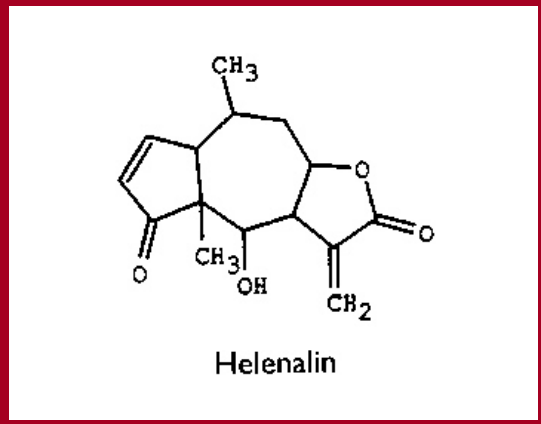
Plants containing
Sesquiterpine lactones



Helenalin

Spewing Sickness - Irritate GI tract – Chronic poisoning

Clinical Signs

Diarrhea
Vomiting
Frothing at mouth
Pneumonia from regurgitation
Kidney and liver damage
Dullness
Weakness
Trembling
Stiff lambs

Bitterweed

Hymenoxys odorata

Southwest

Orange sneezeweed

Dagalda (Helenium) hoopesii

Mountain meadows

Bitterweed

Hymenoxys odorata

Largest poisonous plant problem to sheep industry in W. Texas and E. New Mexico

Ecology

Winter annual

Clay soil, flood plain, dry lake bed

Short-grass prairie, Desert grassland

Increaser spp. invade disturbed areas

Overgrazing open niche

Cyclic pop. – increase in wet years

Conditions of poisoning

Unpalatable

Winter – other forage limited

Bitterweed

Management to reduce loss

- Bitterweed wash
- Antidotes
  - Cysteine
  - Santiquin
  - Cottonseed & Soybean meal (sulfur AA)
- Dry lot – allow sheep to recover
- Grazing systems
  - Flash grazing – 7day on and off
  - Merrill 3-herd, 4-pasture deferred rotation
  - Common Use – cattle sheep and goats – reduce grazing pressure
  - Improve range condition
- Herbicide control
  - 2,4-D – apply during early growth while actively growing

Orange sneezeweed

(Helenium hoopseii)

Spewing sickness, Stiff lamb disease

Ecology
Mountain meadows
Long-lived perennial
Increaser spp. in disturbed sites
Overgrazing increase
Cold tolerant – spring/fall growth

Sneezeweed

Conditions of poisoning

Bed grounds
Closed herding
Repeat grazing
Excessive use of dogs

Regrowth of rosettes in fall

Management

Herder key to reducing loss

Don’t bed in dense patch
Move bedground 1-2 nights
Open herding
Graze sneezeweed stands lightly
On – off grazing
    Detoxify 10-14 day off

Avoid early / late season grazing

Herbicide control
    2,4-D
    Dicamba
    Picloram

Knapweeds

Chewing disease in horses

Russian Knapweed

Yellow starthistle