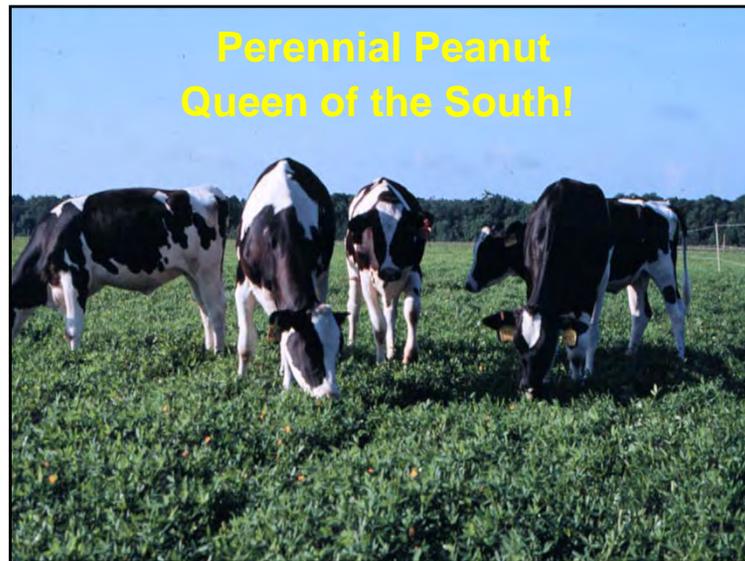




## Introduction

- \* **Perennial peanut** (*Arachis glabrata*) also known as **Rhizoma peanut**.
- \* **Warm-season legume** planted on approx. **28,000 acres** in Florida and **30,000 acres** in the southeastern US.
- \* **Alternative to alfalfa** in Florida because of yield (approx. 5 ton/acre), forage quality, and persistence under Florida conditions.

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## Value

- **Fix Nitrogen**
- **High Nutritive Value**
- **Perennial**

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- \* Botanical name = *Arachis*
- \* Edible Peanut = *Arachis hypogaeae*
- \* Tropical Perennial Peanut = *Arachis pintoii*
- \* Subtropical Perennial Peanut = *Arachis glabrata*

## Legume nodules with N fixing bacteria



Rhizobium (temperate)  
Bradirhizobium (tropical)

## What are the origins of Perennial Peanut?



Cone Farm, Florida

## Perennial Peanut (*Arachis glabrata*)



Latitude 30 North

Equator, latitude 0

Latitude 30 South

## Early Evaluations

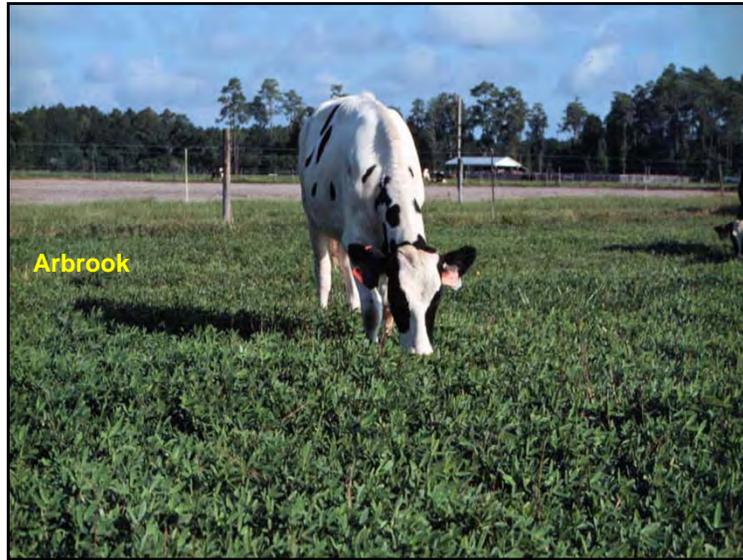
- \* **1936** - two entries introduced to FL by Hull - from plant explorer in Brazil
  - Became 'Arb' and was planted in Brooksville
  - From the other came the material that is known as Florigraze
- \* **1959** – Arbrook is introduced from Paraguay
- \* **1961** – first trials with material collected in 1936
- \* **1978** – release of Florigraze
- \* **1985** – release of Arbrook

\* **A. glabrata cv. 'Florigraze'**

\* **A. glabrata cv. 'Arbrook'**

Characteristic	Arbrook	Florigraze
Growth habit	Upright	Decumbent





Characteristic	Arbrook	Florigraze
Growth habit	Upright	Decumbent
Ground cover	Slow	Moderate
Grazing Tolerance	?	Mod.-High



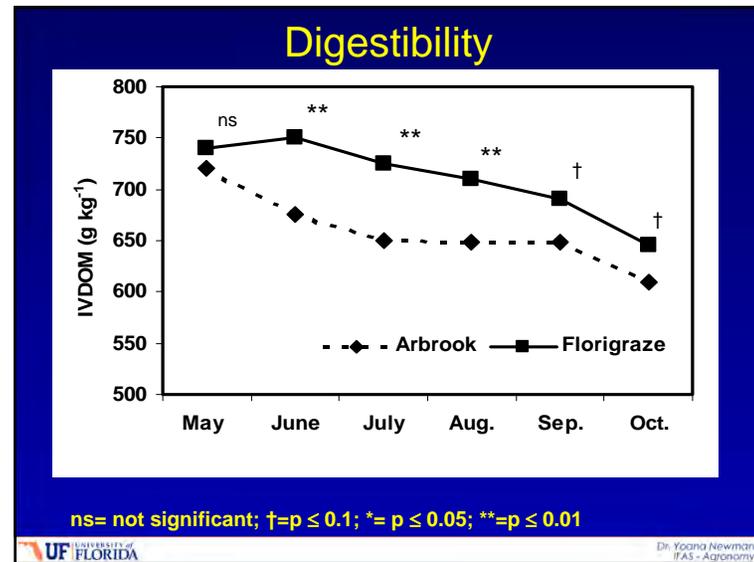
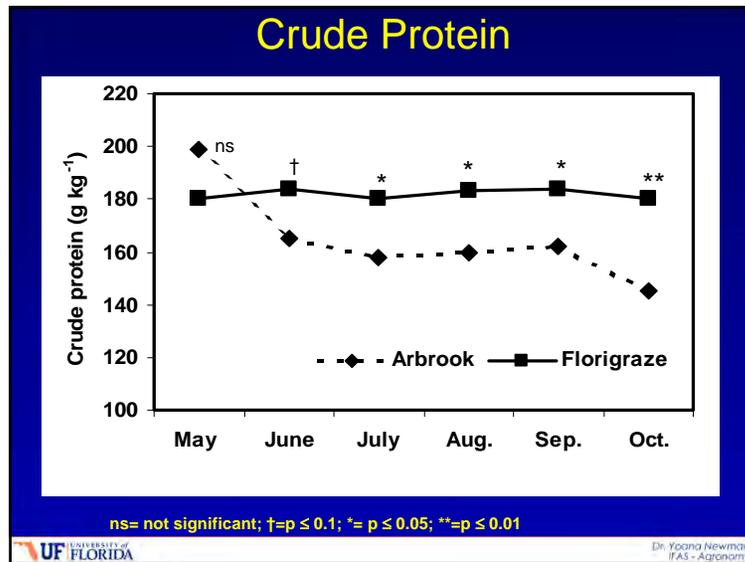

### Pest Tolerance

- Insect resistant
- Low susceptibility to early & late leaf spot, rust, and root knot nematodes
- Virus present – under stress symptoms






Nutritive Value



## Perennial Peanut

- **Soil:**  
Sandy clay loam
- **pH:**  
5.8 – 7
- **Cold tolerance:**  
Lacks
- **Bloat potential:**  
None
- **Production:**  
Mar - Oct
- **Use:**  
Hay, grazing



## Planting

<b>Planting Date:</b>	Dec - March (dormant); May – June Allow for rhizome development before killing frost (to avoid reduced yield in spring)
<b>Planting Depth:</b>	1-2 inches
<b>Seeding Rate:</b>	<ul style="list-style-type: none"> <li>• 80 to 100 bu/acre (1 bu= 1.25 cubic ft)</li> <li>• 1200 1500 lb/acre (1 bu= 11 to 15 lb) highly variable depending on how wet the sprigs are when dug</li> <li>• 1 acre plants 20 acres more or less</li> </ul>

<b>Seed Cost</b>	<ul style="list-style-type: none"> <li>• \$3/bushel</li> <li>• custom sprigged: \$275/acre + delivery costs (\$2.50 per loaded mile)</li> </ul>
<b>Fertilization</b>	15 to 20 lb N, P and K (follow soil test report)

### Notes:

Inoculation of the rhizomes with the N fixing bacteria (Rhizobium) is not necessary because it is passed with the planting material.

## Seedbed Preparation



## Avoid planting in weedy fields



## Establishment

### PLANTING

- Plant at beginning of rains
- Use fresh material (1500 – 2000 lb/acre)

## Care of vegetative seed (tops or sprigs)

- If needing to store the vegetative material (keep the moisture and place under the shade)
- In ideal situations, do not store beyond one day
- 1 hour in extreme conditions ⇒ damages the seed

Exposure time	% Sprigs Alive at Planting
No exposure	100
2 hours, (9 a.m. – 11 a.m.)	94
4 hours, (9 a.m. – 1 p.m.)	72
2 hours, (12 noon – 2 p.m.)	30
4 hours, (12 noon – 4 p.m.)	3
8 hours, shade and moist (9 a.m. – 5 p.m.)	100

- Plant sprigs same day (within 1 hr after dug)



## Planting

- Broadcast
- **Distribute uniformly**



## Planting

- Broadcast
- Distribute uniformly
- **Incorporate with:**
  - a. Crimper or**
  - b. Disc set straight or offset (to cover not to cut)**
- Cover 2-3 years



### Herbicides for Perennial Peanut\*

Trade/Common Name	Common Name	Broadcast (rate/acre)	Observations
2,4-D Amine Weed Killer	2,4-D	1 pt / acre 0.5 lb	<ul style="list-style-type: none"> <li>•Controls broadleaf</li> <li>•Apply any time</li> <li>•30-day haying restriction</li> <li>•Slight yield decrease in Florigraze</li> </ul>

\*Ferrell and Sellers, 2009 – Univ. of Florida

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Impose Cadre is not legal	Imazapic	4 oz	<ul style="list-style-type: none"> <li>•Controls crabgrass, nutsedge, johnsongrass, and broadleaf</li> <li>•No haying or grazing restrictions</li> </ul>

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Select Max Arrow, Select, Trigger are not legal	Clethodim	32 oz/acre	<ul style="list-style-type: none"> <li>•Requires surfactant or crop oil</li> <li>•40-day grazing or haying restriction</li> </ul>

\*Ferrell and Sellers, 2009 – Univ. of Florida

## Hay production

- per cutting: 2,000-3000 lb/acre
- season total: 7,000-10,000 lb/acre



Progressive farmers always strive to improve their forages



Time to Stop!  
Thanks.



# Forages of Florida Website

<http://agronomy.ifas.ufl.edu/ForagesofFlorida>

Dr. Yoana Newmar  
IFAS - Agronomy

## Electronic Fact Sheets

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