



tall blazing star

Liatris aspera Michx.

Alternate Common Names

rough blazing star, rough blazingstar, rough blazing-star, tall gay-feather, gayfeather, button snakeroot, rough gayfeather

Scientific Synonyms

Lacinaria scariosa var. *intermedia* Lunell, *Liatris aspera* var. *intermedia* (Lunell) Gaiser, *Liatris aspera* var. *salutans* (Lunell) Shinners, *Liatris spherioidea* var. *salutans* (Lunell) Shinners

Functional Group

forbs (wildflowers)

Family

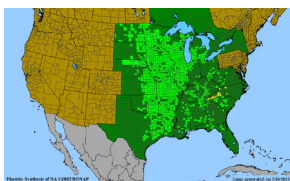
aster family (Asteraceae)

Description

- » **Life cycle/growth form:** Perennial with a woody corm that can be divided.
- » **Height:** 1-4 ft
- » **Leaves and stem:** Leaves narrowly lanceolate, alternate, with a prominent central vein and short stiff hairs; stem is rigid and rough with short hairs, green or purple in color, usually unbranched.
- » **Flower:** Pinkish purple heads, 1 in across, are spaced along the stalk, button-like, in a 6-18 in long spike; plants in production plots may be taller and produce robust, branched inflorescences. Heads of *Liatris aspera* are usually sessile or very short-stalked, compared with the stalked (pedunculate) heads of *Liatris ligulistylis*, Rocky Mountain blazing star, which is otherwise quite similar. Bracts on the underside of *L. aspera* heads are strongly cupped, while *L. ligulistylis* bracts tend to be flattened toward the top.
- » **Fruit/seed head:** Dark brown seeds are 1/4 in long, ribbed, with a light brown pappus (fluff) that is finely barbed but not feathery; wind dispersed.
- » **Pollination:** Insects such as bees, butterflies, moths, and flies



Habitat and Range



Dry to dry-mesic, even sandy or rocky soil; full sun; prairies, savannas, prairie remnants along railroads, upland forests, limestone glades. Upland, very well-drained, loamy soils are preferred for seed production. If soils are too dry or poor, seed production will be curtailed.

Conservation Status

Global- G4, apparently secure; North Carolina- S1, critically imperiled; South Carolina- S2, imperiled; Georgia and Virginia- S3, vulnerable (NatureServe)

General Comments

This species is best propagated in the greenhouse, and transplanted in spring into a weed-free planting bed or weed barrier. Seedlings develop pea-size corms after two months in the greenhouse. Sometimes first year corms are exposed by frost-heaving over the winter, and may be eaten by voles. Species in the genus *Liatris* are known to hybridize, therefore proper isolation should be maintained between related species to avoid hybrid seed production (Levin 1968, Menhusen 1972). *Liatris* species are also produced commercially for the cut-flower industry and some species and cultivars have become popular in gardening and landscaping.

Establishment for Seed Production (Appendix A)

Direct seeding:

Not recommended for this species

Greenhouse:

- » **Seed pre-treatment:** Wet stratify 8-12 weeks at 40° F. Seed sometimes becomes moldy in stratification, and some growers add fungicide to the stratification media.
- » **Sowing:** Sow seed 1/4 in deep in the greenhouse two months before the last frost free date.
- » **Transplanting:** Harden off, transplant into bare soil in rows and mulch or transplant into a weed barrier at 8 in intervals after all danger of frost is past.

Stand Management

- » **Weeds:** Mow/cultivate between rows, mulch within rows. Post emergence grass herbicide, tillage, hoeing, hand roguing. Very sensitive to soil disturbance during bolting/flowering, so clip weeds rather than pulling or hoeing once flower stalks are apparent.
- » **Pests:** Voles will eat and/or cache corms, rabbits and deer eat young shoots, goldfinches consume seed as it ripens.
- » **Diseases:** Powdery mildew, root-knot nematodes, stem rot, verticillium wilt.
- » **Hybridization risk:** This species has been known to hybridize with related species *Liatris acidota*, *L. ligulistylis*, *L. punctata*, *L. pycnostachya*, and *L. squarrosa*.

Seed Production (Appendix B)

- » **First harvest:** Remains vegetative first year (seedlings), abundant flowering/seed production occurs second year. Fall corm division/transplanting results in abundant flowering the following growing season.
- » **Yield:** 8-130 bulk pounds/acre (extrapolated from harvests of 5 plots)
- » **Stand life:** Peak harvests second year. Good harvest third year if proper soils. Stand declines significantly fourth year and after. Plants tend to lodge second year when flowering.
- » **Flowering date:** early August - early September in northern

