



# Georgia Forages Conference

Interseeding alfalfa into bermudagrass to reduce N costs, increase yields, and decrease supplementation needs

**Using Alfalfa Interseeded Into Bermudagrass to Decrease Nitrogen Cost, Increase Yield, and Decrease Supplementation**

Taylor Hendricks, University of Georgia

## Why Alfalfa-Bermudagrass?


1. Grow your own Nitrogen!
2. Increase yield by extending the growing season
3. Increase forage quality
4. Reduce supplementation
5. If all else fails, you still have bermudagrass!



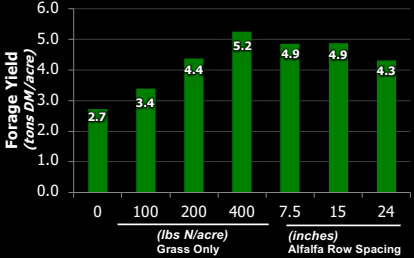

### 1. Grow Your Own Nitrogen

*Adding legumes adds N to the system!*

| Species       | Annual lbs (N/acre) | N value at \$0.45/lb. of N |
|---------------|---------------------|----------------------------|
| Alfalfa       | 200-300             | \$90-135                   |
| Red clover    | 100-200             | \$45-90                    |
| White clover  | 100-150             | \$45-68                    |
| Annual clover | 50-150              | \$23-68                    |




### Forage Yield of Bermudagrass Fertilized w/ N or w/Alfalfa Interseeded – SC Coastal Plain

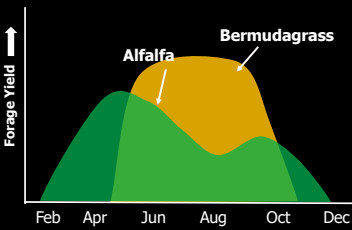



| (lbs N/acre) Grass Only | (inches) Alfalfa Row Spacing | Forage Yield (tons DM/acre) |
|-------------------------|------------------------------|-----------------------------|
| 0                       |                              | 2.7                         |
| 100                     |                              | 3.4                         |
| 200                     |                              | 4.4                         |
| 400                     |                              | 5.2                         |
|                         | 7.5                          | 4.9                         |
|                         | 15                           | 4.9                         |
|                         | 24                           | 4.3                         |

Stringer et al., 1994: avg. of 2 yrs, Blackville, SC (rainfed); Slide Courtesy of Dr. Dennis Hancock



### 2. Increase Forage Yield and Extend the Growing Season

### Current Research

To compare the forage **quality and yield** of bermudagrass with and without alfalfa interseeded when harvested as baleage

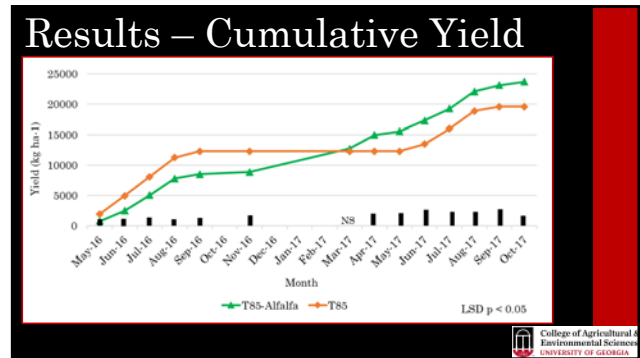
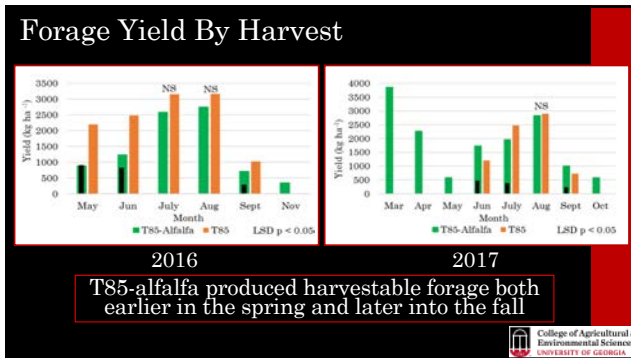


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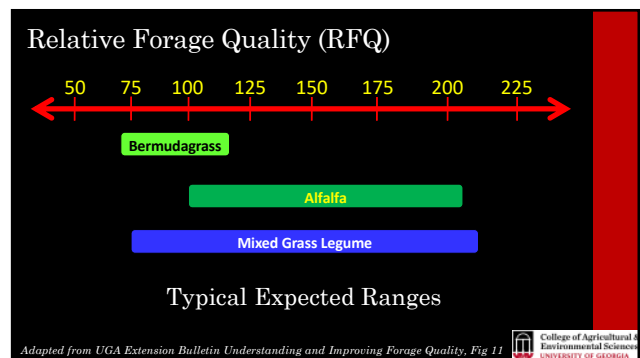
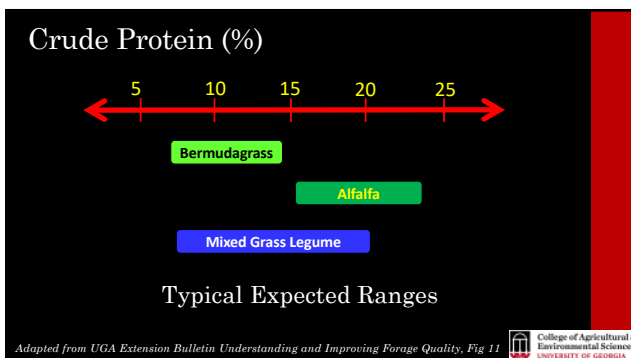
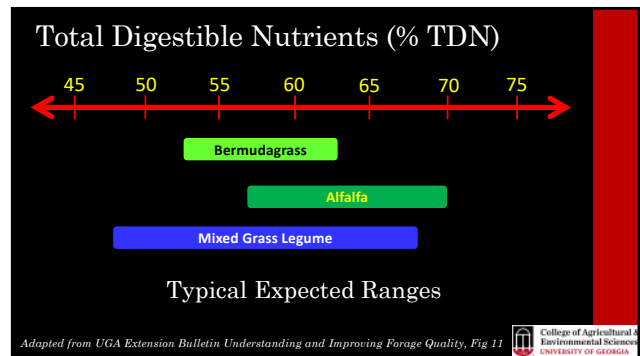
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### 3. Improve Forage Quality

- 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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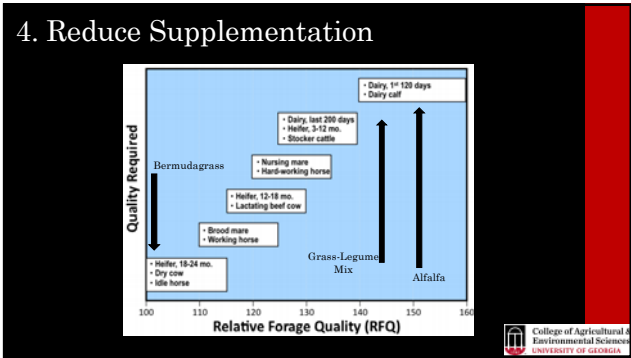
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### Results – 2016 Forage Quality

- Crude protein was greater in T85-alfalfa in 5 of 6 harvests (13.3% vs 10.2%)
- IVDMD and TDN were greater in every harvest
  - TDN: 54.5% vs. 51.8%
  - IVDMD: 74.1% vs. 71.1%


### 5. If all else fails, you still have bermudagrass!




### Summary

Interseeding alfalfa into bermudagrass can add another tool in the toolbox

- Reduce Supplementation
- Improve forage quality
- Extend the growing season
- Growing your own nitrogen!



### Alfalfa In the South Field Day

May 1: Calhoun Co.  
May 8: Bacon Co.  
May 9: Tilton, GA  
May 10: Irwin Co.

Registration \$15. Lunch and reference materials provided.  
RSVP: 706-310-3464




More Info and registration @ [www.georgiaforages.com](http://www.georgiaforages.com)



### Questions?




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