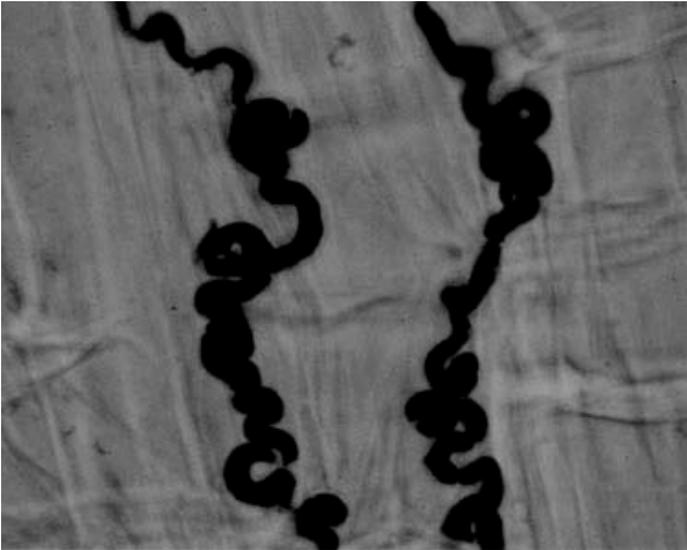


Replacement of Endophyte Infected Tall Fescue Stands



Fungal strands inside tall fescue

There are over 1,000,000 acres of tall fescue in Virginia. Sampling in the 1980's revealed that 75% of tall fescue fields had the endophytic fungus in more than 50% of the plants. Levels of 40% or more can produce moderate to severe adverse effects on animals. While occasional negative responses of animals consuming tall fescue were observed for several decades, it was not until the late 1970's that the cause was attributed to an endophytic fungus.

The fungus causes the plant to produce certain alkaloids that are toxic when eaten by animals. It resides in the spaces between plant cells, predominately in the stem and seedhead and less so in the leaves. It is only spread by seed.

Since learning about these negative effects on grazing animals, several management recommendations have been developed.

1. Keep the grass vegetative with rotational grazing and/or clipping. More of what is eaten will then be leaves.
2. Introduce legumes to dilute the intake of fescue. In the warmer areas of Virginia a natural dilution has occurred with the naturalization of bermudagrass and crabgrass into tall fescue fields. These grasses also add more forage during the summer months.
3. Avoid endophyte infected stands during summer.
4. Do not use high rates of nitrogen.
5. Ensure that dietary copper is adequate.
6. Replace the infected stand with a different forage. This is the most costly and time consuming alternative but may be a choice when all else fails. And, be sure to choose a replacement that is well adapted to the area.

Replacement takes careful planning and attention to detail. Replace only those fields where the new forage has a good chance of succeeding. Leave fescue on those soils that are very prone to erosion or have limitations.

