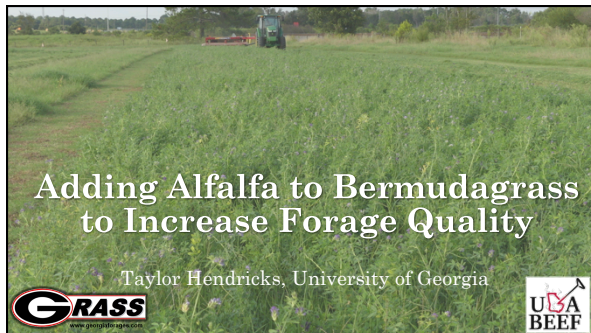



# Forage Conference at GCA Convention

## Adding Alfalfa to Bermudagrass to Increase Forage Quality



### Why an Alfalfa-Bermudagrass mix?


- Adding legumes can improve IVTD, CP, NDF and reduce N input
- Extends seasonal yield
- New varieties of alfalfa are better adapted for growth in warm climates



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### Why an Alfalfa-Bermudagrass mix?

- Bermudagrass is high yielding with moderate quality
- Adding alfalfa to bermudagrass increases quality!
  - RFQ by 25-40 points
  - CP to 14-18% +
  - TDN to 60-64% +



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### Objective

To evaluate and compare the forage **quality and yield** of Bermudagrass fertilized with N and an alfalfa-bermudagrass mixture when harvested as baleage and the associated change over time


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### Materials and Methods

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### Materials and Methods

- Previously established Tifton 85 bermudagrass hayfield
- February 2016: Bulldog 805
- Fertilized P and K to soil test recommendations
- Irrigation applied as needed throughout the growing season



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### Materials and Methods

- Plots harvested at early (10%) bloom every 28-35 days
- Material baled at 41-54% moisture
- Evaluated for species composition, forage maturity, stand density, and yield at each harvest.



### Materials and Methods

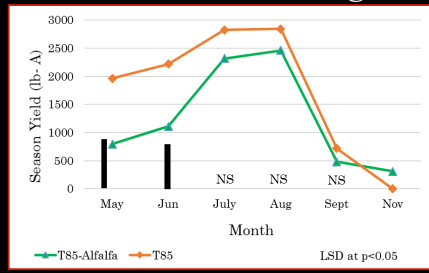
- Core samples taken from bales before wrapping
- Analyzed for ADF, NDF, CP, and In-Vitro True Digestibility
- NIR analysis to be performed



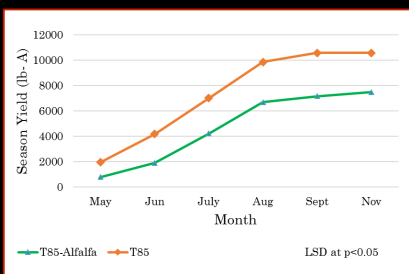
### Results



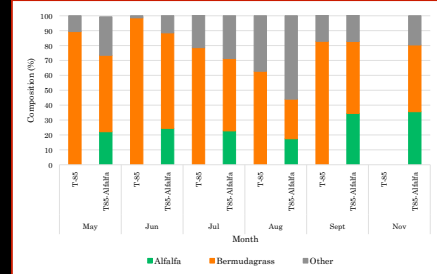
### Results – 2016 Forage Yield



### Results – 2016 Seasonal Yield



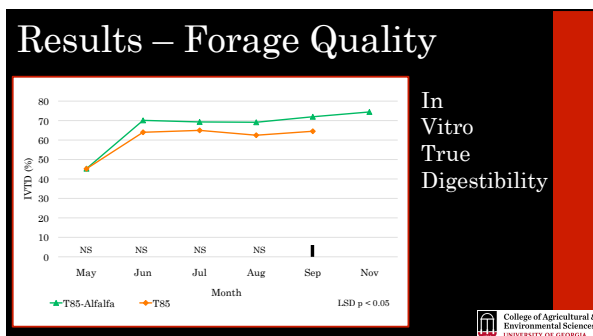
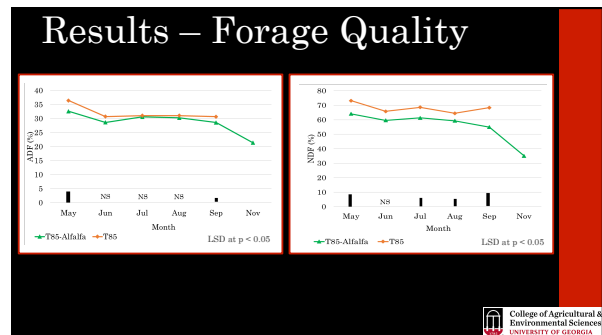
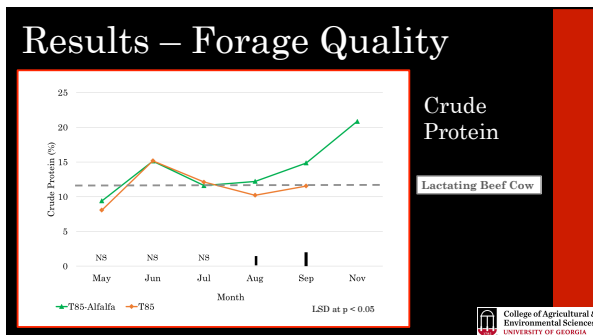
### Results – Botanical Composition



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## Summary

### Summary – First Year Results

- Forage yields were greater in the T85 treatment, however T85-alfalfa mixture provided harvestable forage further into the Fall
- Botanical compositions showed increased weed pressure in the T85-alfalfa mixture
- Crude protein and digestibility were significantly greater in the T85-alfalfa mixtures in later cuttings

### Summary

Early results indicate that alfalfa-bermudagrass baleage production shows potential for improved forage quality and profitability

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## Adding Alfalfa to Bermudagrass to Increase Forage Quality

The authors would like to acknowledge and thank the Georgia Agricultural Commodity Commission for Beef for providing the funding for this research.



### Questions?

