Vascular Plants of Williamson County

Phlox cuspidata – POINTED PHLOX [Polemoniaceae]

Phlox cuspidata Scheele, POINTED PHLOX. Annual, taprooted, not rosetted, 1-severalstemmed at base, principal branches decumbent to ascending, in range to 15 cm tall; shoots with basal leaves (1–2 nodes) and cauline leaves above, lower plant with scattered nonglandular hairs and middle plant and canopy with mostly glandular hairs; cotyledons sometimes persistent on flowering plant, petiolate and obovate. **Stems:** cylindric, < 2 mm long, tough, light green, hairs mostly 1–1.3 mm long. Leaves: opposite decussate with petioles and fused across node (lower plant) and helically alternate subsessile to sessile, lacking stipules; petiole indistinct from blade, flattish, to 5 mm long; blade narrowly oblong, at vegetative nodes mostly $20-35 \times 3-4.5$ mm (bracts of canopy shorter and more narrow), entire (minutely papillate), obtuse to broadly acute at tip, 1-veined with midrib somewhat sunken on upper surface and slightly raised on lower surface, having more hairs on margins, hairs sparse on surfaces except along midrib on lower surface. **Inflorescence:** monochasial cyme, terminal on each principal shoot several-flowers (to 10), at a node forming a branch with 2 flowers opening several days apart) and axis of inflorescence continuing, flowers showy in flat-topped array (widely spreading corolla lobes), bracteate, glandular-hairy (not viscid); bract at node of principal axis leaflike, mostly < 15 mm long, glandular-hairy; pedicel stemlike, 3–6.5 mm long, conspicuously glandular-hairy. Flower: bisexual, radial, 16–20 mm across; strongly fragrant; calvx 5-lobed, 9–10 mm long not elongating in fruit, green tissues glandular-hairy (short hairs nonglandular); tube ± narrowly funnel-shaped of alternating green tissue and 5 membranous panels to sinuses, to midpoint of calyx and ca. 1.2 mm diameter near base and orifice 2 mm at top, membranous panels with several hairs aging brownish, expanding in and partially torn at top by enlarging fruit, inner surface lacking hairs; lobes ascending later widely spreading in fruit, acuminate to fine point at tips, $4.5-5 \times 0.6-0.7$ mm, 1-veined, mostly green but in bud purple-red at tip but fine point aging colorless, with glandular hairs on both surfaces; corolla 5-lobed, lobes conspicuously twisted in bud; tube cylindric becoming slightly bulging from ovary, ca. 2×1 mm, white, with some stalked glandular hairs above midpoint lower throat \pm cylindric, 8.5–10 mm long and 0.7 mm diameter at base and orifice ca. 1.3 mm diameter, rose-red to violet (white blushed pale lavender), with conspicuous, radiating, stalked glandular hairs to 0.5 mm long, ca. 15-veined, upper throat widely flaring and short, in range pale lavender to nearly white, the orifice star-shaped at anthesis; lobes spreading horizontal, ± fan-shaped (obovate) with outer margin somewhat wavy or with coarse tip, $8.5-10 \times 6-7.5$ mm. In range mostly pink-purple (pale light pinkpurple) but around upper throat sometimes much lighter and highlighting 5 sets of dark marks (faint in light-colored form), the marks either pairs of blue-violet lines (opposite points of the orifice star, 10 marks in a ring) ca. 1 mm long or merged as a longer radiating line, lower surface paler, several-veined at base and faintly palmately veined, upper surface minutely papillate, lower surface smooth; stamens 5, fully included, fused to corolla at different levels, having the lower stamens attached at the base of the throat and others progressively upward to just above midpoint; filaments in bud < 1 mm long, lower portion orangish and appressed to throat, upper portion translucent aging threadlike; anthers dorsifixed near base, dithecal, 1.5–1.75 mm long, light yellow-orange, longitudinally dehiscent; pollen light yellow-orange; **nectary disc** surrounding base of ovary, ca. 0.15

mm long, green, producing nectar; **pistil** 1, included (below the lowest anther); ovary superior, ellipsoid, ca. 1.1×0.4 mm, light green, glabrous, 3-chambered, each chamber with 1 elongate ovule; style 3-branched, ca. 1.2 mm long, lower portion 0.4 mm long, light green, the stigmatic branches suberect, 0.8 mm long, translucent, short-papillate. **Fruit:** capsule, loculicidal, 3-valved, 3-seeded, before dehiscent ovoid-broadly ellipsoid, $3.5-4 \times 2.5-2.7$ mm and with a persistent style, valves faintly textured (cell outlines). **Seed:** oblong-ovate in outline somewhat flattened, tight-fitting in fruit, brown. A. C. Gibson