



Common Name: DAKOTA VERVAIN

Scientific Name: *Glandularia bipinnatifida* (Nuttall) Nuttall

Other Commonly Used Names: Dakota mock vervain

Previously Used Scientific Names: *Verbena bipinnatifida* Nuttall

Family: Verbenaceae (verbena or vervain)

Rarity Ranks: G5/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial (sometimes annual) **herb**, all parts covered with stiff, white hairs. **Stems** 4-sided, with many sprawling, upwardly arching, or erect branches up to 20 inches (50 cm) long. **Leaves** $\frac{3}{4}$ - inches (1 - 6 cm) long, opposite, divided into many segments up to $\frac{1}{8}$ inch wide, edges of segments rolled under. **Flower cluster** round- or flat-topped, lengthening into a spike up to $2\frac{3}{8}$ - 8 inches (6 - 20 cm) long as fruit develops. **Flowers** up to $1\frac{1}{2}$ inch (4 cm) wide, pink or purple, with 5 spreading petals and a tube about $\frac{1}{2}$ inch (1 - 1.5 cm) long; a 5-lobed calyx surrounds the base of the flower tube; below each flower are leafy bracts that are longer than the calyx. **Fruit** consists of 4 nutlets, each less than $\frac{1}{8}$ inch (0.3 cm) long.

Similar Species: Moss-verbena (*Glandularia pulchella*, synonym: *Verbena tenuisecta*) is a common roadside weed with finely divided leaves, the leaf segments less than $\frac{1}{16}$ inch (1 mm) wide, and the bracts shorter than the calyx. Rose vervain (*G. canadensis*) flowers are up to 1 inch (2.5 cm) wide, and the edges of the leaf segments are not rolled under.

Related Rare Species: None in Georgia.

Habitat: Patches of open, grassy blackland prairies with clay soils high in calcium; woodland edges near the prairies and open areas in adjacent woodlands.

Life History: Dakota vervain has the widest range of any species in the genus *Glandularia* in North America. It is also the most variable in terms of growth form and appearance of any of the vervain species. Dakota vervain is usually a perennial, although sometimes an annual, and it reproduces by seed. Its nectar-producing flowers are typical butterfly-pollinated flowers, with pink petals spreading to form a flat “landing platform.” Other long-tongued insects, such as hover flies, may also visit the flowers, as well as long-tongued bees. Some bee visitors have bristles on their forelegs which gather nectar when the bee inserts its legs into the flower tube. Its seeds are dispersed by gravity and by small animals.

Survey Recommendations: Surveys are best conducted during flowering (late March–early June).

Range: Georgia, blackland prairies in south-central Alabama, and 19 other states in the midwest and southwest U.S.

Threats: Destruction of habitat by clearing, logging, and development.

Georgia Conservation Status: Only one population is known in Georgia, from the only known blackland prairie in the state, an area that has been slated for development.

Conservation and Management Recommendations: Avoid logging and mechanical clearing. Apply prescribed fire every 2 - 3 years during the growing season.

Selected References:

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Radford, A.E., H.E. Ahles, and C.R. Bell. 1968. Manual of the vascular flora of the Carolinas. University of North Carolina Press, Chapel Hill.

Umber, R.E. 1979. The genus *Glandularia* (Verbenaceae) in North America. *Systematic Botany* 4(1): 71-102.

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L. Chafin, Feb. 2008: original account

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Glandularia pinnatifida

