose) nearly from base, the branchlets twisted, wavy, and often intertwined. **Fruit:** achene (caryopsis), dispersed as floret tightly enclosed within adherent palea and awned lemma + a rachilla segment, awned dispersal unit commonly 12–16 mm long; achene hemi-oblongoid compressed front-to-back, ca. 7 × 2 × 0.8 mm, grayish brown, concave (sunken) on palea side, with whitish flap ca. 0.5 mm long and tuft of short hairs on tip; lemma with short hairs along veins and membranous tissues; palea mostly flattened scarcely wrapped around edge of achene, showing the 2 short-ciliate keels; rachilla segment appressed, flattened front-to-back, 1.4–3 mm long; anthers not retained within floret; the uppermost fertile floret retaining rachilla and sterile floret.]]]Is this really pubescens fruit.

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