## **Vascular Plants of Williamson County**

*Photinia serratifolia* var. *serratifolia* – TAIWANESE PHOTINIA, CHINESE PHOTINIA [Rosaceae]

Photinia serratifolia (Desf.) Kalkm. var. serratifolia, TAIWANESE PHOTINIA, CHINESE PHOTINIA. Shrub, evergreen, on some shoots spinescent (foliage), several-stemmed (trunks) at base, principal branches suberect to ascending, in range 120-600 cm tall; shoots with only cauline leaves, foliate tough and leathery (sclerophyllous), sometimes hollylike (*Ilex*) with spinose margins; stems when scratched emitting hydrogen cyanide (bitter almonds). Stems: initially cylindric with projecting leaf bases later developing a midridge from leaf base, glabrate to short-hairy and with inconspicuous glandular hairs, forming periderm at end of growing season lacking hairs, with prominent, smilelike leaf scars; on large stems with grayish brown, flaking bark like cherries (Prunus). **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, wings attached to lower petiole, triangular to semicircular, 0.5–4 mm long, red to green, glabrous; petiole shallowly channeled, in range 4–33 mm long, green aging dull, sometimes with several low teeth along upper ridges, short-hairy on upper side aging with early periderm; blade elliptic to obovate-elliptic, in range  $50-125 \times 25-53$  mm, tapered to broadly tapered at base, serrate to spine-serrate and often wavy on margins, acute at tip, pinnately veined with midrib slightly sunken on upper surface and raised on lower surface, minor vein ending in each tooth or spine with tip to 2 mm long often whitish and sometimes reddish purple point (with minute hairs), surfaces initially with short hairs aging with some hairs persistent along midrib, lower surface aging with hairy only near margins or also along midrib. **Inflorescence:** panicle with ascending branches having branchlets with monochasial cyme, with to 12 branches, flat-topped, 100–150+ mm across, many-flowered, bracteate, glabrous; axes ridged, green; bract subtending primary branch and branchlets, decreasing upward, bracts also 1-several on each internode, bracts to 7 along pedicel helically alternate, awl-shaped and cupped, the uppermost 0.7–1 mm long, papery and red, with a ridge descending from each bract. **Flower:** bisexual, radial, in range 8.5–10 mm across, strongly scented; hypanthium funnel-shaped,  $2-2.5 \times 3$  mm, greenish to whitish, glabrous, thick-walled, inner surface above midpoint = **nectary**, 0.5 mm long, off-white; **sepals** 5, at anthesis erect from rim of hypanthium, broadly triangular to deltate, ca.  $1 \times 1.5$  mm, white, acute to obtuse at tip; **petals** 5, horizontal, rounded cupped upward with short base,  $\pm 3$ mm, white, 5-veined at base, margin narrowly inrolled (revolute), overlapped in bud, in range glabrous or essential so, abscised after pollination; stamens 20 in 2 close series arising on rim of hypanthium; filaments 1.5–2.5 mm long in a single flower, white and glabrous, inner filaments  $\pm$  erect and outer filaments ascending; nthers dorsifixed, dithecal, - mm long, longitudinally dehiscent; pollen white; **pistil** 1; ovary inferior, fused to lower portion of hypanthium, broadly ovoid, 1 mm, greenish, conspicuously and densely pubescent on top, 2-chambered, each chamber with 2 ovules; style, ascending,  $2 \times 0.3$  mm, white, 2-forked at midpoint; stigmas terminal, ± truncate, 0.4 mm across. **Fruit:** drupe, mostly 1–2-seeded, obovoid-subspheroid,  $5-5.5 \times 6-7.5$  mm, depressed on top with starshaped opening filled with hairs and 5 appressed sepals on top, wall (pericarp) ca. 1 mm thick; pulp light yellowish orange, somewhat cartilaginous next to seeds and aborted seeds.

**Seed:**  $\pm$  obovoid to ellipsoid,  $3.5-4\times2.5\times1-1.5$  mm, brown, sometime flattened on 1 face and 1 face rounded.

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