



## **Beef Cattle Short Course 2012**

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# **Comparison of Jiggs to Other Bermudagrass Alternatives**

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**Joe Vendramini**

**Forage Specialist – Range Cattle REC, Ona**

# Forage Species

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# Forage Species

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- ✓ Selection of forage species and cultivars are among the most important decisions on forage production
- ✓ Pasture establishment can cost from \$ 300 to \$ 500 / acre

# Warm-season grasses

Species	Pros	Cons
Bahiagrass	Persistence Low maintenance	Production Nutritive value
Bermudagrass	Production Nutritive Value	Poorly drained areas Overgraze Soil fertility
Stargrass	Production Nutritive Value	Cold tolerance Overgraze Soil Fertility
Limpograss	Winter production Nutritive value	Overgraze Soil Fertility

# Forage Species

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- ✓ IF the soil is well drained
- ✓ IF fertilization and weed control are planned and executed properly
- ✓ IF forage is destined to hay, haylage, or silage
- ✓ IF grazing is controlled at the recommended stubble height

# Forage Species

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✓ Bermudagrass MAY be a feasible option

- Coastal
- Tifton 85
- Tifton 44
- Russell
- Jiggs

# Forage Species

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- ✓ IF soils are moderately drained and all other requirements are met, Jiggs MAY be an option

# Forage Species

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# Jiggs

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- ✓ Mr. Riggs selected Jiggs from a bermudagrass field in East Texas



# Jiggs

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- ✓ Fast establishment from sprigs and/or tops
- ✓ Thin stems – when harvested for hay, forage dry faster on the field (and the hay looks good!)

# Jiggs - Grazing

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Grazing Trial – Ona, FL (Mislevy and Miller, 2007)

Species	Herbage Yield lb DM/acre/yr
Jiggs	14200
Florona	14200
Tifton 85	13000
Okeechobee	11500

# Jiggs - Plots

Plot trial – Summer - Wauchula, FL (Vendramini et al., 2010)

Response Variable	Forages					
	Bahiagrass	Stargrass	Limpograss	Florakirk	Jiggs	Tifton 85
Yield (lb/ac)	2600	3670	3870	3800	4600	2970
CP, %	14.9	12.0	12.5	11.6	11.6	10.2
NDF, %	63.6	71.7	65.7	71.4	72.2	58.0
IVTD, %	56.3	61.7	60.1	58	58.4	63.9
NDFD, %	53.2	50.0	44.1	45.2	43.3	57.0

# Jiggs - Plot

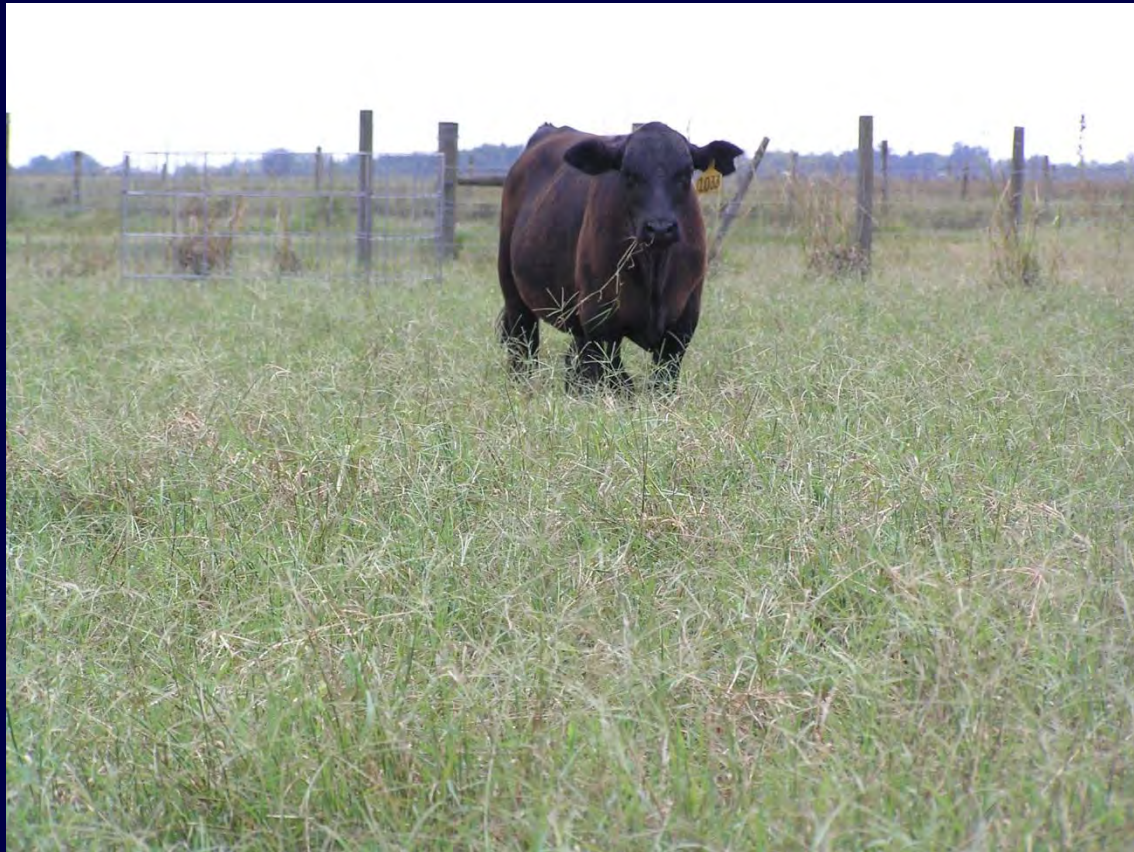
Plot trial – Fall - Wauchula, FL (Vendramini et al., 2010)

Response Variable	Forage Species		
	Florakirk	Jiggs	Tifton 85
Yield (lb/ac)	2040	2870	1140
CP, %	11.7	11.4	13.1
NDF, %	67.1	69.2	67.7
IVTD, %	63.0	63.0	66.6
NDFD, %	55.5	51.5	60.0



# Jiggs - Grazing

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# Jiggs - Grazing

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## Grazing Trial – Ona, FL

Grazing Height (inches)	ADG (lb/d)	Gain per Acre (lb)
8	1.3	600
7	0.7	760
6	0.5	790
Contrast	Linear	Linear



# Tifton 85 – Grazing

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## Grazing Trial – Gainesville FL

Supplement Levels (% BW)	ADG (lb/d)
1.0	1.2
1.5	1.4
2.0	1.4
Contrast	Linear

# Jiggs – Stubble Height

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Species	Target Stubble height (inches)
Bahiagrass	2
Bermudagrass	3-4
Mulato	5-7
Stargrass	6-8
Limpograss	8-10

# Jiggs - Haylage

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- ✓ Haylage study



# Jiggs - Haylage

## Haylage study – Ona, FL

Response Variable	Forage Species	
	Jiggs	Tifton 85
DM (%)	57a	49b
CP, %	12.3	12.3
NDF, %	75	73
IVTD, %	54	55
NDFD, %	37b	41a

# Jiggs - Haylage

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## Haylage study – Ona, FL

Response Variable	Forage Species	
	Jiggs	Tifton 85
pH	4.6	4.6
LA, %	3.4	3.2
AA, %	2.6	1.8
Ammonia, % CP	11	13

# Jiggs – Cold Tolerance

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✓ Cold Tolerance



# Jiggs – Cold Tolerance

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## Variety Trial – Ardmore, OK

Species	Herbage Yield lb DM/acre
Tifton 85	9144
Coastal	8659
Russell	8119
Cheyenne	7317
Jiggs	7245
Tifton 44	7106

# Jiggs - Pests

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- ✓ Jiggs is susceptible to rust and symptoms are commonly observed in longer regrowth periods
- ✓ Control - Harvest





# Jiggs - Pests

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- ✓ Jiggs is susceptible to stem maggot (*Atherigona reversura*)



# Jiggs - Pests

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- ✓ There are no insecticides specifically registered for stem maggot control in bermudagrass. The insecticides used for armyworms, with the exception of Dimilin, are effective to control stem maggot
- ✓ Best Control - Harvest

# Jiggs - Summary

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- ✓ Jiggs is a bermudagrass and requires management to be productive and persistent
- ✓ Jiggs has comparable nutritive value and quality (animal performance) to other bermudagrass cultivars

# Jiggs - Summary

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- ✓ Jiggs has been a good option for hay production because of the thin stems (good appearance) and faster drying time on the field
- ✓ Persistence on moderately drained soils differs Jiggs from other bermudagrass cultivars



Thanks!  
jv@ufl.edu



Joe Vendramini, Forage Specialist  
UF/IFAS Range Cattle REC