



Jimmyfern

Cheilanthes cochisensis

Jimmyfern is an erect evergreen with simple, fernlike leaves. The numerous leaflets are scaly beneath and have star-shaped hairs above. The leaves originate from a short, woody stem.

This is a “resurrection” plant: the leaflets roll up and become quite dry when moisture is lacking. They unroll and appear green and fresh after rain.

Distribution and habitat

Jimmyfern grows on rocky slopes and crevices, often closely associated with grasses characteristic of dry habitats.

Common in the Trans-Pecos, it also occurs in the Plains and Edwards Plateau regions of Texas. It extends into New Mexico, Arizona and south to Mexico. Regions: 7, 8, 9, 10.

Toxic agent

The toxic agent in jimmyfern is unknown. The poison is excreted in milk and is not destroyed when the plant dries.

Jimmyfern poisoning occurs in sheep, goats and cattle. A trembling reaction called “the jimmies” develops about 48 hours after animals are fed as much as 0.5 percent of their body weight in the fern and are exercised. Animals generally must walk 10 to 60 minutes to develop signs.

The danger of jimmyfern poisoning is greatest in wet years from mid-November through February when other forage is dry and the evergreen fern remains succulent and relatively palatable.

Livestock signs

Animals poisoned with jimmyfern show these clinical signs:

- Failure to keep up with the herd or flock
- Stilted, uncoordinated gait
- Arched back
- Violent trembling (the jimmies)
- Rapid heartbeat and breathing
- Prostration

Further exercise may bring on a fatal attack. Characteristically, in the last attack, the animal takes three or four stilted steps, drops, gasps a few breaths and dies almost immediately of respiratory paralysis.

Integrated management strategies

No specific treatment is known. Sheep and goats usually do not recover after eating a lethal dose of jimmyfern. Cattle tremble but usually live. Nonfatal cases require 5 to 19 days to recover. Under range conditions, it is important to leave poisoned sheep strictly alone during the danger period, because any excitement or exercise aggravates their condition.

Because most deaths occur in the winter, during this period supply enough forage or supplemental feed to animals in an infested pasture. Under severe conditions, move animals from pastures where jimmyfern is abundant in winter before additional losses occur.

Because of the habitat where jimmyfern typically grows, herbicidal control with spot applications is difficult and generally unjustified. Provide ample watering places in pastures where jimmyfern grows so that animals can drink conveniently.



Leaf ↗

Whole plant ↓

