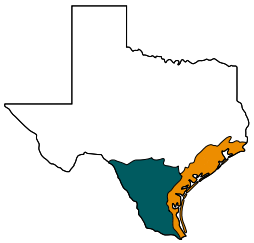

Berlandier Lobelia

Lobelia berlandieri

Lobelia is a cool-season annual reaching up to 20 inches tall, although most plants are less than 12 inches tall. Most of its leaves are basal, hairless, oval and up to 2 inches long on short stems. Leaves on the stalks are lance-shaped and much smaller.

Berlandier lobelia has from one to 20 thin, ascending branches, each bearing a loose stalk of small, bright, purplish-blue flowers with white eyes.

Distribution and habitat

These plants are confined in Texas to the Rio Grande Plains and extend south into Mexico.

They are abundant on disturbed rocky, sandy or clay soils in years with adequate fall and winter rainfall. Regions: 2, 6.

Toxic agent

Berlandier lobelia contains nicotine alkaloids that are responsible for its toxicity. The plants are short and inconspicuous until the flowering stalk stage of growth. These plants are palatable and are readily consumed.

Above-average rainfall during the fall and winter almost always results in lobelia poisoning in cattle on the plains south of Kingsville TX. Nelgi antelope have also been poisoned in the same area.

Livestock signs

Depending on the dose, the nicotine alkaloids are central nervous system stimulants or depressants and result in the following signs:

- Excitability (early, and not usually observed in brush pastures)
- Depression
- Down animals that refuse food and water

Animals become so severely depressed that they lie down and die from water deprivation and exposure.

Integrated management strategies

Depressed and down animals often recover if they are moved to the shade and given adequate nutrition (feed and water) by tube. This treatment may have to be repeated daily for up to 2 weeks.

Prevention of poisoning requires moving cattle to pastures not containing a significant amount of the plant in the flower and seed stages.

Severe infestations may be controlled with broadleaf herbicides such as 2,4-D or Grazon P+D® at 0.5 to 1.0 pounds a.i./acre in the spring with good growing conditions.