

Sericea Lespedeza, an Anthelmintic Plant for Goats with Great Potential in Pasture Renovation and in Pure Stands

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Infection with gastrointestinal nematodes (GIN), particularly *Haemonchus contortus*, is a major limiting factor to economic goat production in the southern USA. Recent reports (3) indicate that anthelmintic resistance in goats has become highly prevalent in the southern USA. Grazing forages high in tannins has been shown to reduce number of parasite eggs in sheep and goat feces in a number of studies (1,2).

Research on the effect of sericea lespedeza forage on GIN in goats (2) has shown that animal grazing on sericea lespedeza alone or grazing on sericea lespedeza alternating every 2 weeks with fescue-crabgrass reduced total fecal egg output based on FEC (parasite eggs per gram of feces) and fecal output, rate of larva development (larvae per 10g of feces), and animal worm burden compared to those animal grazing on crabgrass alone. These results suggest that grazing a sericea lespedeza cultivar such as AU Grazer or including it in pasture renovation may result on reduced contamination of pastures from GIN larvae.

The anthelmintic potential of sericea lespedeza hay was evaluated in an 8-week feeding trial with goats. After 3 weeks grazing, 20 yearling Spanish-cross does were moved to pens and fed either ground sericea or bermudagrass hay diets balanced for crude protein and energy with a small amount of supplement. All 20 does were fed the bermudagrass diet for a 1-week adjustment, after which 10 animals were switched to the sericea diet for 4 weeks (experimental period). All the does were then fed the bermudagrass for an additional 3 weeks. Throughout the trial, parasite eggs was determined weekly for each doe. Egg shedding (ES) was similar between the two groups during the 3-week adjustment period, significantly lower ($P < 0.05$) in sericea-fed goats during the 4-week experimental period, and not different during the 3-week post-trial period. Feeding sericea lespedeza hay to goats reduced nematode ES and may have potential to reduce pasture contamination from GIN larvae.

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3. Mortensen, L.L., L.H. Williamson, T.H. Terrill, R.A. Kircher, M. Larsen, and R.M. Kaplan, 2003. Evaluation of prevalence and clinical implications of anthelmintic resistance in gastrointestinal nematodes in goats. *JAVMA* 223:495-500.