



Jimsonweeds, Thornapples

Datura spp.

Several species of jimsonweeds grow in Texas, all appearing very similar. They are coarse-looking, ill-scented, herbaceous annual weeds of the nightshade family.

The very distinctive flowers are large, showy, erect, solitary and white or purplish and may appear from April to October. Flowers grow in the leaf axils. Leaves are alternate, simple, hairless and toothed.

Except that they are larger, the seedpods resemble those of cocklebur, being a spiny capsule up to 2 inches long.

Distribution and habitat

Jimsonweeds are distributed widely throughout Texas and the United States. They normally grow in rich soils on disturbed sites, waste places, old fields and in open areas. Regions: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

Toxic agent

Toxicity results from tropane alkaloids (atropine, scopolamine, hyoscyamine). Livestock and people can be poisoned by eating any part of the plant, including the seeds.

Consumption of as little as 10 to 14 ounces of the plant, or less than 0.1 percent of the body weight of the animal, can kill cattle.

Many humans have been poisoned by eating the seeds and unripened seed pods and flowers.

The plants have been ingested for their hallucinogenic effects.

Livestock signs

Signs of poisoning are similar for both humans and livestock. Clinical signs include:

- Intense thirst
- Distorted vision
- Uncoordinated movement
- High body temperature
- Rapid and weakened heartbeat
- Dilated pupils
- Convulsions
- Coma and death

Integrated management strategies

No medicinal treatments are specified for poisoned livestock, although stimulants such as pilocarpine and physostigmine have been used. Some poisoned animals may recover if they are hand-fed a suitable diet and provided good quality water.

Jimsonweeds are extremely unpalatable to livestock and poisoning occurs only rarely. When it does occur, it is usually because hungry livestock are confined where plants are found.

Grubbing or herbicides easily control this plant. Exercise caution when treating jimsonweed with 2,4-D, as it makes the plant more palatable.

