



Twinleaf Senna

Senna roemeriana

Twinleaf senna is an erect, gray, perennial herb covered with short, soft hairs. It has few to many stems arising from a thickened root.

Leaves are arranged spirally as a single pair of **leaflets** (hence the name twinleaf). Yellow flowers emerge from April to August with five petals about twice as long as the sepals. The flower **stamens** are straw-colored to light brown.

Distribution and habitat

Twinleaf senna is common in pastures and open woods on limestone soils in Central and West Texas and westward to New Mexico. Regions: 4, 5, 6, 7, 8, 9, 10.

Toxic agent

The toxin involved is unknown. Twinleaf senna is toxic to cattle, goats and horses. Sheep are more resistant, but also can be poisoned if they eat too much.

The **lethal dose** of dry plant material for cattle and goats is about 1 percent of their body weight eaten for 5 to 10 days. Field cases indicate that goat kids may be fatally poisoned with much less fresh plant material.

Livestock signs

Senna usually affects muscle tissue by destroying the energy-producing systems within the

cells. It also causes gastrointestinal disturbances.

In goats, primarily the heart muscle is affected, and animals die suddenly of heart failure. Sometimes pale streaks are visible in the cardiac muscle.

In cattle, the large skeletal muscles are most affected.

Clinical signs include:

- Diarrhea
- Weakness
- “Alert downers”—not depressed, will eat, but unable to rise
- Dark urine
- Death

Senna-poisoned animals found already down seldom recover. Again, affected muscles may be visibly pale-streaked.

Horses and sheep poisoned with *Senna* die of liver failure. Microscopic examination of skeletal muscle reveals the same kind of damage that other species suffer, but to a lesser extent.

Integrated management strategies

The best prevention is to maintain good range condition.

Supplemental feeding programs, especially with phosphorus, also reduce twinleaf senna losses. Because of their higher resistance,

including sheep in the grazing mix may reduce the amount of twinleaf senna consumed by cattle or goats.

Small populations can be controlled with Grazon P+D® or Weedmaster® herbicide (1 percent solution in water) applied directly to the leaves. Follow chemical applications with proper stocking rates and good grazing management practices.

