

POISONOUS PLANTS OF BRITISH COLUMBIA

LARKSPUR POISONING

Upland Larkspur (*Delphinium nuttallianum*) and Low Larkspur (*Delphinium bicolor*)

Family

Buttercup Family

Ranunculaceae

Description

Both larkspurs range from 10 to 60 cm tall. They are perennials with single stems and long-stalked, lobed, alternating, and primarily basal leaves. This plant flowers in the spring (May to June) and is distinguished by having 3 to 15 showy, blue to violet flowers, with each flower having a long spur. Roots vary from compact and tuberous-fleshy to fibrous and many-branched roots.



Distribution and Ecology

Larkspurs are common throughout the southern interior. Upland larkspur occurs on dry grasslands, sagebrush slopes, open ponderosa pine and Douglas fir forests. Low larkspur is also found in open forests as well as on roadsides, hills, and meadows.

Concern

All larkspurs contain potent alkaloid neurotoxins that are very poisonous to cattle. Sheep can also be affected, and horses have been poisoned under experimental conditions.

FACTSHEET



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Many cases of Larkspur poisoning occur throughout North America each year with losses ranging from a couple of calves to 10 to 15 percent of a herd.

Four pounds (1.81 kg) has been found to kill a 600-pound (272 kg) animal and 14 pounds (6.4 kg) has been found to kill a 2000-pound (907 kg) animal. Thus, based on their body weight, calves are the most susceptible to poisoning whereas heavy bulls or heavy cows are the least susceptible. Sheep require approximately four times the dosage before displaying any symptoms.

Larkspurs are particularly problematic in the spring when they often reach a grazable height before many of the other forage plants in our area. These plants are also very palatable to cattle who often select it while ignoring other available forage plants.

Symptoms

Cattle exhibit the following symptoms after consuming a toxic or lethal dose of larkspur: uneasiness, muscular weakness or trembling, a straddled stance, periodic collapse with frontal limbs folding first, nausea, abdominal discomfort, and vomiting. Individual animals may also bloat when they collapse. Moreover, if the animal collapses facing downhill it increase the chance of it developing fatal bloat by impeding the movement of gases from the rumen (stomach).

What Can You Do?

Treatment

Cattle in the United States have been successfully treated with physostigmine.

Grazing Management

If possible, avoid grazing areas with heavy infestations until the mature plant dies off in late June or early July. After July, these plants are generally not considered a problem. Otherwise, avoid grazing areas with heavy infestations before the other forages reach a grazable height, approximately 10 cm (4 inches) or as a last resort only graze dry cows or bulls in heavily infested areas.



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