

Vascular Plants of Williamson County
Cercis canadensis var. *texensis* – TEXAS REDBUD [Fabaceae]

Cercis canadensis L. *texensis* (S. Watson) M. Hopk., TEXAS REDBUD. Shrub, winter-deciduous, with ascending principal branches, in range to 300 cm tall; shoots sometimes 2-dimensional (plagiotropic), foliage forming after flowers open and not after mid-spring, the blade strongly folded (conduplicate) with upper surface totally hidden, nearly glabrous but some short nonglandular hairs and minute glandular hairs on exposed (lower) surface of developing leaves; bark dull gray and often with conspicuous blotches in shades of gray.

Stems: ± zigzagged, tough, with projecting leaf bases, always glabrous, forming periderm first year. **Leaves:** helically alternate, simple, petiolate with pulvinus at base and top, with stipules; stipules 2, attached obliquely to leaf base (below pulvinus), cupped-obovate to cupped-broadly elliptic or somewhat diamond-shaped, 5.5–10.5 × 4–5.5 mm, for the latest formed leaves in spring ovate, flat, and < 1.5 mm long, entire, rounded to obtuse at tip, pinnately veined, green with colorless margins; petiole to 45 mm long, pulvinus at base 2–3 mm long, axis above pulvinus cylindric, pulvinus at top 3–4+ mm long (upper pulvinus larger); blade inversely heart-shaped, (35–)50–115 × (30–)40–130 mm, length < width, cordate at base, entire with margin edges nongreen, broadly acute to obtuse or rounded at tip, palmately veined mostly with 9 principal veins at base and slightly raised on lower surface, with elaborate network of minor veins, upper surface glabrous, lower surface sometimes short-pilose between veins several mm from pulvinus (domatia).

Inflorescence: raceme, on short shoots along woody twigs, to 7-flowered, bracteate; short axis below flowers bumpy with bud scars having raised bases, some nonglandular hairs < 1 mm long and short glandular hairs, rachis with essentially no internodes; bractlets subtending pedicel 2 arising from elevated base, ± boat-shaped, ca. 1.5 mm long, pinkish and membranous, short-ciliate and fringed on margins, ± keeled and keel short-ciliate, having a subterminal tuft of reddish short hairs, early-abscised; pedicel cylindric, 9–11 × 0.5–0.6 mm, rose to deep rose (darker in cultivated forms). **Flower:** bisexual, bilateral, 7–8 mm across; fragrance absent; **nectary** on receptacle tissue near ovary, nectar-producing; **calyx** 5-lobed, asymmetrically cup-shaped and appearing pouched and slightly compressed side-to-side, 5 × 5 × 3.5 mm, rose-purple, glabrous; lobes 2 upper, 2 lateral, 1 lower, subequal, short-semicircular, ca. 0.6 × 1.5–2 mm, lower lobe the widest, rose to rose-purple, short-ciliate on rounded margin, inner surface above midpoint with minute, sessile, colorless glandular hairs having spheric heads; **petals** 5, somewhat dimorphic, clawed, light pink-purple (cultivated forms variable and often darker), pinnately veined, glabrous; banner projecting forward, claw, shallowly crescent-shaped in ×-section, ± 3.5 mm long, limb bent 120° from claw, ovate, ca. 6.5 × 4.5 mm, rounded and somewhat hooded at top; wings 2 ascending-spreading on top of perianth, similar to banner but each limb bent 90–110° from claw, divergent from flower, and not hooded; keel petals 2 (not fused), lateral to pistil and cluster of stamens, claw 2.5–3 mm long, pale pink, limb ovate and distinctly cupped, ca. 8 × 5.5 mm, > wings + banner and slightly darker, rounded at tip; **stamens** 10 in a ring surrounding pistil, free; filaments the widest at base, somewhat S-shaped, slightly bent upward near base, and mostly gradually curved upward, 5 filaments long alternating with 5 shorter filaments, ca. 8–9 mm (straightened), white at base only then rose or purplish rose at base becoming paler to pink and white at slender top, having

colorless papillate-hairs at and below base of ovary; anthers dorsifixed (nearly versatile), 0.8–1 mm long, red-purple, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 8.5–9 mm long, stalked (stipe), the stalk 1.5–2 mm long, purple or purplish; ovary superior, narrowly fusiform, to midpoint of pistil, green, glabrous, 1-chambered with to 8 ovules attached to upper side; style straight at base to curved approaching tip, purplish; stigma terminal, compressed top-to-bottom, greenish, short-papillate. **Fruit:** pod (legume), indehiscent or tardily narrowly dehiscent along lower side, to 6-seeded, fusiform and strongly flattened side-to-side, 48–65 × 10–13 mm, brown, veiny with veins crossing between upper and lower edges. **Seed:** roundish ovate in outline compressed side-to-side, ca. 5 × 4.3–5 × 2 mm, dull brown.

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