## **Vascular Plants of Williamson County**

Sesbania drummondii – RATTLEBUSH, POISON-BEAN, RATTLEBOX, DRUMMOND'S SESBANIA (Fabaceae)

Sesbania drummondii (Rydb.) Cory, RATTLEBUSH, POISON-BEAN, RATTLEBOX, DRUMMOND'S SESBANIA. Shrub, unarmed, with ascending branches, 120–350 cm tall; shoots with only cauline leaves to 230 mm long, leaflets having sleep movements, foliage bluish green and somewhat glaucous, initially soft-hairy aging glabrescent, not glanddotted, somewhat odorous when crushed. Stems: ridged aging cylindric, with 3 ridges descending from each leaf, tough. Leaves: helically alternate, even-1-pinnately compound with (5-)11-19 pairs of leaflets, petiolate with pulvinus, with stipules; stipules 2, attached to leaf base below pulvinus, ascending, sickle-shaped to asymmetrically ovate,  $4-7 \times 2-2.4$  mm, green or with reddish, sometimes with basal lobe on stem side, finely short-ciliate on margin aging glabrescent, acuminate at tip, on inner side with winglike midvein, surfaces with several short soft hairs to glabrate, early-deciduous; petiole having pulvinus at base, pulvinus  $6-9 \times 3-3.5$  mm, with some short, fine hairs, cylindric above pulvinus (faintly channeled), to 15 mm long; rachis narrowly channeled and 2-ridged, tough, pairs of leaflets arising along ridges on upper side of rachis, pairs 8–9 mm apart, with short extension beyond the uppermost pair of leaflets, initially  $\pm$  sericeous; stipels 2 at end of ridge beside channel, minute-triangular, 0.2–0.3 mm long, withering above midpoint; petiolule = pulvinus,  $1.2-2 \times 0.6-0.8$  mm, short-hairy; blades of leaflets, elliptic to lanceolate-oblong,  $< 20-44 \times < 6.5-13$  mm, bluish green, tapered and oblique at base, entire, acute to obtuse with narrow point (often curved) at tip, pinnately veined with midrib slight raised on lower surface, upper surface glarous, lower surface  $\pm$  short-sericeous aging sparsely short-hairy wit fine appressed hairs. Inflorescence: raceme, axillary, mostly 12+-flowered, bracteate, axes with scattered short hairs; rachis somewhat lobed with broad ridges descending from each bractlet, furrowed above each pedicel, later with projecting, persistent bractlet bases; bractlet subtending pedicel, awl-shaped, partially sheathing; pedicels ca. 7 mm long increasing  $2 \times$  in fruit, with 2 subopposite bracteoles at top subtending flower, bracteoles awl-shaped, ca. 2 mm long, green, short-ciliate on margins, abscising before anthesis leaving persistent bases in fruit. Flower: bisexual, bilateral, modified pealike (papilionaceous), 11–15 mm across; calyx 5-lobed, yellow-green, ca. 5 mm long; tube asymmetrically bell-shaped, 6-6.5 mm (widest); lobes  $\pm$  deltate but low, somewhat soft-hairy along colorless margin; petals 5, clawed; banner claw suberect and somewhat inflated, about 3 mm long, white to yellowish; limb  $\perp$  claw, semicircular when flattened and deeply notched at top and truncate at base,  $11-12 \times 15-17$  mm, spreading but often folded along midline, light yellow or tinged greenish sometimes with clusters of minute orange dots on lower surface and veins somewhat visible but not dark-pigmented, wings 2, claws  $\pm$  2.5 mm long and twisted, white to yellowish, limbs obovate, ca. 12  $\times$  5 mm, yellow with veins same color; keel of 2 petals fused ca. 3 mm on outer edge approaching tip, claws ca. 3.5 mm long, limbs fused from tip nearly to claws on lower edges, broadly crescent-shaped, ca.  $12 \times 6$  mm, light yellow with arching veins; nectary surrounding stalk and base of ovary, vase-shaped, producing some nectar; stamens 10, diadelphous (9 fused and 1 free), included (not visible); filaments strongly curved, sheet several mm long and free portions unequal alternating short and long, 3–4.3 mm long, pale

greenish yellow to light yellow; anthers dorsifixed, dithecal, ovate in outline with broad connective, 1.1-1.4 mm long, dul light yellow to light orange-yellow, longitudinally dehiscent; pollen light orange to yellowish; **pistil** 1, stalked (stipe), stipe ca. 4 mm long increasing in fruit, light green, glabrous; ovary superior, cylindric, yellow-green, glabrous, 1-chambered with to 7 ovules attached to upper side; style curving from end of ovary and bent 90 °, 3.5-4 mm long, light yellowish green to pale yellow-green; stigma exserted ca. 1 mm above anthers, terminal, capitate, ca. 0.3 mm across. **Fruit:** pod (legume), dry, indehiscent with 4 papery wings, typically 2–7-seeded, pendent on pedicel and long stipe; pod  $42-80 \times 10 \text{ mm}$ , dark brown, wings wavy, with bulging seeds; on stalk often 15+ mm long, often persistent. **Seed:**  $\pm$  D-shaped compressed somewhat side-to-side,  $6.5-10 \times 5-6 \times 4-4.5 \text{ mm}$ , dull light to dark brown, smooth, with large, craterlike hilum on straight side.

A. C. Gibson