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### WILL YOUR BERMUDAGRASS BE READY FOR WINTER?

**Preparation of warm season perennial forages for winter can help performance next spring.** Several practices should be considered when preparing bermudagrass for winter... among these is fertility, and more specifically potassium nutrition.

**Potassium performs many important functions in forage crops.** Among the benefits of adequate potassium fertility are:

- **Increased forage yields and potential profit**
- **Improved efficiency of nitrogen fertilizer**
- **Increased water use efficiency**
- **Increased root growth**
- **Enhanced drought tolerance**
- **Reduced susceptibility to several plant diseases**
- **Improved winter hardiness**

**If bermudagrass forage production this summer seemed sluggish or did not respond to nitrogen applications as well as expected, you might want to check the soil potassium level.** Soil potassium can be rapidly diminished under forage production, especially where hay is harvested. Each ton of bermudagrass hay will remove about 50 pounds of potassium (expressed as  $K_2O$ ). This means that a 6 ton bermudagrass seasonal hay harvest will export the equivalent of about 300 lb  $K_2O$  fertilizer per acre.

**The book *Southern Forages* (Ball, Hoveland, and Lacefield) states: "This nutrient (potassium) should be present in adequate amounts at all times, but is particularly important in areas where cold hardiness is a factor in forage stand persistence.** Even where there is no cold stress, potassium is of major importance to stand longevity of legumes and rhizome production of bermudagrass."

**Applying potassium fertilizer in the late summer to early fall is often referred to as winterization.**

Potassium applied 4 to 6 weeks before the forage goes dormant can help winterize perennial warm season forage by:

- **Increasing the photosynthetic production of carbohydrates**
- **Stimulating storage of starch reserves in the roots and rhizomes.** Rhizomes are underground stems that function as food storage organs and as vegetative buds for next season's growth.

**A good late summer soil fertility and bermudagrass nutrition program can be important in improving forage, livestock, and profit production potential going into next year.**

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