

Vascular Plants of Williamson County
Phacelia congesta – BLUE-CURLS [Boraginaceae]

Phacelia congesta Hooker, BLUE-CURLS. Annual, taprooted, not rosetted, 1–several-stemmed at base, initially 1-stemmed but typically forming an ascending to spreading branch at each cauline node (top to base), ascending to erect, mostly to < 40 cm tall; shoots hispid and glandular-pubescent, the hispid hairs mostly < 1 mm long with bulbous bases, the stalked glandular hairs with small amber heads, in range not noticeably viscid. **Stems:** cylindric or with an inconspicuous pair of ridges descending from cauline leaf, to 5 mm diameter, not straight; solid. **Leaves:** helically alternate, odd-1-pinnately compound often with the lower 2(–4) lateral leaflets distinct and upper portion having several lateral lobes with deep sinuses and a terminal lobe, lateral leaflets mostly alternate (subopposite), petiolate, without stipules; petiole channeled with a narrow groove, to 35 mm long; rachis channeled like petiole, < 20 mm long; blade oblong to ovate in outline, to 55 × 30 mm; petiolules < 1 mm on lower leaflets or sessile above; lateral leaflets oblong or obovate to narrowly ovate or broadly elliptic in outline, to 23 mm long, dull, toothed on margins, pinnately veined with principal veins sunken on upper surface and conspicuously raised on lower surface; terminal leaflet 3-lobed or 5(7)-lobed, ± rhombic to ovate, pinnately veined, toothed on margins. **Inflorescence:** branched cyme, terminal on main and each lateral shoot, cymes typically in clusters of 3–5, at anthesis on spreading branches, each branch many-flowered, 1-sided, buds and open flowers densely coiled at tip, flowers with distinct pedicel, having scattered, stiff, radiating hairs and shorter glandular hairs, the stiff hairs without a purple ring around thick base; bract subtending inflorescence = a diminutive, petiolate, upper cauline leaf with only a small, ovate terminal lobe; peduncle cylindric, typically < 25 mm long; axis initially forked, becoming erect, 2 branches in fruit diverging ca. 60°, branches with cymes initially ⊥, in fruit erect; bractlets absent; pedicel at anthesis ca. 1 mm long increasing to 3 mm in fruit. **Flower:** bisexual, radial, 6–7 mm across; **calyx** 5-lobed, at anthesis 3.5–4 mm long, green, hispid and glandular-pubescent; tube shallowly cup-shaped; lobes subequal, linear-lanceolate, ca. 3 mm long scarcely increasing in fruit, 1 lobe somewhat wider, acute at tip, inner surface nearly glabrous; **corolla** 5-lobed, broadly funnel-shaped; tube ca. 0.5 mm long, white; throat ca. 2.5 mm long, white at base to violet at top, lacking conspicuous spots, with scales; lobes spreading, ± semicircular, ca. 2 × 2 mm, blue-violet lacking spots or prominent lines, lower surface of lobes short-pilose; internally scales paired on each side of filament base fused diagonally to corolla ca. 0.7 mm but not to filament, white-translucent, the scales cupped inward and jagged on upper free margin, descending from corolla and curving to the pistil side of filament forming a collar concealing nectar; **stamens** 5, fused ca. 0.5 mm above base of corolla tube, ascending, exserted, with bases hidden by pairs of cupped corolla scales; filaments subequal, 5–6 mm long, light violet, glabrous; anthers versatile, dithecal, 0.9–1.1 mm long, light yellow, longitudinally dehiscent; pollen light yellow; **nectary disc** beneath ovary, shallowly 10-lobed, 1 mm diameter, purplish, nectar-producing; **pistil** 1; ovary superior, ± ovoid, ca. 1 × 0.7 mm, green, densely hirsute with erect hairs, 2-chambered, each chamber with 2 ovules; style exserted, arching, ca. 5 mm long, 2-branched ca. 1.5 mm above ovary, the branches ascending later strongly spreading, pale violet, with short hairs from base and below fork; stigmas terminal, minute. **Fruit:** capsule, loculicidal, dehiscent by 2 valves, 4-seeded, ovoid, ca. 3.5 × 2.5 mm + persistent style base (beak), light brown,

short-hairy with some longer, stiff hairs above midpoint, lacking glandular hairs; inflorescence erect to ascending after flowering, fruit-bearing axis to 80 mm long. **Seed:** 1/4 sphere (= 2 flat faces and outer face convex), 3–3.2 × 1.1–1.4 mm, brown, having netlike ridges defining deep pits.

A. C. Gibson