



Kleingrass

Panicum coloratum

Kleingrass is a tufted perennial bunch grass with stems arising from firm, often knotty bases. It grows from 20 to 50 inches tall.

The plant gives rise to an open-flowering head with rounded seeds. The species is a warm-season grass that can provide good grazing for cattle.

Distribution and habitat

Not native to Texas, the grass was introduced from Africa in the 1950s. After more than 10 years of research, Kleingrass 75 was released as the most desirable variety, through joint efforts of the Texas Agricultural Experiment Station and the U.S. Soil Conservation Service. In the past 45 years, hundreds of thousands of acres in Texas have been planted to a monoculture of kleingrass. Regions: 3, 4, 5, 7.

Toxic agent

If managed properly, kleingrass provides abundant good-quality forage for cattle. However, saponins in the grass cause liver damage in horses, sheep and goats, with accompanying photosensitization in small ruminants. Cattle appear to be unaffected.

Green growth after moisture or grazing is reported to be more toxic than old or dormant growth.

Livestock signs

Poisoned sheep and goats exhibit typical signs of hepatogenous photosensitivity, including:

- Discharges from the eyes and nose
- Sunburn and edema of skin on the muzzle, eyes and nose progressing to tissue death

Examination after death may reveal liver inflammation and lesions. Small bile ducts may be obstructed. Kidneys and adrenal glands may also show lesions.

Researchers have reported toxic signs in sheep (swellhead) after several weeks of grazing; in other cases, signs appeared after only a few days. If not removed from pastures, up to 100 percent of affected animals can die.

Horses are also susceptible to kleingrass toxicity, but unlike sheep, they do not exhibit classical signs of photosensitivity. Therefore, detecting poisoning early may be difficult. A serum chemistry profile can be very helpful.

Poor body condition and weight loss (i.e., “hard keepers”) may be the only early signs. With long-term exposure, liver damage may be lethal in horses.

Integrated management strategies

Cattle are not reported to be susceptible to kleingrass-induced photosensitivity. Therefore, they are the best species to graze kleingrass pastures. If other livestock species have access to kleingrass, use caution. Monitor animals closely, and limit the time spent grazing kleingrass, especially when the grass is green and growing. Rotational grazing to other grass species may help.

Most animals showing clinical signs recover when kleingrass is removed from the diet. Horses should not be fed kleingrass.



Seed head ↗

Pasture ↘

↙ Whole plant

