

## Vascular Plants of Williamson County

### *Nicotiana repanda* – FIDDLELEAF TOBACCO [Solanaceae]

*Nicotiana repanda* Willd., FIDDLELEAF TOBACCO. Annual, taprooted, rosetted, several-stemmed at base, branches spreading to ascending, in range < 60 cm tall; shoots with basal leaves and cauline leaves having conspicuous clasping basal lobes (auriculate and amplexicaulous), glandular-pubescent with short-pilose hairs, ill-smelling but not viscid. **Stems:** cylindric, < 5 mm diameter,  $\pm$  zigzagged, densely glandular-pubescent. **Leaves:** helically alternate, simple, sessile (alternatively interpreted as a winged petiole) mostly with well-developed basal lobes, without stipules; blade (esp. cauline leaves) fiddle-shaped (pandurate) or lower leaves with basal portion petiolelike and winged, wide portion of blade ovate to roundish, 20–130  $\times$  20–90 mm, tapered at base, entire and weakly wavy (repand) on margins, obtuse to rounded or slightly notched at tip, pinnately veined with veins slightly sunken on upper surface and principal veins conspicuously raised on lower surface, basal lobes clasping stem and overlapping, earlike to rounded, often 15+ mm long, petiolelike portion of lower leaf to 70 mm long, wings to 4 mm wide along biconvex principal vein. **Inflorescence:** raceme and panicle of racemes, terminal and axillary in canopy, flowers helically alternate (at some nodes lacking flower), bracteate, glandular-pubescent; rachis stemlike; bractlet subtending pedicel triangular to narrowly ovate, at anthesis  $\pm$  4  $\times$  1.5 mm increasing in fruit, with or without clasping bases (flowerless node having clasping bractlet), persistent; pedicel at anthesis 5–6 mm long increasing 2 $\times$  in fruit, glandular-pubescent. **Flower:** bisexual, radial, 12–15 mm across, sweetly scented; **calyx** 5-lobed, 12–13 mm long; tube ellipsoid to ovoid, 7–7.5  $\times$  4.5–5 mm, green, 10-ridged, with short glandular hairs and < 10% (the longer hairs) with liquid-filled bulbous bases; lobes unequal to subequal,  $\pm$  linear but the narrowest at midpoint, 4.5–7  $\times$  0.7–0.9 mm (each flower), green but having a flared base with white margins to midpoint, entire, blunt-acute to nearly rounded at tip, both surfaces with sparse glandular hairs having bulbous bases; **corolla** 5-lobed, trumpet-shaped, in range 30–42 mm long; tube cylindric (enlarged around ovary), to 30 mm long, at midpoint 1.2–1.5 mm diameter and slightly enlarged approaching stamens, white at base to pale green above midpoint, glabrate with several hairs near ovary and conspicuously glandular-pubescent above with hairs to 0.8 mm long; throat funnel-shaped and 5-ridged, ca. 6 mm long, green becoming white at orifice; lobes folded and twisted in bud, spreading, broadly ovate, ca. 5  $\times$  4 mm, white with green midvein, having glandular hairs on lower surface; **stamens** 5, fused to top of corolla tube  $\pm$  at same level (the longest filament attached slightly lower on corolla tube), included; filaments short–0.5 mm long, white; anthers dorsifixed, dithecal, arranged in ring below stigma,  $\pm$  2 mm long, yellowish white, longitudinally and inwardly dehiscent; pollen copious, white, sticky; **nectary disc** cupping base of ovary and appressed to sides, producing copious nectar; **pistil** 1, to 36 mm long, included; ovary superior, narrowly conic, at anthesis ca. 3  $\times$  1.5 mm, yellow-green, veiny, glabrous, 2-chambered, each chamber with many ovules; style slender-cylindric, to 33  $\times$  0.25–0.3 mm, pale green, glabrous; stigma terminal, positioned 1 mm above anthers, 2-lobed and top-shaped to barrel-shaped, 1.2–1.3  $\times$  2.2 mm, green, papillate, sticky. **Fruit:** capsule, dehiscent by 2 valves, many-seeded, ovate, 9–10  $\times$  4.5 mm, tannish brown, glabrous; calyx slightly

expanded. **Seed:** D-shaped, ca.  $0.6 \times 0.3$  mm, brown; seed coat with a network of sinusoidal ridges.

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