## Vascular Plants of Williamson County *Rhus lanceolata* – FLAMELEAF SUMAC [Anacardiaceae]

Rhus lanceolata (A. Gray) Britt., FLAMELEAF SUMAC. Shrub (small tree), clonal, winterdeciduous, clump-forming, lacking long shoots and short shoots, in range to 600 cm tall; dioecious; shoots with only cauline leaves, densely pubescent, young foliage  $\pm$  velveteen, pleasantly aromatic when handled having rsin ducts; young bark brown and  $\pm$  shorttomentose, old bark ±tight with short vertical cracks, light brown with ash-gray patches, lacking hairs. **Stems:** cylindric, purplish red on vigorous shoot, internodes to 30 mm long, young periderm puberulent and short-hairy, with lenticels length < width; containing colorless resin from ducts in stem. Leaves: helically alternate, odd-1-pinnately compound with (13–)15–21 leaflets with lateral leaflets in subopposite pairs, petiolate, without stipules; petiole lacking pulvinus,  $\pm$  cylindric but channeled at base, to 45 mm long, densely short-hairy with curved longer hairs; rachis on upper side with 2 green ridges and a raised, pinkish midvein, 80–160 mm long, internodes 13–24 mm long and with narrow wings above midblade, the wings the widest approaching each pair of leaflets; lateral leaflets subsessile and terminal leaflet sessile; blades of terminal leaflet symmetric an lateral leaflets asymmetric (shorter on trailing side), lanceolate,  $(16-)20-70(-100) \times$ (5-)10-17(-21) mm, the largest at midblade, terminal leaflets narrower than lateral leaflets, tapered at base, entire to subentire and thicker on margins but sometimes sparsely low-serrate especially on the forward margin (terminal leaf on both margins), acuminate (acute) with red callus at tip, pinnately veined with midrib raised on upper surface and principal veins raised on lower surface, upper surface aging glabrescent and somewhat glossy, lower surface  $\pm$  villous, with minute glandular hairs mostly adjacent to veins. Inflorescence: panicle of racemelike branches, unisexual, dense, terminal often with 1–4 smaller panicles axillary leaves (opening after terminal panicle), many-flowered, terminal panicle ovate in outline, to  $170 \times 120$  mm, principal branches to 100 mm long, with 3–4 orders of branches, bracteate, short-hairy; leaf subtending panicle having 19 or 21 leaflets; bract subtending each branch and branchlet and bractlet subtending pedicel, ovate, 0.5–0.8 mm long, short-hairy, early abscising at anthesis, bract subtending lateral branch halfsheathing; axes tomentose-villous, bracts of branchlets acuminate and  $\pm$  short-strigose; pedicel curved upward,  $\pm 2 \text{ mm}$  long, pale green, short-hairy, with 2 bracteoles at top, bracteoles like bractlet. Staminate flower: radial, 3 mm across; calyx 5-lobed, bellshaped, scarcely fused at base; lobes overlapping, cupped-ovate, 1.3–1.4 mm long, yellowish green with white margins, short-hairy; **petals** 5, recurved, obovate,  $3-3.3 \times 1.6$ mm, white and cream-colored aging white, short-ciliate on margins, with scattered, short hairs on inner surface below midpoint and some hairs  $\pm$  glandular approaching base; stamens 5, free; filaments erect, tapered base-to-tip,  $\pm 2.6$  mm long, white, glabrous; anthers  $\pm$  versatile, dithecal, 1.5–1.7 mm long, light yellow, longitudinally dehiscent; pollen yellow; nectary disc surrounding pistil, ringlike, ca. 1.2 mm diameter, with 5 notched lobes, fleshy yellowish, disc ca. 0.4 mm thick, producing copious nectar around bases of petals and stamens; pistil 1, sterile, 1–1.2 mm long; ovary superior, ovary whitish, short-hirsute, 1-chambered; styles 3, from midpoint, rose, with hairs near base; stigmas stout, tip ± lobed. **Pistillate flower:** radial, 3.5–4.5 mm across; calyx 5-lobed, bellshaped, scarcely fused at base; lobes overlapping, cupped-ovate, 1.3–1.4 mm long, green

with narrow white margins, short-hairy; petals (4–)5, not recurved but bent near midpoint,  $\pm$  elliptic to obovate, ca. 2 × 0.9–1.2 mm, white and cream-colored aging white, rounded to obtuse at tip, short-ciliate on margins, with scattered, short hairs on inner surface below midpoint and some hairs  $\pm$  glandular approaching base; stamens 5, vestigial; filamens fingerlike, < 0.5 mm long, greenish white, glabrescent; anthers dithecal, sterile, 0.7 mm long, orangish red; nectary disc surrounding pistil, ringlike, ca. 1.2 mm diameter, with 5 notched lobes, fleshy yellowish, disc ca. 0.4 mm thick, producing copious nectar around bases of petals and stamens; **pistil** 1, ca. 1.4 mm long; ovary superior, ca. 1 mm long, pale green, densely short-hairy, 1-chambered with 1 ovule; styles 3, 0.5 mm long, green, with some short hairs below midpoint; stigmas terminal white in bud and at anthesis pinkish or rose aging green and reddish. Fruit: drupelike, fleshy, with 1 stone, resin-coated and strongly aromatic, obovate lens-shaped compressed side-to-side,  $5.5-6 \times 5-5.5 \times 3$  mm, aging strawberry red, drying with pits, short-beaked with 3 persistent styles, having uniformly spaced glandular short hairs and short-pilose; calyx lobes appressed; mesocarp thin and not juicy; stone disclike, ca.  $4 \times 3.5 \times 0.9$ –1 mm, dull brown, with groove along edge.

A. C. Gibson