

Vascular Plants of Williamson County

Streptanthus petiolaris – BRAZOS ROCKCRESS [Brassicaceae]

Streptanthus petiolaris A. Gray, BRAZOS ROCKCRESS. Annual, taprooted, not rosetted, 1-stemmed at base, unbranched or sometimes with inflorescence branches in canopy, erect, in range 34–109 cm tall; shoot with several basal leaves and mostly cauline leaves, all leaves with well-developed petioles, to midplant pilose and above midplant glabrous.

Stems: ± cylindric, to 6 mm diameter, green and somewhat glaucous or purple at base, internodes to 65 mm long. **Leaves:** helically alternate, deeply pinnately lobed (basal and lower cauline leaves) and unlobed (upper cauline leaves), petiolate, without stipules; petiole broadly and shallowly channeled, 12–70 mm long decreasing upward, green or purplish and glaucous, pilose (lower leaves) or glabrous (upper leaves); blade of lower leaves to 70 × 45 mm, with 1–4 pairs of subopposite lateral lobes, having sinuses often to the midrib, lobes ovate or oblong to obovate, to 22 mm long, ± obtuse at lobe tips, terminal lobe deltate and dentate, pinnately veined with principal veins raised on lower surface, pilose; blade of unlobed leaves narrowly lanceolate to lanceolate-linear, to 70 × 13 mm decreasing upward, the lower ones with short basal lobes or not, low-dentate and wavy on margins, acute at tip, pinnately veined, glabrous and often red-purple on margins.

Inflorescence: raceme terminal or later with axillary racemes developing downward in canopy, 20+-flowered, flat-topped and ca. 12 mm across; peduncle cylindric, < 20 mm long; pedicel ascending, cylindric, 6–7 mm long increasing 2× in fruit, glabrous. **Flower:** bisexual, radial, in range 4.5–5 mm across; **sepals** 4, oblong-lanceolate, 4–4.5 × 1.1–1.3 mm, white to below midpoint and green above midpoint having a purplish line near margins, glabrous; **petals** 4, oblanceolate (claw not distinct from limb), in range 5.5–6.3 × 2–2.2 mm, “claw” white to above midpoint, limb lavender to light purple, rounded at tip, pinnately veined; **stamens** 6, free, outer 2 short and inner 4 longer; filaments erect, ca. 2.5 mm long (short stamens) and 3.5–3.8 mm long (long stamens), white, glabrous; anthers dorsifixed, dithecal, 0.9–1.1 mm long, pale yellow in bud with a tiny purple spot at tip, longitudinally dehiscent; pollen pale yellow; **nectaries** = irregular disc connected next to bases of stamens, to 0.15 mm long, green, nectar-producing in bud; **pistil** 1, 3–3.5 mm long, green; ovary superior, cylindric, ca. 3 mm long, slightly glaucous, 2-chambered, each chamber with to 25 ovules; style short, hidden by terminal, domelike, 2-lobed stigma, stigma positioned at midpoint of anthers of long stamens. **Fruit:** siliqua (silique), short-stalked (gynophore < 0.5 mm long), ascending from ascending pedicel, dehiscent by 2 valves from septum, to 50-seeded, linear, < 65–75+ × (2.4–)3–3.7 mm, green, strongly flattened parallel to septum, scarcely bulging on faces at seeds; beak (style) 2.2–3 mm long. **Seed:** winged, thin, and strongly flattened, ± heart-shaped and asymmetric, in range 3.8–4.2 × 2.8–3.3 mm, continuous to notch at funiculus, at maturity papery, in range 0.7–1.2 mm wide, seed chamber low-biconvex, glabrous.

A. C. Gibson