Vascular Plants of Williamson County

Sambucus nigra subsp. *canadensis* – COMMON ELDERBERRY, AMERICAN ELDERBERRY [Adoxaceae; alt Caprifoliaceae]

Sambucus nigra subsp. canadensis (1.) Bolli, COMMON ELDERBERRY, AMERICAN ELDERBERRY. Robust shrub (small tree), winter-deciduous, several-many-stemmed at base, in range flowering specimens 150–400+ cm tall; shoots with only cauline leaves, essentially glabrous with inconspicuous short hairs on foliage. Stems: becoming ± 12ridged, with several ridges descending from each leaf, sometimes purplish red just above node, having long internodes especially on robust, rapid-growing shoots; pith wide, white, soft. Leaves: opposite decussate, odd-1-2-pinnately compound, with 2-4 pairs of primary lateral leaflets, on robust shoots commonly having leaf or leaves with 1–4 lateral primary leaflets having 2-3 secondary leaflets, petiolate, without stipules (in 2-compound leaves, linear, vestigial leaflets at base of petiolate appear to be stipels); petiole shallowly channeled, 55–110 mm long, channels of leaf axis puberulent; rachis groove-channeled, to 175 mm long and often 2× petiole, with petiolules arising from ridges, lateral leaflets usually opposite and pairs spaced < 20–65 mm apart, when 2-compound primary leaflet lower pairs with 1–2 smaller leaflets arising just beneath dominant terminal secondary leaflet; petiolules of primary leaflets channeled, to 16 mm long (of terminal leaflet to 20 mm long), channel puberulent; blades of leaflets ovate-elliptic or ovate-oblong to ovate or elliptic-obovate (terminal leaflet), $< 45-165 \times 16-83$ mm, broadly tapered and slightly oblique (longer on trailing edge) to subtruncate at base, low-serrate on margins with teeth mostly pointed but occasionally broader and blunt, ± acuminate at tip, pinnately veined with principal veins ± sunken and puberulent on upper surface and principal veins raised on lower surface, upper surface aging glossy glabrescent, lower surface with inconspicuous glandular hairs along midrib and short-hairy on blade tissue. Inflorescence: panicle of cymes, terminal, flat-topped to domed, 75–384 mm across with 100–4000+ flowers. compound with 4 primary rays (at top of peduncle) opposite decussate (lacking internode) + 1 terminal central ray (= 5-forked), node 2 usually radially 5-forked, but subsequent nodes with unequal rays and oriented away from lower side, 2–7 nodes 5-forked, axes decreasing upward to ultimate flower clusters; peduncle ridged, often 100+ mm long on robust shoots; bract subtending each ray at forks awl-shaped, < 0.5 mm long, mostly nongreen, with short hairs; minor axes often sparsely puberulent, at and around fork papillate to glandular-hairy and some hairs turning red; bractlet subtending pedicel = diminutive bract; pedicel cylindric, 1.3–4.3 mm long, white, sparsely papillate, persistent. Flower: bisexual, radial with parts in sets of 4–5, 5–6.3 mm across, never closing, mildly fragrant; calvx 4–5-lobed, whitish; tube < 0.3 mm long; lobes spreading, equal, triangular, 0.6–0.7 mm long, minutely toothed above midpoint, ascending after corolla abscised; corolla 4–5-lobed, dishlike (rotate), white, easily dislodged; tube 0.35–0.5 mm long, orifice 0.7–1.1 mm across; lobes overlapping in bud and at anthesis, spreading and cupped upward slightly, broadly ovate to roundish, $1.9-2.2 \times 1.5-1.9$ mm, rounded to obtuse at tip; **stamens** 4–5, fused to corolla tube just below sinuses (alternate with corolla lobes); filaments spreading, 1.5–1.9 mm long, white; anthers basifixed (filament fused to base of anther but continuous with connective), dithecal, 0.6–0.8 mm long, cream-colored, surfaces with domed cells, longitudinally dehiscent; pollen white; **pistil** 1, ca. 2 mm long;

ovary half-inferior, overall ellipsoid, above calyx ovoid to conic, $0.7-0.8 \times 0.8-0.9$ mm, white, 3–5-chambered, each chamber with 1 pendent ovule; styles 3–5, ascending in a ring with depression in center, short; stigmas appressed to surface of ovary, 0.4 mm long, conspicuously papillate. **Fruit:** drupe, with 3–5 stones, oblate spheroid, $4.3-5.2 \times 5-6.2$ mm, glossy black (not glaucous), with 4–5 calyx lobes persistent and appressed to top of fruit; pulp (mesocarp) fleshy, watery, purplish, not sweet; stone (endocarp) 3–5-parted, very hard, each part 3-sided with 2 flat faces and rounded on back, 2.2-3.2 mm long, dull amber, rough cobblestonelike to \pm transversely wrinkled on all faces. A. C. Gibson