

Vascular Plants of Williamson County

Ruellia metziae – SISTER MARY CLAIRE'S RUELLIA [Acanthaceae]

Ruellia metziae Tharp, SISTER MARY CLAIRE'S RUELLIA. Perennial herb, with short caudex, not rosetted, 1–2-stemmed at base, ascending to spreading, in range < 40 cm tall; shoots with cauline leaves, foliage short-hairy but in canopy nonglandular hairs replaced with stalked glandular hairs. **Stems:** 4-sided aging cylindric, enlarged above each node, faces alternating convex (descending for each leaf) and flat (descending from ledge), to 4 mm diameter, pale green with whitish stripes aging purple-red on lower stem and midplant above each node, internodes to 60 mm long, nonglandular hairs short but also with scattered hirsute hairs, having projecting leaf bases and at each node with a pair of straight ledges across each node, ledges with short and longer nonglandular hairs, hairs on stems changing upward as stalked glandular hairs. **Leaves:** opposite decussate, simple, petiolate with petioles fused as ledges across node, without stipules; petiole shallowly broadly channeled, to 15 mm long, indistinct from blade; blade elliptic to narrowly ovate, < 30–75 × 15–32 mm, narrowly tapered at base, subentire to low-dentate, obtuse to rounded (minutely notched) at tip, pinnately veined with principal veins raised on both surfaces, hirsute and short-hirsute; upper surface raised midrib channeled, tissue with elongate crystal inclusions. **Inflorescence:** cymes, 1–10-flowered, in terminal inflorescence panicle with to 5 nodes of opposite decussate cymes, at early nodes early in the growing season sometimes with a cleistogamous flower paired with an emerging vegetative shoot and < subtending leaf; peduncle ascending, stemlike, 4-sided with pulvinuslike swelling at base, to 35 mm long, pale green, axes densely glandular-hairy, secondary axes 4-sided; bracts 2 per node fused as ledges across node; bracts at the lowest node blunt acute-lanceolate, to 9 × 2.5 mm, decreasing upward, densely stalked glandular-hairy; bractlets (bracts) 2 subtending pedicel of terminal flower and a pair of lateral axes, glandular-hairy; pedicel cylindric, at anthesis ca. 2 mm long increasing 2× in fruit, glandular-hairy. **Flower:** bisexual, radial, 40–47 mm across; **calyx** 5-lobed, at anthesis 19–21 mm long, green, with dense, stalked glandular hairs to 0.35 mm long; tube somewhat barrel-shaped, 3 × 3.5 mm, light green; lobes subequal, acuminate-linear, at anthesis 16–18 × 1.5–1.8 mm, light green (never purplish), with midvein raised, narrowly colorless and short-ciliate on margins, outer (lower) surface with dense, glandular short hairs, lacking longer hairs on margins, inner (upper) surface appearing strigose to midpoint and with mostly glandular hairs above midpoint; **corolla** 5-lobed, 59–65 mm long, white, outer surface with scattered short hairs nearly base to tip, inner surface lacking hairs; tube somewhat 10-ribbed, 30–34 × 2.5 mm, slightly enlarged around ovary, short hairs descending; throat funnel-shaped, ca. 20 mm long and 10 mm wide at orifice, appearing somewhat pleated, outer surface with some stalked glandular hairs having colorless heads, inner surface somewhat veiny; lobes widely spreading, obovate, 15–17 × 12–14 mm, jagged on margin, rounded to slightly notched 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 and 2 winglike ridges decurrent to base; filaments flattened becoming cylindric approaching anthers, unequal, ca. 9 mm long and 11 mm long, white, glabrous; anthers included, dorsifixed, dithecal, 3.6–4 mm long, white, longitudinally and inwardly dehiscent; pollen white; **nectary disc** below pistil, short

barrel-shaped, 0.7–0.8 mm long, light green, producing thin nectary for lower corolla tube; **pistil** 1, ca. 50 mm long; ovary superior, cylindric-narrowly ovoid, ca. 3 × 1 mm, green, densely short-hairy with nonglandular hairs becoming stalked glandular hairs approaching top, 2-chambered, each with 4 ovules attached to center; style exerted, slender, white, with short hairs to midpoint including scattered nonglandular and glandular hairs, stigma lanceolate flap, 2 × 0.4 mm, white, acute. **Fruit:** not observed in range, capsule, loculicidal, dehiscent tip to base with diverging valves, oblanceolate, 16–22 × 4–5 mm, brown, densely pubescent and viscid above midpoint, each valve with median shallow groove. **Seed:** waferlike with uneven, papery wing; seed body roughly circular in outline notched at attachment, ca. 9 mm across with wing, roughly convex; wing translucent, viscid-pubescent on margins.

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