



Flora of North America

Dasistoma (Orobanchaceae)

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X. DASISTOMA Rafinesque, J. Phys. Chim. Hist. Nat. Arts 89: 99. 1819 * Mullein-foxtonglove [Greek *dasys*, hairy, and *stoma*, mouth, alluding to lanate throat of corolla] E

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Herbs, annual or biennial, possibly sometimes perennial; hemiparasitic. **Stems** erect, not succulent, puberulent, retrorsely puberulent, or pubescent. **Leaves** loosely basal and cauline, opposite, not succulent; petiole present; blade margins pinnatifid to bipinnatifid proximally, sometimes entire distally. **Inflorescences** terminal or terminal and axillary, spikelike racemes; bracts present. **Pedicels** present; bracteoles absent. **Flowers**: sepals 5, calyx weakly bilaterally symmetric, campanulate, lobes ovate to oblong-ovate; petals 5, corolla yellow, campanulate, abaxial lobes 3, adaxial lobes 2; stamens 4, adnate to corolla, didynamous, filaments lanate, staminode 0; ovary 2-locular, placentation axile; stigma capitate or 2-lobed. **Capsules** symmetric, dehiscence loculicidal. **Seeds** 50--100, tan or brown, angled, not winged.

Species 1: e, nc United States.

SELECTED REFERENCE Pennell, F. W. 1928. *Agalinis* and allies in North America. Proc. Acad. Nat. Sci. Philadelphia 80: 339--449.

1. *Dasistoma macrophylla* (Nuttall) Rafinesque, New Fl. 2: 67. 1837 (as *Dasistema*) * Mullein-foxtonglove
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Seymeria macrophylla Nuttall, Gen. N. Amer. Pl. 2: 49. 1818

Stems branched distally or rarely, unbranched, square to round, 80--200 cm. **Leaves**: basal and proximal ones withering; petiole narrowly winged distally, (5--15--100 mm; blade ovate to ovate-lanceolate, 15--35 x 6--22 cm, base truncate to tapered, segment margins irregularly serrate to irregularly dentate, apex acute, scabrid-puberulent to pubescent; distal leaves with petioles 2--20(--35) mm; blade lanceolate to narrowly lanceolate, 7--21 x 2--14 cm, base truncate to tapered, segment margins entire or crenate, irregularly serrate, or irregularly dentate, apex acute, scabrid-puberulent to pubescent. **Racemes** 1--8, congested to interrupted, cylindrical, 7--35 cm; bracts leafy, gradually reduced distally, 9--65 x 7--35 mm, margins entire or irregularly serrate to irregularly dentate, apex acute; cymes 1-flowered. **Pedicels** erect, 1--4 mm, puberulent to retrorsely puberulent. **Flowers**: calyx puberulent to pubescent; lobes (2--4--5.5 x 2.5--4.5 mm, margins entire, apex acute to obtuse, membranous; corolla 15--16 mm, glabrous externally, densely lanate internally; tube 7--9 mm; throat inflated, 5--7 mm wide; lobes spreading, ovate-reniform, 6--7 mm; fertile stamens distinct, reaching orifice or barely exerted, filaments: proximal pair 1.8--2.2 mm, distal pair 2.3--2.5 mm, anther sacs 2, parallel, lanceolate-ovate to oblong, navicular, 2--2.8 mm, glabrous; style 3--4 mm. **Capsules** ovoid to spheric-ovoid, 8--12 x 7--9 mm, glabrous. **Seeds** reticulate, 1.8--2.5 x 1--2 mm.

Flowering Jun--Sep. Dry to mesic forests and woodlands, brushy tallgrass prairies, stream banks; 60--400 m; Ala., Ark., Ga., Ill., Ind., Iowa, Kans., Ky., La., Mich., Miss., Mo., Nebr., Ohio, Okla., Pa., S.C., Tenn., Tex., Va., W.Va., Wis.

In the greenhouse, *Dasistoma macrophylla* formed haustorial connections with 18 species of gymnosperm and angiosperm trees; it also could remain autotrophic (L. J. Musselman and W. F. Mann 1979), but there is no evidence of autotrophy in the wild.