

## Vascular Plants of Williamson County

*Ceanothus herbaceus* – INLAND CEANOTHUS, INLAND NEW JERSEY TEA [Rhamnaceae]

*Ceanothus herbaceus* Raf. (= *C. herbaceus* var. *pubescens*), INLAND CEANOTHUS, INLAND NEW JERSEY TEA. Low shrub, winter-deciduous, principal branches with lateral branches producing terminal inflorescences, in range to 50 cm tall; shoots with only cauline leaves, principal new shoots formed in March from 2 or more axillary buds just beneath broken tips of twigs, each principal new shoot within weeks producing its own axillary shoots.

**Stems:** on new growth ± cylindric with a low ridge descending from leaf, ± straight, internodes < 25 mm long, densely puberulent; twig of previous year ± having puberulent periderm mostly reddish brown and gray aging without hairs. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached to leaf base at base of petiole subtending axillary bud, cupped-triangular, ca. 3 × 1 mm, whitish, with straight, upward-pointing short hairs on lower surface, early-deciduous; petiole chambered, 6–9 mm long, green, puberulent but while developing having some straight hairs; blade broadly elliptic to ovate-oblong, in range < 10–40 × 5–21 mm, tapered at base, short-serrate with glandular points on margins, obtuse to rounded at tip, pinnately veined with 3 principal veins at base having midrib sunken on upper surface and principal veins raised on lower surface, upper surface somewhat glossy and with inconspicuous, appressed, upward-pointing, fine hairs along principal veins, lower surface with some appressed fine hairs along principal veins and sometimes puberulent near petiole. **Inflorescence:** cymes, many in hemispheroid array, terminal on new shoot, array 30+-flowered, showy, < 20–40 mm across, flowers produced along stubby lateral branchlets, several cymes per branchlet, each cyme 2–7-flowered, bracteate, puberulent; bract subtending branchlet typically leaflike and petiolate, < 10 mm long, with a pair of colorless stipules to 2 mm long, early-deciduous while flowers in tight bud; bract (bractlet) subtend cyme (first flower) keeled to cupped or scooplike, 4–5.5 mm long, colorless or with greenish petiolelike base grading to other bractlets subtending pedicels often cupped ovate, presence of stipules obscure and determining which bractlet associated with which flower but later flowers often lacking bractlets, short-ciliate on margins above midpoint, pointed at tip, puberulent on outer (lower) surface, early-deciduous and leaving a tiny, ledgelike base; pedicel cylindric, 7–9.5 mm long, flexible, opaque white, glabrous. **Flower:** bisexual, radial, 5–6 mm across, protandrous (dehiscing after bud opens), strongly scented; hypanthium subtending fleshy disc and ovary base, white (beneath nectary); **sepals** (4–)5–6(–7), incurved, equal to subequal within a flower, deltate, 1–1.2 × 0.8–1.8 mm, white; **petals** (4–)5–6(–7), initially ascending and with hood totally cupping anther, later twisted away becoming recurved, narrowly clawed to ca. midpoint and conspicuously hooded, 1.8–2 mm long, white; **stamens** (4–)5–6(–7), free, opposite petals; filaments attached below edge of nectary disc, ascending, ca. 2 mm long, white, arching inward and sometimes approaching stigmas; anthers initially enclosed in petal hood, dorsifixed, dithecal, 0.6–0.7 mm long, pale yellow or blushed reddish, longitudinally dehiscent; pollen pale yellow; **nectary disc** flattened ringlike, weakly scalloped with 2 small lobes at base of each stamen, ca. 0.35 mm thick, 1.8–2 mm diameter, red-purple to purplish, raised slightly around base of ovary; **pistil** 1; ovary superior, triangular in ×-section, 3-lobed lacking incipient horns, green, 3-chambered, each chamber with 1 ovule; style ± 2 mm long, white, 3-branched from

midpoint, at anthesis cylindric, the branches appressed later spreading; stigmas whitish aging reddish. **Fruit:** schizocarpic capsule, at maturity separating explosively into 3 1-seeded parts from persistent disc, 3-lobed lacking hornlike projection (crest) on tip of each valve, ca. 5.5 mm across, dark brown at maturity before dehiscence, glabrous; persistent disc 4.5–5 mm diameter. **Seed:** obovoid 3-sided,  $\pm 3 \times 2.5$ –2.7 mm, dark brown minutely mottled with lighter brown, smooth, back rounded and inner 2 faces flat, hilum at base.

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