

**Vascular Plants of Williamson County**  
*Persicaria setacea* – BOG SMARTWEED [Polygonaceae]

*Persicaria setacea* (Baldw.) Small, BOG SMARTWEED. Perennial herb, rhizomatous, fibrous-rooted, with shoots ascending from rhizome, to 70 cm tall; shoots with only cauline willow-shaped (*Salix*) leaves, with a large purplish blotch on upper surface of blade, strigose and short-strigose (short-hirsute); rhizomes of buried, horizontal stems, swollen at nodes; adventitious roots several–many at all rhizome nodes. **Stems:** cylindrical, to 5 mm diameter, distinctly swollen above each node to 7 mm, greenish but lacking deep rose or purplish red spots; internodes solid. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules (2) fused into cylinder and sheathing stem (ocrea) and attached to petiole, to 18 mm long, enlarged but appressed around node, truncate at tip, membranous and later becoming pale brown and scarious and sometimes fracturing above midpoint, lacking glandular dots, with parallel veins, splitting by emergent lateral shoot, densely strigose with appressed stiff hairs, having ca. 12 bristles ciliate on top margin (arising 1–2 mm from margin), the tannish bristles 6–13 mm long; petiole strongly attached to leaf base, above ocrea hemi-cylindric, in range 0.7–1.5 mm long, not winged, with 5 raised veins, short-strigose with colorless and reddish hairs; blade narrowly lanceolate to narrowly elliptic-lanceolate to lanceolate, in range 55–145 × 8–33 mm, flat, tapered at base, entire and short-strigose ciliate on margins, acute to acuminate at tip, conspicuously pinnately veined with principal veins slightly sunken on upper surface (midrib slightly raised) and raised on lower surface, not gland-dotted. **Inflorescence:** panicle of 1–3 spreading, racemelike branches, terminal, branch somewhat cylindrical, uninterrupted, and dense, 4.5–7.5 mm diameter, many-flowered with many flowers per clusters along axis, bracteate having bract and bractlets (ocreoelas) nested with 1 bractlet around each flower, with bristles on margin; peduncle slender, 26–40 × 0.5–0.8 mm, essentially glabrous with several hairs approaching the lowest bract, lacking glandular hairs, bract subtending cluster encircling like ocrea, long bell-shaped, ca. 3 × 1.5 mm, and at anthesis each flower exerted from bractlet and bract on pedicel, bract not splitting, green with membranous margin, surface ± glabrous but with bristles 1–3.5 mm long along top; bractlet < bract, mostly membranous; pedicel to 4 mm long, white aging pale green in fruit, glabrous. **Flower:** bisexual, radial, 3 mm across; open; **perianth** 5-lobed, ca. 3 mm long, lacking glands; tube funnel-shaped, 0.7–1 mm long increasing 2× in fruit, green; lobes overlapping, monomorphic, rounded, (1.4–)1.8–2.2 × (1.4–)1.7–1.8 mm, pure white, with 5 or more fine veins, the veins not 2-forked or recurved near tip (not anchor-shaped), the outermost lobe sometime acute at tip; **nectary** 8-lobed, with a pair bracketing base of each stamen of lower whorl, mostly fused to perianth tube, lobes free at tips, tips semicircular, ca. 0.1 × 0.2 mm, pale green, fleshy at anthesis, nectar-producing; **stamens** 8 in 2 whorls, lower whorl fused to perianth tube near top of nectary lobes, upper whorl fused to white perianth tissue on 1 side next to margin of 4 lobes; filaments 1.5–1.9 mm long, white or aging pinkish, tapered to tip; anthers versatile-dorsifixed, dithecal, not noticeably exerted, ± 0.5 mm long, white, longitudinally dehiscent; pollen white; **pistil** 1, 1.3–1.8 mm long, included, stigmas below levels of anthers; ovary superior, 3-angled, 0.5–0.6 mm long, glossy light green, 1-chambered with 1 ovule; style 1, 3-branched above midpoint, white, the branches ascending, 0.4–0.5 mm long; stigmas capitate. **Fruit:** achene, 3-angled, ca. 2

× 1.3–1.4 mm, glossy black, ± smooth, with rounded edges, faces concave above midpoint;  
enclosed by persistent perianth.

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