

# Nitrogen Rate and Timing Effects on the Yield of Tall Fescue Stockpiled for Winter Grazing

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## INTRODUCTION

- > Stockpiled tall fescue can provide economical winter feed
- > Nitrogen fertilization is required for maximum production
- > Below normal precipitation occurs one out of four years
- > Interest exists in application strategies that could reduce financial risk associated with late summer nitrogen fertilization

## RESULTS



Figure 1. Impact of nitrogen fertilization on tall fescue growth in late fall.

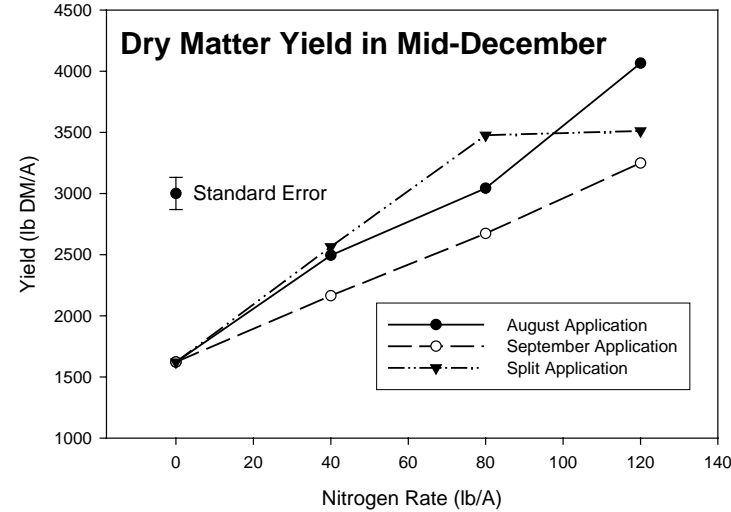


Figure 2. Nitrogen rate and timing effects on the yield of stockpiled tall fescue.



## SUMMARY

- > Yield increased as nitrogen rate increased
- > Applying nitrogen in September decreased yield
- > Applying moderate rates of nitrogen as a split application had minimal effects on total dry matter production
- > Forage quality increased as nitrogen rate increased
- > Forage quality was higher when nitrogen was applied in September
- > Splitting moderate rates of nitrogen provides the option of withholding the second application if moisture is limiting plant growth.

## OBJECTIVE

To evaluate the effect of nitrogen rate and application timing on the yield and nutritive value of stockpiled tall fescue

## MATERIALS AND METHODS

- > Study conducted near Blackstone, VA
- > 0, 40, 80, and 120 lb N/A was applied to tall fescue sod
- > Nitrogen was applied in August and September or ½ in August and ½ in September
- > Plots harvested in mid-December

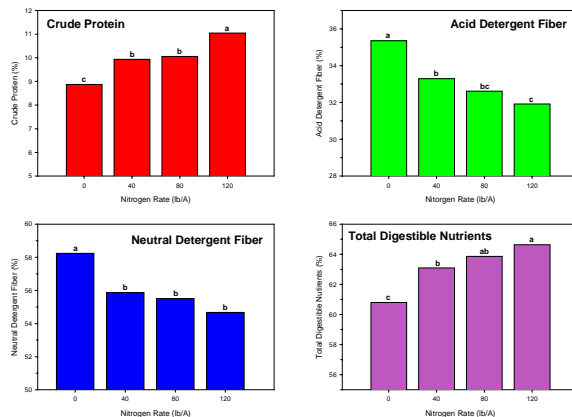


Figure 3. Nitrogen timing effects on crude protein, neutral and acid detergent fibers, and total digestible nutrients.

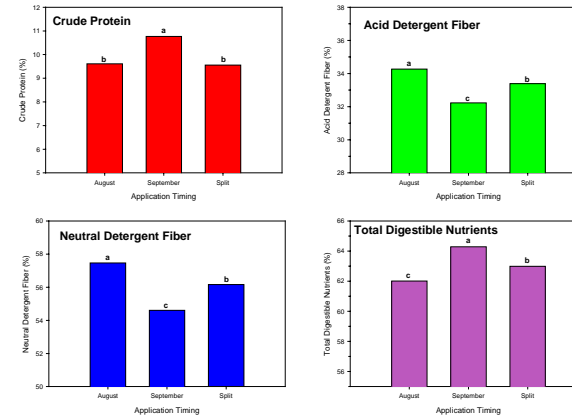


Figure 4. Nitrogen timing effects on crude protein, neutral and acid detergent fibers, and total digestible nutrients.

## Contact Information

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