

Larkspur Delphinium spp.

The larkspurs are perennial herbs growing 1 to 3 feet tall. The leaves are deeply divided from a single point into numerous fine, narrow segments and are usually confined to the bottom half of the plant.

Showy, light blue, blue, purple or white flowers are arranged along the top of the erect stalk. The distinguishing characteristic of the flower is the prominent backward trailing "spur."

Distribution and habitat

One or more species of *Delphinium* may be found in open pastures, hillsides or valleys of all vegetational areas of Texas. Regions: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

Toxic agent

More than 40 different diterpenoid alkaloids have been identified from *Delphinium* spp., but most of these are from the tall larkspurs of the mountains in the western United States. Toxicity varies greatly among species, as does the concentration of toxins.

Usually, alkaloid concentrations are highest in the spring after flowering and gradually decrease as the plant matures. All parts of the plant should be considered toxic. All species of livestock may be affected, though cattle are the most susceptible.

Texas larkspur species are small

plants with scant foliage, and poisoning is uncommon. Despite this, all larkspurs should be considered to be potentially toxic.

Livestock signs

Larkspur primarily affects the neuromuscular system and consequent signs of poisoning include:

- Salivation
- · Arched back
- Stiff gait
- Collapse, followed by struggle to regain feet
- Muscular twitches
- Death

Within 3 to 4 hours of consumption, death can occur from either paralysis of the respiratory system or asphyxiation caused by bloating or vomiting.

Integrated management strategies

Larkspur poses the greatest risk to livestock in the spring. Losses in heavily infested areas may be reduced by keeping cattle out of pastures until after the plants have flowered and gone to seed, or by grazing sheep, which are more resistant, before cattle.

Because treating larkspur with some herbicides increases its palatability, do not use treated pastures for grazing until the affected plants are dead.

