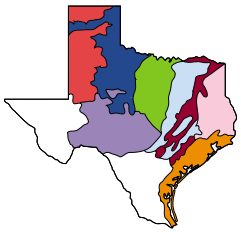

Ryegrass Ergot

Claviceps purpurea

The ergot of ryegrass *(Lolium* spp.) is a fungal body or sclerotium often found in many cereal grasses. It is a purplish black, banana-shaped, 0.25- to 0.75-inch-long body replacing a grain in the seed head.

The ergot body drops to the ground with the seed, lies dormant through the winter and produces millions of spores in the spring.

Distribution and habitat

Annual ryegrass is found throughout the eastern half of Texas and in the Panhandle. It grows as a cool-season forage and as a volunteer in disturbed areas. Severe contamination by ergot is usually restricted to the eastern third of Texas, where rainfall is more abundant. Regions: 1, 2, 3, 4, 5, 7, 8, 9.

Toxic agent

The ergot alkaloids in the sclerotia cause smooth muscle contraction, which limits blood supply to the extremities. In the United States, cattle are most often affected.

If consumption occurs in winter, dry gangrene may result; in the summer, animals exhibit heat intolerance and poor performance.

The ergot of mature annual ryegrass fractures easily from the seed head; most poisoning occurs when animals consume harvested seed or grain screenings. Hay seldom causes problems because it is usually harvested before the seed heads, sclerotia and toxins fully develop.

Livestock signs

Signs of gangrenous ergotism vary depending on dose and the time of year and may include:

- Loss of the tips of the ears
- Loss of the tip of the tail
- Loss of one or more feet
- Standing in shade or water
- Poor weight gain
- Abortion

Integrated management strategies

Prevent poisoning by harvesting ryegrass during or before the early dough stage of seed development. Inspect ryegrass seed and seed screenings for ergot sclerotia before feeding, and do not place animals in mature, heavily infected monoculture pastures.