

Vascular Plants of Williamson County

Hexalectris spicata var. *spicata* – CRESTED CORAL ROOT, SPIKED CRESTED CORAL ROOT
[Orchidaceae]

Hexalectris spicata (Walter) Barnh. var. *spicata*, CRESTED CORAL ROOT, SPIKED CRESTED CORAL ROOT. Perennial herb, saprophytic (lacking chlorophyll), clonal, rhizomatous, without roots and vegetative shoots, scapose having erect inflorescences arising belowground, in range to 75 cm tall; aboveground plants glabrous; rhizomes (not examined). **Stems:** absent. **Leaves:** absent. **Inflorescence:** raceme, 1–several per clone (appearing 1 per ramet), spikelike, 15+-flowered, flowers ± helically alternate but internodes unequal, spreading, open for several week after anthesis, with pedicel and lower ovary twisted 180° (resupinate), bracteate, glabrous; peduncle stemlike, to midplant, ca. 5 mm diameter, pinkish brown and somewhat glaucous, smooth; solid; bracts on peduncle to 5, helically alternate, sheath without blade and sessile, in range 11–13 mm long, closed except the uppermost bract open, closed sheath ca. 5 mm long, entire, broadly acute at tip, parallel-veined, pale pink to whitish with reddish veins; rachis pinkish brown and glaucous; bractlet subtending pedicel open and not sheathing, spreading, ovate, 11–12 × 5.5 mm, whitish with 7 reddish veins, persistent aging scarious; pedicel indistinct from ridged ovary, at anthesis to 6 mm long, reddish. **Flower:** bisexual, bilateral, ca. 26 mm across (when perianth fully spreading), not obviously scented; **sepals** 3, not fused at base, subequal, spreading (day 1) later ascending, oblanceolate (upper/dorsal sepal) and ovate to oblong-elliptic (lateral sepals), (15–)18–22(–24) × (6–)7.5–9 mm, dorsal sepal the narrowest, lateral sepals somewhat asymmetric, ochre with 7 conspicuous purple-brown veins at midpoint, typically 5-veined at base, entire, rounded to obtuse at tip and tip somewhat turned outward, veins essentially parallel with midvein slightly sunken on upper surface approaching tip and 3 principal veins somewhat raised on lower surface, upper surface somewhat glossy and minutely beaded with domed cells, lower surface mostly dull and somewhat glaucous; **petals** 3, dimorphic, not spurred, lateral petals ascending, oblanceolate but somewhat curved (not truly sickle-shaped), in range ca. 20 × 7 mm, yellowish tan with 7 reddish veins at midpoint, typically 3-veined at base, entire, obtuse to roundish at tip, veins essentially parallel, upper surface glossy and minutely beaded with domed cells, lower surface dull, scarcely glaucous; lower petal (labellum) 3-lobed with ear-shaped wings from a central axis defined by shallow sinuses, ca. 17 × 13 mm, wings yellow-tan from an axis having 5 conspicuous, tall, dark purple ribs (lamellae), wings also with raised purple veins; terminal lobe somewhat semi-circular, ca. 5 × 7 mm, purple with 5 radiating dark purple lamellae, margin wavy, lower (outer) surface paler and with low ridges and furrows along central axis; **stamen** 1, fused into column with style and stigma, visible at throat, = 2 anther sacs (dithecal), terminal on column; anther strongly 2-lobed, ca. 2 × 3.5 mm, lobes bulbous, appressed backward on top of column, purple-red along top and yellowish below with sacs opening on lower side; pollen in sold masses (pollinia) 8, with 2 pairs of pollinia in each sac, each club-shaped, 0.8–1.2 × 0.5 mm, amber to brown, with sticky attachment (viscidium) on a short stalk (caudicle); **pistil** 1; ovary inferior, the base somewhat twisted, narrowly funnel-shaped, somewhat 3-sided, and strongly ridged, ca. 11 × 2.5–3 mm, rose-red, low ridge of ovary descending from midvein of each sepal, broad ridges descending from paired edges of sepals, 1-chambered with many minute ovules on 3 yellow placenta along the wall; style column (columella) keeled, arching

outward 180° projecting stigma and anther, and cupped inward, to 15 mm long (straightened), purple at base with dark purple basal lobes, pale yellow to cream-colored above midpoint, inner surface with deep central furrow to base of wet stigma; stigma subterminal, with shelflike projection at top (below anther sac), margin of projection red and lip-shaped. **Fruit:** capsule, developing on same clone but fertile capsule not observed, nodding, ellipsoid, ca. 15 × 8 mm (immature).

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