

### **Can overseeding toxic fescue pastures with small grains and/or clovers eliminate fescue toxicity problems?**

No. Overseeding non-toxic forages into toxic fescue pastures does reduce the effect of fescue toxicity by diluting the amount of toxin ingested. However, this practice does not eliminate fescue toxicity. Research has shown production losses even when small amounts of toxin are consumed by the animal. The only way to completely eliminate fescue toxicosis is to replace toxic fescue with a non-toxic variety like MaxQ.

### **Is MaxQ tall fescue fungus (endophyte) free?**

No. Like Kentucky 31 fescue, MaxQ contains an endophyte that lives within the plant tissue. This endophyte enhances the plant's ability to withstand stress brought on by heat, drought and grazing. However, unlike the endophyte in Ky 31, the MaxQ endophyte has no adverse effects on livestock health and performance.

### **What is "novel endophyte" fescue seed?**

Much of the tall fescue traditionally grown in pastures contains an endophyte (fungus) that lives within the cell walls of the fescue plant. This endophyte in older fescue varieties (Ky 31, etc.) gives the plant greater hardiness and persistence, but causes adverse health and performance issues for livestock that consume it. New varieties of tall fescue like Jesup MaxQ have been developed that contain an endophyte that enhances the plant's hardiness and persistence like the old varieties, but does not adversely affect animal health and performance. These new varieties are often referred to as 'novel' or 'friendly' endophyte fescue varieties.

### **Will MaxQ work as well as small grains for stocker cattle?**

Yes. In a comprehensive study at the University of Arkansas, Dr. Paul Beck found that novel endophyte varieties of fescue like Jesup MaxQ can be a viable and a more economical alternative to winter annuals for stocker cattle production. In his trial, Dr. Beck compared performance and economics of grazing stockers on non-toxic novel endophyte fescue and small grain pastures. In this study, grazing days were 35% greater in the fall and double in the spring with novel endophyte fescue versus small grains. Per acre gains were similar in the fall for both systems, but were 110% greater in the spring for novel fescue. Economic analysis showed per acre profits to be \$125 - \$145 per acre more with novel endophyte fescue.

### **What is fescue toxicity?**

Old traditional varieties of fescue such as Kentucky 31 contain an endophyte (fungus) that dwells within the plant and produces compounds that, when ingested by cattle, horses, sheep and other livestock, cause adverse health and production problems. In cattle, symptoms include long hair coats into summer, runny noses, abnormal body temperatures, poor weight gains, low conception rates, reduced semen quality and lower milk production. These symptoms are collectively known as fescue toxicosis or fescue toxicity. Fortunately, there are new varieties of fescue now available like MaxQ that contain no toxins detrimental to livestock health and performance.

### **Can newly established fescue pastures/hayfields be used the year of establishment?**

Yes. If establishment year weather is favorable, newly planted fescue can be grazed or hayed the first year. Grazing should not begin until plant growth reaches 6-8" in height. Do not graze below a 3" height or allow animals to trample the young seedlings during the year of establishment. If harvested for hay, adjust the mower to leave a minimum of 3" stubble height.

### **Can MaxQ tall fescue be established with companion annual forage such as rye, wheat, clover, etc?**

For best results, Pennington recommends MaxQ be established alone. Annual grasses and clovers are aggressive competition for young fescue seedlings trying to become established.

### **When can newly seeded fescue fields be safely sprayed with an herbicide to control broadleaf weeds?**

Product labels specify when a certain herbicide can be applied. Some herbicides can be applied once seedling fescue plants become fully tillered while others specify application only to well established plants. Refer to the individual herbicide label for application timing and rate information or contact your local farm supply dealer or university ag extension office for assistance.

### **Can bermudagrass and MaxQ be established together?**

This practice is discouraged. Establishment seasons, fertilization times and management schemes for these two forages are quite different. Trying to establish a suitable pasture mix of these two forages would be difficult and most likely result in the failure of one or the other.

### **When can grazing begin on newly established MaxQ pastures?**

Many factors affect this including planting date, method of planting (overseeded vs. prepared seed bed), fertilization, weather, etc. In general, fescue seedlings do not emerge and grow as quickly as annual grasses. As such, farmers should not plant fescue thinking it will replace small grain grazing in the establishment year. MaxQ can be grazed once growth reaches 6-8 inches in height, the plants are well anchored in the ground and the soil under hoof will adequately hold up the animal grazing it without punching out holes in the pasture from wet conditions. Once grazing is initiated, it should not be grazed below a height of 3 inches during the year following planting.

### **Will the toxic endophyte found in KY31 tall fescue contaminate a neighboring field of MaxQ due to its close proximity?**

No. The endophyte is safe within the plant and cannot be transmitted from plant to plant. Endophyte is not present in pollen, the soil or juices of the plant. It is only mobile through the seed.

### **When renovating a pasture should existing toxic fescue like KY 31 be killed prior to planting MaxQ tall fescue?**

Yes. The endophyte found in old KY 31 pastures produces toxic side effects that reduce animal performance. The only way to completely rid the pasture of these harmful side effects is to eliminate 100% of the toxic fescue.

**Will the novel endophyte in MaxQ tall fescue revert back to the old toxic endophyte over time?**

No. The endophyte contained in MaxQ is completely different from the one found in KY31. It is a naturally occurring endophyte that was introduced to a variety of fescue that was previously fungus free. This new endophyte is stable within the plant and remains so for the life of the fescue plant.