

It's true: You can feed tall fescue

Forget horror stories about fescue's palatability problems. New endophyte-free varieties perform well and taste good.

By Jerry Cherney and Debbie Cherney

Most cropland in the Northeast is better suited to perennial grass production than to legume or row crop production. Grasses also have advantages when it comes to nutrient management. Compared to alfalfa, grasses have a greater response to manure, which can be applied multiple times during the season. Grasses use large quantities of nutrients, minimizing the risk of nutrient leaching or runoff. And they can remove more than twice the nitrogen per acre compared to corn.

High yields are possible, but the majority of dairy farmers consider forage quality the Achilles Heel of grasses.

Among grasses, tall fescue may have one of the worst reputations. So it may surprise you that the "new" tall fescue looks promising, both in yield and quality.

Old tall fescue varieties contain an endophytic fungus that makes plants healthier and stronger but the forage unsuitable for dairy cows. New endophyte-free tall fescue varieties do not have palatability problems.

Tall fescue's strengths include:

- Often ranks highest for yield among cool-season grass species in the Northeast and the Midwest. Tall fescue has yielded up to 20% higher than the most popular perennial grasses grown in New York.

- The top varieties yielded 16.5 tons silage equivalent per acre in New York in 2003 on a well-drained loam soil, with a 3-ton range among entries in the trial.

- It has survived northern New York winters and does not appear to have persistence problems in New York or Pennsylvania. Tall fescue appears to be less persistent than other grasses in the upper Midwest.

How about forage quality?

Tall fescue is typically lower in crude protein than other grasses, except for timothy. But it's similar in fiber concentration and digestibility when grasses are compared at similar maturity stages.

We recently conducted feeding trials with lactating cows on tall fescue diets at the Cornell Animal Science Farm in Harford, N.Y.

Tall fescue was harvested at approximately 55% neutral detergent fiber (NDF), and rations were balanced for maximum NDF. Here are conclusions from these studies:

1. Tall fescue silage can produce as much milk per cow as alfalfa silage when rations are balanced.

2. We observed no palatability problems with tall fescue.

3. Dry matter intake increased as the portion of concentrate in diets increased, resulting in higher milk production in high fescue diets compared to high alfalfa diets.

4. In diets with mixtures of tall fescue and alfalfa, milk protein and milk urea nitrogen decreased as the proportion of grass increased.

Muddy the field

Now that the endophyte stigma of tall fescue could disappear, breeders have confused the issue. Because endophyte-free tall fescue varieties suffer from reduced persistence compared to the older fescue types in the central United States, breeders developed a "friendly-endophyte."

Two new varieties (MaxQ and Arkplus) contain a less toxic endophytic fungus that is supposed to improve plant health and persistence. These varieties supposedly don't have the negative effects on palatability and performance.

We have not seen any persistence problems with endophyte-free tall fescue in the Northeast, so the addition of a friendly-endophyte may have limited value here.

More than 20 new tall fescue varieties are adapted to our region. We currently have field trials at several locations in New York to evaluate all of them. Tall fescue is suited to either hay/silage production or pasture systems. Intensive management is required for high silage yields in the 50 to 55% NDF range. ■



For new grass seedings in 2004, give tall fescue a try. Palatability has improved and yields are respectable.

FYI

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