## Vascular Plants of Williamson County

*Delphinium carolinianum* subsp. *vimineum* – PINEWOODS LARKSPUR, GOLD COAST LARKSPUR [Ranunculaceae]

Delphinium carolinianum Walter subsp. vimineum (D. Don) M. J. Warnock, PINEWOODS LARKSPUR, GOLD COAST LARKSPUR. Perennial herb, root vertical and below several-manybranched, 1(-2)-stemmed at base, open rosetted, erect, in range < 80 cm tall; shoots with ca. 8 ascending basal leaves and to 8 spreading cauline leaves present at flowering,  $\pm$ villous-tomentose and foliage with minute glandular hairs. Stem: cylindric, aboveground to 4 mm diameter, green, villous and short-villous. Leaves: helically alternate, deeply palmately dissected with 3 principal lobes or 5–9-lobed (upper cauline leaves), longpetiolate, without stipules; petiole U-shaped at base attached halfway around stem, cylindric from below midpoint, 16–85 mm long, for basal leaves petiole >> blade for cauline leaves petiole  $\geq$  blade, villous on lower side and on edges; blade of basal leaves with 3 obovate lobes to 42 mm long, each with 3–5 sublobes where widest or 2-parted and then with sublobes, ultimate sublobes acute and oblong to elliptic or obovate, of cauline leaves 3-lobed but more slender and sublobes longer and slender and acute, margins of lobes and sublobes entire, palmately veined. Inflorescence: raceme, terminal, manyflowered, the longest with < 15 flowers, flowers helically alternate, bracteate; rachis > 1/2plant, cylindric, internodes at anthesis 5–7 mm increasing to 35 mm long in fruit, densely villous and glandular-hairy, the glandular hairs to 0.6 mm long; bractlet subtending pedicel acuminate, 2–5 mm long, green, upper portion glabrous, lower portion thickened, glandular-hairy, and persistent; pedicel lower segment erect, ca. 8 mm long, with 2 opposite bracteoles, the bracteoles acuminate, 3 mm long, arising 90° from bractlet, upper segment above bracteoles pedicel 5 mm long and spreading. Flower: bisexual, bilateral, 33–40 mm across, with backward-pointing spur (sepals) on upper side; sepals 5, dimorphic; 4 sepals  $\pm$  elliptic to obovate but somewhat irregular,  $8-18 \times 6.5-9$  mm, lateral 2 sepals widely spreading and > lower 2 sepals, pale blue to pale violet-blue with some white but thicker and green at base and having a dark green patch on back above midpoint surrounded by pale violet, often somewhat crisped and margins mildly scalloped above midpoint, lateral sepals finely ciliate on margins below midpoint, lower surface with hairs having ampoulelike bases, abundant especially on green tissue; upper sepal outside and overlapping lateral sepals, blade  $11-14 \times 8-9$  mm with spur projecting backward and spreading somewhat upward, spur in bud curved somewhat upward becoming straight and  $\pm$  horizontal, 11–13.5 mm long, 3.5 mm diameter at orifice to rounded tip 2 mm diameter, pale violet-blue to light violet-blue to whitish or darker at rounded spur tip with a couple pouches, somewhat angled with flat inner faces and conspicuously wrinkled; petals 4, upper 2 petals spurred and nested within sepal spur, spur 7 mm long, glossy blue-violet and green, nectar-producing (nectaries), limb appressed, broadly elliptic, , ca. 10 mm long, white or pale lavender with some green where thickened, upper portion wavy and often 2–3-lobed at tip; lower 2 petals, clawed, the claw cupped,  $\pm 6$  mm long, light violet, with ampoulelike hairs on back (lower surface), limbs strongly bent outward and asymmetrically ovate, ca.  $9 \times 7$  mm, white, with conspicuous veins, having several teeth on margin above midpoint, 1 margin glabrous and other margin ciliate, having long hairs on surface (hairs initially glandular); stamens 28–35, helically alternate in several series, free;

filaments (4–)5–5.8 mm, greenish in bud aging white, lower portion flared, strongly bent at junction with anther and with a swelling below anther; anthers basifixed, dithecal, 1.7–1.9 mm long, purple-red, having several straight short hairs on anther margins mostly above midpoint, longitudinally dehiscent; pollen white; **pistils** 3, whorled, 3.5–6 mm long, together 1.5 mm across; ovaries oblong, 2.5–3 mm long, green with ascending short hairs and sessile glandular hairs, 1-chambered with many ovules; styles 1 per follicle, ascending, fingerlike to triangular, ca. 1.5 mm long, white but green at base aging purplish (not violet), with short ascending hairs and sessile glandular hairs. **Fruits:** follicles, 3, initially in set parallel, appressed, and touching except at top, each follicle dehiscent at top to base on inner side, 15–25-seeded, cylindric and peapodlike,  $(13–)18–22 \times 3$  mm + beak to 2 mm long (persistent style), not veiny, with scattered hairs having ampulelike bases; pedicel in fruit to 40 mm long. **Seed:** ovoid to pine cone-shaped, ca. 1.5 × 1 mm, brown with colorless, wavy horizontal ridges 1 cell wide and high. A. C. Gibson