

## LEAST SNOUTBEAN

### *Rhynchosia minima* (L.) DC.

plant symbol = RHMI4

Contributed by: USDA NRCS Kika de la Garza Plant Materials Center

#### Alternate Names

*Dolicholus minimus*, *Rhynchosia diminifolia*



#### Uses

**Wildlife:** Least snoutbean (*Rhynchosia minima*) leaves are readily eaten by white-tailed deer and cattle. Least snoutbean is a good plant for use in deer food plots. The seeds of least snoutbean are also eaten by several species of wild birds.

**Range:** The plant can also be used for ground cover and erosion control. It is considered an important palatable pasture plant in Tropical Africa.

Least snoutbean is a nodulated species, and can help fix nitrogen in the soil. Rhizobia from the nodules of *Rhynchosia minima* have been known to nodulate *Amorpha*, *Crotolaria*, and *Wisteria* species.

A related species, Texas snoutbean (*Rhynchosia texana*) is also a good plant for ground cover and erosion control. Its leaves are eaten by white tailed deer. It is also a nodulated species.

**Medicinal:** Least snoutbean is also a source of prodelphinidin, a phytochemical with antibiotic potential.

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's

current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

#### Description

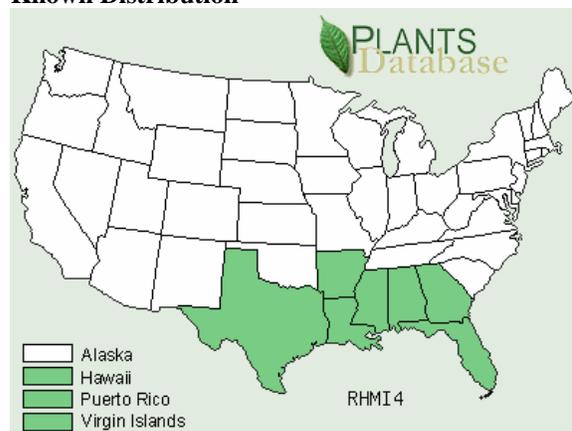
Least snoutbean is a perennial vine, with trailing or twining stems that can grow 6 to 7 feet in length. This member of the legume or *Fabaceae* family is trifoliolate and has yellow flowers on a raceme. In the past, two varieties of least snoutbean had been recognized: *minima* and *diminifolia*. Currently, the two varieties are included under *Rhynchosia minima*. Least snoutbean was previously recognized as *Dolicholus minimus*.

Both the genus and common name come from the plant's small, curved beans, which appear to have a beak or nose. The genus name *Rhynchosia* comes from the Greek word 'rhynchos', meaning beak. Least snoutbean produces approximately 38,530 seeds per pound.

#### Adaptation

Least snoutbean can be found in Texas, Louisiana, Florida, and Georgia. It also grows in tropical Africa. In Texas, least snoutbean can be found from the Coastal Plain, inland to Newton, Houston, Travis, Bexar, and Hidalgo counties. It can be found on various soils in pastures, woods, along ravines, and in stream lowlands, but prefers clay soils.

#### Known Distribution



#### Establishment

Least snoutbean can be established from seed. Kika de la Garza Plant Materials Center germination data from 1993 yielded germination ranging from 0 to 100%, with an average germination of 76.25% for 36 accessions. Seeds can be soaked for five minutes in H<sub>2</sub>SO<sub>4</sub> to help increase germination if it is low. In

1996, James Carson of Alamo Transplants increased germination of some least snoutbean seed from 17% to 53% using this method.

Seed should be inoculated prior to planting with the appropriate rhizobial bacteria. (Seed inoculant can be purchased from companies that market legume seed. It is best to include the scientific name of the species and the amount of seed to be inoculated.)

We recommend planting in the early spring as young plants are not particularly frost hardy, but need some time to establish before the hot summer months.

Least snoutbean can be successfully transplanted, from seeded transplants. It may also be reproduced from cuttings with about 40 percent success. Use of a rooting hormone is recommended.

### **Management**

Least snoutbean is a difficult plant from a management standpoint, especially if the stand is being managed for seed production purposes. Its vining habit makes weed control difficult at best. Plants may require irrigation in the hot summer months, as they do not appear particularly drought hardy. Also, seed production is low and it is difficult to harvest seed efficiently, making large-scale production unfeasible. For small scale projects seed can be harvested by hand.

For additional assistance regarding the production and establishment of least snoutbean, please contact the Plant Material Center at (361) 595-1313.

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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