Vascular Plants of Williamson County

Mimosa strigillosa – POWDERPUFF, HERBACEOUS MIMOSA, VERGONZOSA [Fabaceae]

Mimosa strigillosa Torrey & A. Gray, POWDERPUFF, HERBACEOUS MIMOSA, VERGONZOSA. Perennial herb, not spinescent, fibrous-rooted, not rosetted, several-stemmed at base, procumbent, in range growing as weed in lawns and treelawns of St. Augustine grass (Stenotaphrum secundatum); shoots with only compound cauline leaves, secondary leaflets folding together when touched (thigmotropic), internodes long and typically not armed with sharp prickles but on bare substrate internode sometimes with < 5 prickles, axes with upward-pointing strigose hairs. Stems: initially compressed side-to-side below each node aging cylindric, at expanded node 3.5–5.5 mm, cylindric mid-internodes to 2.5 mm diameter, internodes to 85 mm long, prickles when present on lower side of expanded node, ca. 1 mm long, old stems with brown periderm lacking hairs. **Leaves:** helically alternate, even-2-pinnately compound with 4-6 pairs of primary leaflets each with 8-11 pairs of secondary leaflets, petiolate with pulvinus, with stipules; stipules 2, broadly attached across node, ovate, $2.6-3.8 \times 1.2-1.7$ mm, entire and minutely ciliate below the widest point to appressed short-ciliate above midpoint of margins, broadly acute to obtuse at tip, parallel-veined from base with veins conspicuous and raised when dried, surface glabrous, margin often purplish to red; petiole pulvinus 1.5–2 mm long, white below midpoint where hidden by stipules, with several hairs, above pulvinus channeled and slender, to 85 mm long, sparsely strigose with upward-pointing hairs; rachis narrowly channeled, with primary leaflet pairs spaced 6.5–31 mm apart, extension ca. 1.5 mm long, strigose with upward-pointing upward; primary leaflet 15–33 mm long; petiolule pulvinus \pm erect, 1–1.5 mm long, petiolule appearing jointed with axis above somewhat divergent, at joint purplish and puberulent; rachilla with rounded lower side and 2 flat upper sides on which secondary leaflets attached, pairs of leaflets spaced 1–1.1 mm apart, with long hairs along upper ridges and on lower side 1–1.5 mm long; secondary petiolule pulvinus 0.25-0.3 mm long, light green; blades of secondary leaflets obovate to oblong, $2.8-5.3 \times 10^{-2}$ 0.8–1.3 mm, asymmetric at base, short-ciliate on margins, acute to obtuse at tip, 4-veined at base, the veins parallel. Inflorescence: headlike spike, axillary, spheroid to more elongate, 14–19 mm across, mostly 70–75-flowered, flowers helically alternate and closely packed, bracteate; bract subtending peduncle = 2 stipules attached across node, acuteovate, ca. 3 × 1.5 mm long, pale green, parallel-veined, glabrous; peduncle pulvinus 2 mm long, dark blue-green, strigose, axis above pulvinus cylindric, at anthesis to $175 \times 0.9-1$ mm, > leaf, strigose with upward-pointing hairs but not closely appressed; rachis to 9×1 mm, with flowers in pits having rim around base of each flower, with straight hairs along rim surrounding ovary, the hairs to 1 mm long with enlarged bases, lacking glandular hairs; bractlet subtending flower curved awl-shaped, ca. 1.4 mm long, in bud > flower, greenish. Flower: bisexual, radial, ca. 4 mm across (crooked filaments); calvx lacking lobes and teeth, saucer-shaped, 0.35–0.4 mm long, colorless, sparsely and minutely fringed; corolla 4(-5)-lobed, 2-2.8 mm long; tube funnel-shaped, ca. $1.5-2.1 \times 1.5$ mm, colorless, with a raised vein to each lobe; lobes deltate, 0.5–0.75 mm, green with purple-red on margins and inner surface, 3-veined, sparsely puberulent on outer (lower) surface with hairs often having papillate bases; **stamens** 8(10), free, attached at base of short stalk for pistil; filaments exserted, crooked (never straight) and tangled, 7–8 mm long, white from base

and within corolla to exserted portion light pink to light pink-purple, fine at top, glabrous; anthers dorsifixed \pm versatile, dithecal, 0.5–0.65 mm long, white aging cream-colored, longitudinally dehiscent; pollen white; **pistil** 1, 7.5–8 mm long, stalk < 0.2 mm long, white; ovary superior, 0.5 mm long, green, pubescent, 1-chambered with ca. 3 ovules; style exserted above anthers, crooked, pale pink; stigma terminal. **Fruit:** pod (legume) indehiscent, 2–4-seeded, somewhat oblong in outline, $12-25 \times 5.5-7.5$ mm including beak (style) to 2 mm long, brown, straight on upper side and indented between seeds on lower side, bulging at seed, densely covered with bristlelike hairs, the hairs with enlarged bases (pustulate) either cylindric and somewhat straight to 4 mm long or curved and compressed sided-to-side to 2.5 mm long. **Seed:** ovoid to quadrangular compressed side-to-side, ca. $4.5 \times 2.5-3 \times 1.2$ mm, dull dark brown, hard, with lighter, fine line around 2 faces. A. C. Gibson