



Rayless Goldenrod, Jimmyweed

Isocoma wrightii

Rayless goldenrod is a low-growing half-shrub with erect stems arising from a woody crown to a height of 2 to 4 feet. The leaves are sticky, narrow, alternate and may be even or slightly toothed along the margins. The stems bear flat-topped clusters of yellow flowers from June through October.

Distribution and habitat

Rayless goldenrod is often found on dry rangelands, especially in river valleys, along drainage areas and irrigation canals, and on gypsiferous soil outcrops.

It is a local problem in the Pecos Valley drainage in southeastern New Mexico and western Texas. It usually grows at 2,000 to 6,000 feet elevation and is found from southern Colorado into Texas, Mexico, New Mexico and Arizona. Regions: 8, 9, 10.

Toxic agent

Goldenrod can poison all species of livestock. The toxic agent is tremetone. The poison accumulates in the animal and is present in green and dry leaves, making the plant toxic year-round.

The toxin in rayless goldenrod can be passed through milk. It is common for poisoning signs to appear in suckling young, but not their mothers. Humans have been poisoned by consuming milk from

affected cattle. Most poisoning cases occur in late fall or early winter, but can occur year-round.

A lethal dose generally consists of 1.0 to 1.5 percent of the animal's weight, consumed over 2 to 3 weeks.

Livestock signs

In cattle, this plant produces clinical signs often referred to as the trembles. Muscular trembling is particularly noticeable about the nose, hips and over the shoulders. Trembling is more pronounced after exercise.

Stiffness and weakness are most pronounced in the forelegs. In later stages, the animal lies down and becomes unable to rise.

Other signs may include:

- Constipation
- Vomiting
- Quickened and labored breathing
- Almost continuous dribbling of urine

Shortly before death, the animal breathes with a prolonged inhalation followed by a pause and then a short and somewhat forcible expiration. Postmortem findings in cattle include:

- Congestion of the **abomasum** and intestine
- Pale liver
- Distended gall bladder

Integrated management strategies

Keep animals away from areas severely infested with rayless goldenrod.

There is no specific treatment for poisoned animals. Remove them from the area of poisoning and give them good-quality hay and water. Purgatives and laxative feeds may aid recovery. Orally administering activated charcoal at 1 gram per kilogram of body weight may be helpful. Take calves and lambs off poisoned mothers. Discard all milk from affected females.

Chemical control is achieved through aerial or ground broadcast methods in the fall. Good results have come from applying 0.45 ounces a.i./acre of Escort® or 0.5 pound a.i./acre of Tordon 22K®.

Treat individual plants with a 1.0 percent v/v solution of Tordon 22K®.

