## Vascular Plants of Williamson County Ruellia nudiflora var. nudiflora, VIOLET RUELLIA [Acanthaceae]

Ruellia nudiflora (Engelm. & A. Gray) Urban var. nudiflora, VIOLET RUELLIA. Perennial herb, with caudex, not rosetted, 1–3-stemmed at base, decumbent to ascending, in range 25–70 cm tall; shoots with cauline leaves, with spreading leaves. **Stems:** 4-sided aging cylindric enlarged above each node, faces alternating flat (descending for each leaf) and channeled (descending from ledge), to 5 mm diameter, green but red-purple on enlarged portion of internodes, internodes to 90 mm long, with mostly with some appressed short hairs, 12-veined aging with whitish streaks along veins, having projecting leaf bases and at each node with a pair of straight to crescent-shaped ledges across each node, ledges with short and longer nonglandular hairs along edge. Leaves: opposite decussate, simple, petiolate fused as ledges across node, without stipules; petiole  $\pm$  hemicylindric, to 8 mm long, greenish, with collapsed hairs on  $\pm$  flat on upper side; blade ovate, (20–)30–90  $\times$ (10–)14–48 mm, tapered at base, subentire to low-dentate and wavy on margins, broadly acute to obtuse at tip, pinnately veined with principal veins raised on both surfaces, ± strigose with upward-pointing hairs, upper surface midrib channeled to midblade. **Inflorescence:** cymes, 1–10-flowered, in terminal inflorescence panicle with to 5 nodes of opposite decussate cymes, at other nodes with a pair of axillary inflorescences typically > subtending leaf or with 1 axillary inflorescence paired with an emerging vegetative shoot and < subtending leaf, when paired at node unequal, to 110 mm long; peduncle ascending, stemlike, 4-sided with pulvinuslike swelling at base, to 65 mm long, secondary axes 4sided; bracts 2 per node fused as ledges across node, ledges short-hairy, petiolate, petiole 2.5–7 mm; bractlets (bracts) subtending pedicel 2, narrowly triangular,  $3.5-6 \times 0.8-1.2$ mm, leaflike and  $\pm$  petiolate, pilose-ciliate on margins, glandular-hairy; pedicel cyclindric, at anthesis ca. 2 mm long increasing 2× in fruit, glandular-hairy. Flower: bisexual, radial, 28–40 mm across, 47–60 mm long; calyx 5-lobed, 13–17 mm long, green, with dense, stalked glandular short-pilose hairs; tube funnel-shaped to bell-shaped,  $1-2.2 \times 2.2-2.5$ mm; lobes subequal, acuminate-linear,  $11-15 \times 1-1.5$  mm, green or purplish at tip, with midvein raised, narrowly colorless and short-ciliate on margins, outer (lower) surface with dense, glandular short-pilose hairs, often ciliate with longer hairs on margins, inner (upper) surface minutely strigose; **corolla** 5-lobed, to 52 mm long; tube somewhat 5-ribbed, 15–20 × 1.5–2 mm, slightly enlarged around ovary, white at very base, light violet with some green to whitish, lower portion glabrous above glandular short-pilose, inner surface with decurrent filaments from above ovary and short-pilose; throat funnel-shaped, 15–22 mm long, pale to light violet and sometimes whitish, pleated with 5 raised on outer surface, white veins to lobes along folds and each with 2 principal veins on other (lower) surface having mostly stalked glandular hairs but lower throat with scattered short-pilose hairs; lobes subequal, widely spreading,  $\pm$  obovate,  $8-12 \times 7.5-10.5$  mm, violet but paler on lower surface, overlapping at bases, jagged on margin, rounded to obtuse at tip, upper surface glabrous, lower surface with glandular short-pilose hairs; stamens 4 in 2 pairs arising from 2 tall ridges, a short and longer stamens center pair shorter than outer pair, attached to top of corolla tube; filaments compressed, unequal, flattened, 6–8 and 7.5–10.5 mm long, white, glabrous; anthers included, dorsifixed, dithecal, 3.6–4.5 mm long, creamcolored with pink stripes to rose-pink, longitudinally and inwardly dehiscent; pollen white;

**nectary disc** below stalk of pistil short barrel-shaped,  $0.7-0.8 \times 1.2$  mm, white with green, nectar-producing; **pistil** 1, 30–42 mm long, having stalk below pistil 1 mm long; ovary superior,  $\pm$  cylindric to lanceoloid,  $3-3.7 \times 1$  mm, green to bluish green, densely puberulent to short-pilose, 2-chambered, each with 4 ovules attached to center; style exserted, slender, greenish at base and mostly white but light violet at top, with short-pilose hairs scattered to midpoint, stigma tonguelike,  $2 \times 0.4-0.5$  mm, white aging violet, truncate. **Fruit:** capsule, loculicidal, dehiscent tip to base with diverging valves, oblanceolate,  $14-16 \times 2.5-3$  mm, brown, short-hairy, each valve with median shallow groove. **Seed:** waferlike with uneven, papery wing; seed body roughly circular to broadly obovate in outline, 2.6-3.2 mm, brown, roughly convex but flattish whenever adjacent developing seeds touch, with some short hairs; wing translucent, to 0.25 mm wide. A. C. Gibson