

## Toxic Plant: Locoweed (*many species in genera Astragalus and Oxytropis*)

**Location:** Pima, Santa Cruz, Cochise [★]

**Affected Livestock:** Cattle, Horses, Sheep



**Affected Livestock:** All classes of livestock are affected. The toxin (Swainsonine) is produced by an endophyte fungus that inhabits the plant. This compound impairs several cellular processes which ultimately disrupts organ systems including the nervous system, digestive system, and reproductive organs. Not all species of *Astragalus* or *Oxytropis* are toxic, but it can be difficult to distinguish between species in the field. Unlike most toxic plants, locoweed is relatively palatable to most classes of livestock and animals can become habituated to consuming it. Poisonings typically occur in early spring before other forages are readily available, or late fall when other forages have matured out for the winter. Locoweed seeds can “bank” in the soil for many years and germinate quickly following unusually wet seasons. This leads to some years seeing especially large numbers of locoweeds and cases of locoweed poisoning. The plant remains toxic when dried.

**Symptoms (can vary):** Poisoning from locoweeds is a chronic process, animals must consume the plant regularly over a period of weeks. Signs of toxicity include odd or erratic behavior, extreme nervousness, a slow, staggering gait, staring, depression, weight loss, and lack of coordination. Horses are especially sensitive, and may develop dangerous behavior patterns that do not resolve, making them permanently unsafe to ride. The toxin is secreted in milk and may affect nursing calves, foals, or lambs.

**Treatment:** Remove animals from problem grazing area, especially if evidence of locoweed grazing is present. Herbicide treatment is very effective for controlling locoweed however large-scale application can be difficult or costly, and the application must be repeated yearly due to the seed banks present in the soil. Some producers in heavily infested areas have found regular herbicide treatments to be beneficial in preventing economic losses to their operations.



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