

Successful Renovation of Tall Fescue with Serecia Lespedeza and Brown Tyne Chicory 2004-2005

Terry Hutchens, Animal and Food
Sciences, University of Kentucky
(G10407)

Kentucky is tall fescue country. There are 6 million acres of tall fescue established in our state. This is for the most part good, but there are problems associated with this pasture species. Fescue can be used and abused like no other coolseason grass and in the early spring (April 15-June 15) and late fall (October 15-December 15), fescue is a high quality grass.

Alternatively, the hot dry weather of summer brings on the *summer slump* for all cool season grasses like tall fescue. Pasture production declines in response to summer weather conditions. In addition, rates of gain, milk yield, and reproductive fertility declines for many ruminant and non-ruminant species in Kentucky. This phenomena is caused by the increase in ambient temperature and drier weather conditions reduced pasture quality, hasten the reproductive stage of the plants, and induce plant dormancy.

Secondly, there is an activation of an internal survival mechanism or toxic effect caused by a naturally occurring fungal endophyte that lives in symbiosis within the tall fescue plant tissue. The endophyte provides protection to the fescue plant from overgrazing during plant stress periods, and the plant provides a protected living space for the fungus.

To date, the majority of cattle producers accept the presence of the endophyte and manage around the endophyte problem.

- This is done by avoidance of the fescue during the summer slump period by moving animals to another pasture species such as orchardgrass, warm-season grasses, alfalfa, red clover, or other warm-season forages.
- Manage through diluting the toxic effect and improving productivity through interseeding non-infected species into a stand of tall fescue.

This is called *pasture renovation*. Seeding must take place prior to the accelerated growth phase of tall fescue (seed Feb. 15-March-15).

Likewise, goat producers will also benefit from pasture renovation. Dilution is more important when grazing goats on tall fescue during the summer slump period. At this point goats need plants that grow in an upright manner, providing adequate nutrition while keeping goats grazing above the parasite infection zone. See UK publications: AGR 26, AGR 119, AGR 86.

