



# Flora of North America

Schwalbea (Orobanchaceae)

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X. SCHWALBEA Linnaeus, Sp. Pl. 2: 606. 1753; Gen. Pl. ed. 5, 265. 1754 \* Chaffseed  
[For Christian Georg Schwalbe, eighteenth-century medical botanist] E

Bruce A. Sorrie

**Herbs**, perennial; hemiparasitic, caudex knotty, semiwoody. **Stems** erect, not succulent, densely pubescent. **Leaves** cauline, alternate, not succulent; petiole absent; blade margins entire. **Inflorescences** terminal racemes; bracts absent. **Pedicels** present; bracteoles present. **Flowers**: sepals 5, calyx bilaterally symmetric, tubular, abaxial lobes long-triangular, larger and with 2 lateral lobes and larger central lobe 3-notched at summit, adaxial lobes short-triangular; petals 5, corolla pale yellow, strongly suffused with purple distally, tubular, abaxial lobes 3, adaxial lobes 2, adaxial lip +/- galeate; stamens 4, adnate to corolla near base, equal, filaments crisp-pilose, staminode 0; ovary 2-locular, placentation axile; stigma capitate. **Capsules** bilaterally symmetric, dehiscence septical and loculicidal. **Seeds** ca. 300, brown or amber, linear, flattened, +/- twisted, winged.  $x = 18$ .

Species 1: e United States.

SELECTED REFERENCE Kirkman, L. K., M. B. Drew, and D. Edwards. 1998. Effects of experimental fire regimes on the population dynamics of *Schwalbea americana* L. Pl. Ecol. 137: 115--137.

1. *Schwalbea americana* Linnaeus, Sp. Pl. 2: 606. 1753 \* Chaffseed C E F

*Schwalbea americana* var. *australis* (Pennell) Reveal & C. R. Broome; *S. australis* Pennell

**Herbs** blackening upon drying. **Stems** simple or occasionally branched from near base, 3--8 dm. **Leaves** densely pubescent; blade 3-nerved, lanceolate to narrowly elliptic, 20--50 x 6--10 mm, gradually reduced distally. **Racemes**: bracteoles 2, linear, 6--12 mm, arising just proximal to calyx. **Pedicels** ascending, 1--5 mm. **Flowers**: sepals 1.5--2.2 cm; calyx prominently 10--12-ribbed, oblique, glandular-pubescent, lobes unequal; petals suffused with purple in distal 1/2 and on veins, 2.2--3.5 cm; stamens included in adaxial lip; style included, 2--3 mm, glabrous. **Capsules** brown, ellipsoid to ovoid, 10--12 mm, glabrous. **Seeds** 2--2.5 mm, wings membranous.  $2n = 36$ .

Flowering Apr--Aug. Savannas, flatwoods, ecotones of depression ponds and streamheads, moist glacial outwash plains, pine-oak woodlands, primarily under longleaf pine but other pines northward and inland; of conservation concern; 0--400 m; Ala., Conn., Del., Fla., Ga., Ky., La., Md., Mass., Miss., N.J., N.Y., N.C., S.C., Tenn., Va.

*Schwalbea americana* is among the most fire-dependent species in the flora, responding favorably to annual burns. Documented host plants include *Aletris farinosa*, *Carphephorus odoratissimus*, *Gaylussacia dumosa*, *Ilex glabra*, and *Pityopsis graminifolia*. It has declined greatly since the advent of widespread fire suppression and is now federally endangered; extant populations occur in Florida, Georgia, Louisiana, New Jersey, North Carolina, and South Carolina. Chaffseed has been reported from eastern Texas by D. S. Correll and M. C. Johnston (1970), but no voucher has been seen.

*Schwalbea americana* is in the Center for Plant Conservation's National Collection of Endangered Plants.