

# Olam Edible Nuts

“Dealing with the 2010 Crop”

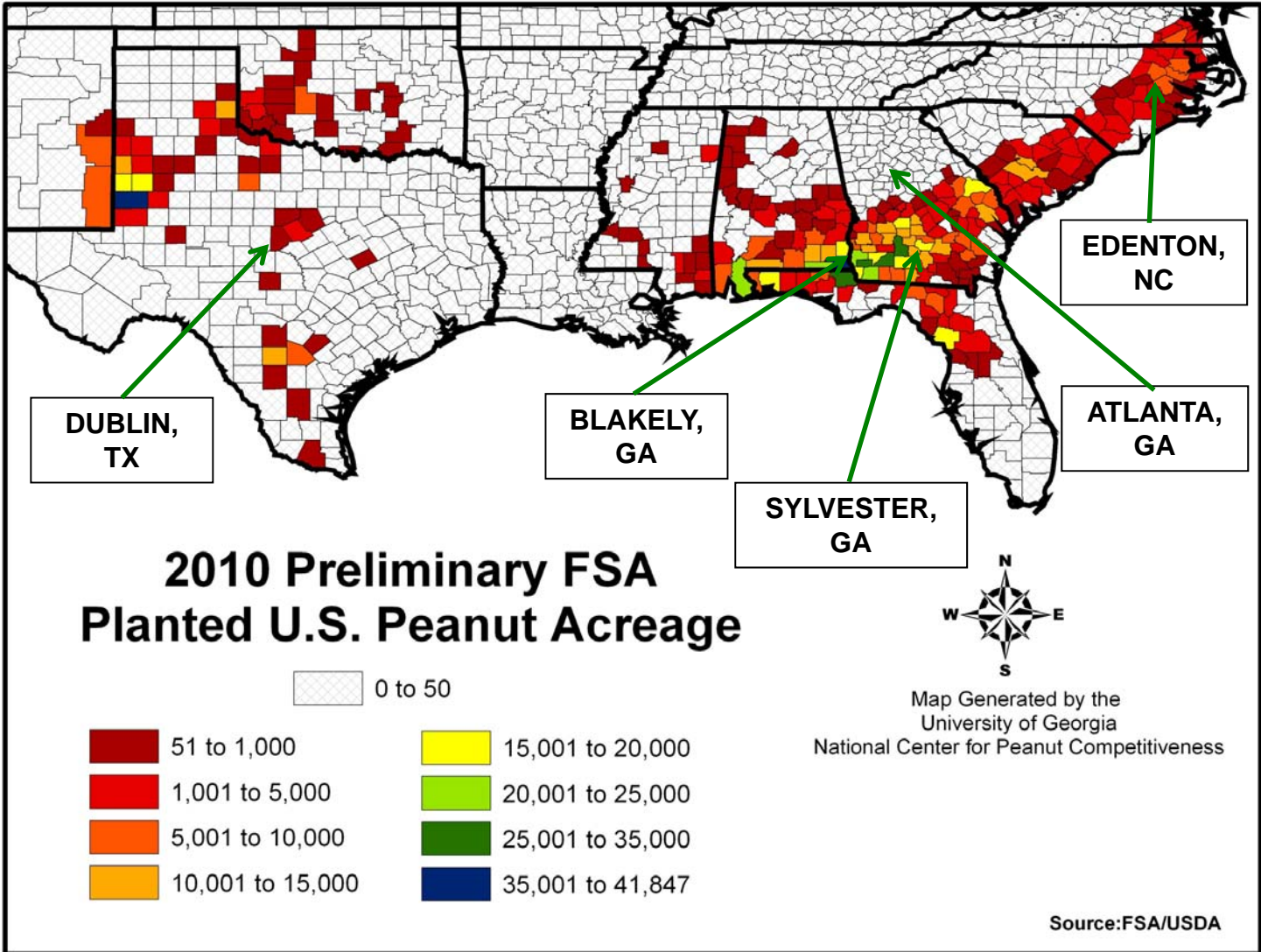
2011 Southern Peanut  
Growers Conference

Edgewater Beach Resort  
Panama City Beach, FL

July 22<sup>nd</sup>, 2011

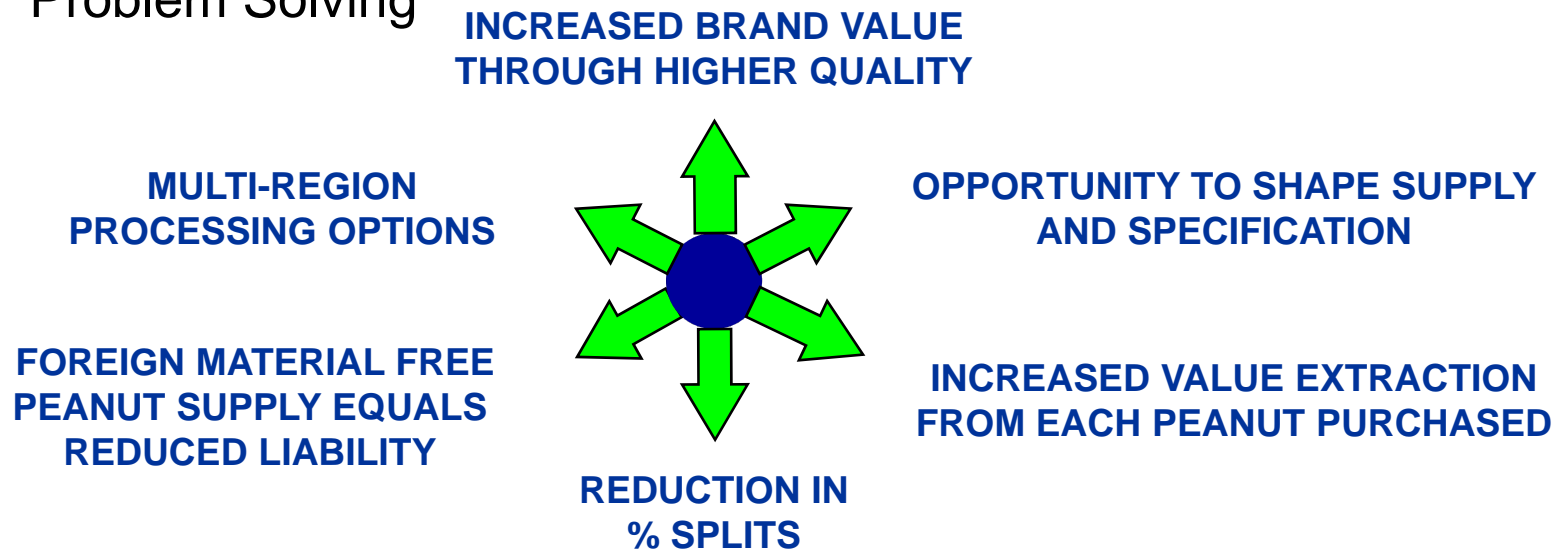


# Olam Edible Nuts Locations



# Olam Edible Nuts Peanut Pre-Cleaning/Blanching

- Benefit from Our:
  - 30 Years of Experience and Proprietary Technologies
  - Presence in SE and SW Growing Regions
  - Core Competencies
    - Foreign Material Removal
    - Maximizing Yield and Quality
    - Customer Service
    - Problem Solving



# Olam Edible Nuts Products and Packaging Matrix

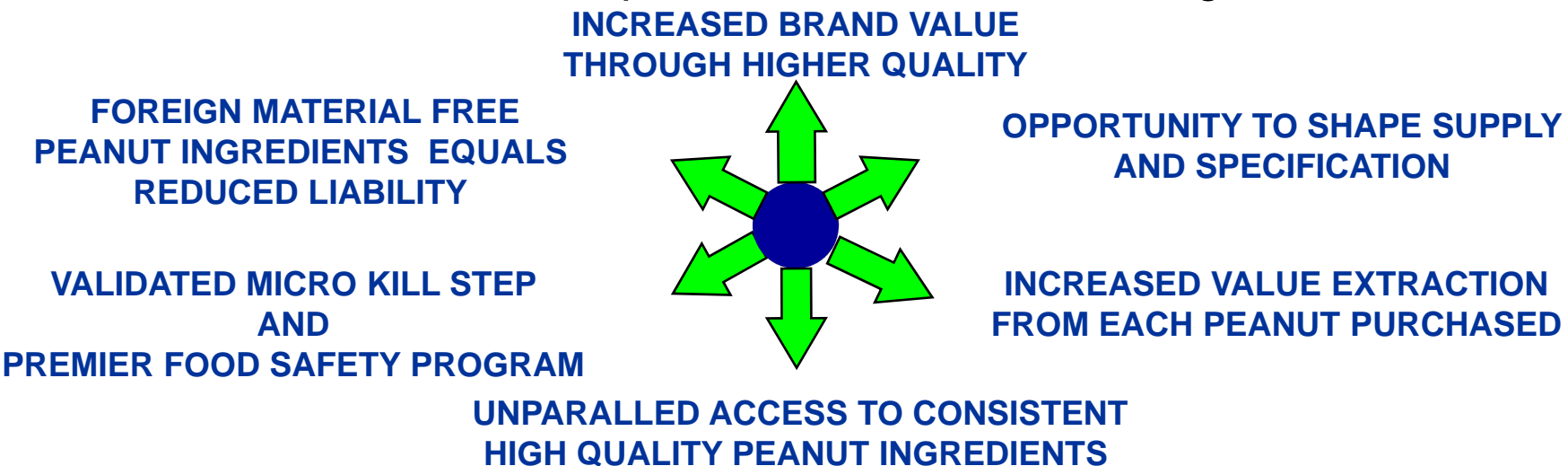
OLAM EDIBLE NUTS CUSTOM SERVICE PACKAGING MATRIX							
LOCATION	PARTICULARS	--- Cartons ---			110 # Burlap Bag	2,000 # Tote	2,000 # Box
		25 #	30 #	50 #			
Blakely, GA	Package Transfer					√	√
	Pre-Clean or Remill					√	√
	WNB or SNB				√	√	√
Sylvester, GA	Package Transfer			√	√	√	√
	Pre-Clean or Remill			√	√	√	√
	WNB or SNB			√	√	√	√
Dublin, TX	Package Transfer			√	√	√	√
	Pre-Clean or Remill			√	√	√	√
	WNB or SNB			√	√	√	√
Dublin, TX	Dry Roasted Redskins	√	√	√		√	√
	Dry Roasted and SNB	√	√	√		√	√
	WNB and Dry Roasted	√	√	√		√	√

Additional Lead Time Required as These Are Not Current Inventory Items.



# Olam Edible Nuts Peanut Ingredients

- Benefit from Our:
  - 30 Years of Experience and Proprietary Technologies
  - Validated Micro Kill Step and Premier Food Safety Program
  - Core Competencies
    - Foreign Material Removal
    - Maximizing Yield and Quality
    - Customer Service
    - R&D, Product Development, and Problem Solving



# Olam Edible Nuts Products and Packaging Matrix

OLAM EDIBLE NUTS PEANUT INGREDIENTS PACKAGING MATRIX (EDENTON, NC LOCATION)												
PARTICULARS	--- Cartons ---			2,000 # Tote	2,000 # Box	--- Pails ---			--- Drums ---			Bulk Tanker
	25 #	30 #	50 #			9 #	28 #	45 #	500 # Fiber	525 # Fiber	500 # Metal	
	(1 G)	(3.5 G)	(5 G)			(58 G)	(62.6 G)	(55 G)				
Dry Roasted Redskins	✓	✓	✓	✓	✓							
Dry Roasted and SNB	✓	✓	✓	✓	✓							
Dry Roast of UB WNB	✓	✓	✓	✓	✓							
Dry Roasted Granules	✓	✓	✓	✓	✓							
All Natural Peanut Paste/Butter				✓		✓	✓	✓	✓	✓	✓	✓
Stabilized Peanut Butter	✓	✓	✓			✓	✓	✓	✓	✓	✓	
Chunky Peanut Butter	✓	✓	✓			✓	✓	✓	✓	✓	✓	
Peanut Butter Variegate						✓	✓	✓	✓	✓	✓	✓
Peanut Butter Topping						✓	✓	✓	✓	✓	✓	✓
Roasted Peanut Extract								✓			✓	

Applying a Finishing Oil and/or Salting of Dry Roasted Peanuts Available Upon Request.  
 Nitrogen Flushing of Dry Roasted Peanuts or Granules Available Upon Request.  
**A 25 # Carton Holds 45 #'s Peanut Butter; a 30 # Carton Holds 50 #'s Peanut Butter; a 50 # Carton Holds 75 #'s Peanut Butter**  
 This Would be a Ropak w/ Liner, Which is Not a Current Inventory Item.  
**A 45 # (5 G) Pail Holds 37 #'s Extract; a 500 # (55 G) Metal Drum Holds 425 #'s Extract**  
 Although We Do Not Have Any Customer Using This Option, It Would be Feasible on a Large Volume.  
**AVG Bulk Tanker: 45K #'s of Paste**  
**We Recommend Export Paste/Butter be Shipped in Metal Drums.**

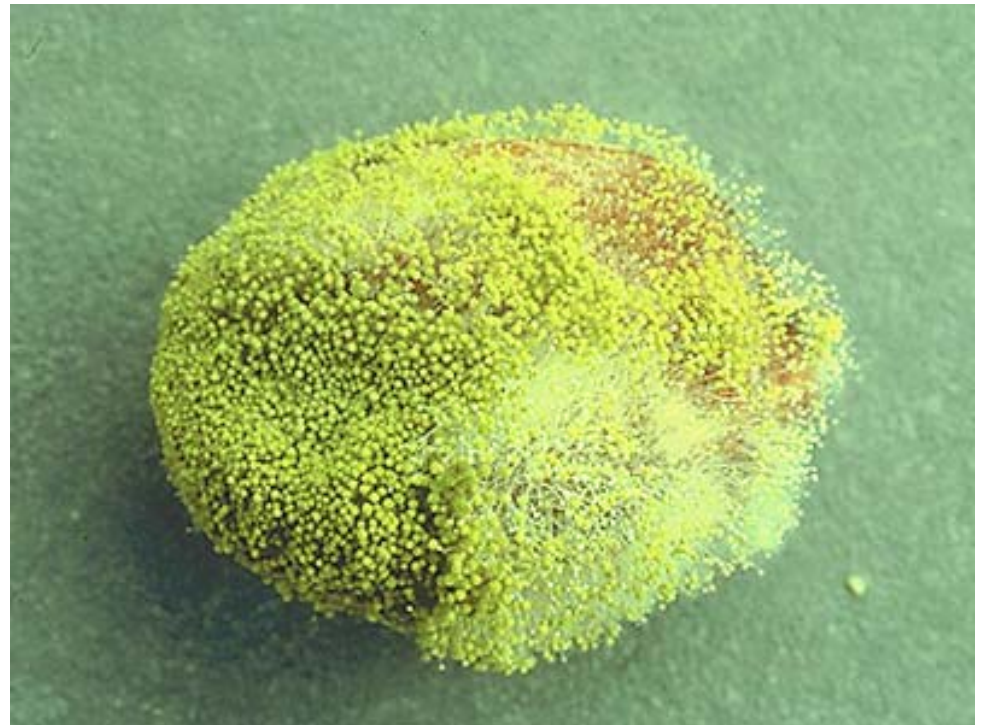


# Aflatoxin



*Aspergillus flavus*

Chia Peanut



# Aflatoxin Origin: Drought



Early County, GA: August 17<sup>th</sup>, 2010

# Aflatoxin Origin: Subterranean Pests



Lesser Cornstalk Borer

Lesser Cornstalk Borer



# Aflatoxin Origin: Subterranean Pests



Burrowing Bug

## Burrowing Bug Damage



# Olam Edible Nuts Peanut Pre-Cleaning/Blanching

- Addressing Aflatoxin and/or Damage in the 2010 Crop:

## SOUTHEAST RUNNER TYPE AFLATOXIN

<b>GRADE</b>	<b>HISTORICAL</b>		<b>2010 CROP AVG</b>		<b>2010 CROP HIGH</b>
	<b>(ppb)</b>		<b>(ppb)</b>		<b>(ppb)</b>
<b>JUMBO</b>	<b>Less Than 100</b>		<b>93</b>		<b>725</b>
<b>MEDIUM</b>	<b>100 - 200</b>		<b>167</b>		<b>790</b>
<b>#1</b>	<b>150+</b>		<b>215</b>		<b>845</b>
<b>SPLITS</b>	<b>50+</b>		<b>87</b>		<b>485</b>

# Olam Edible Nuts Peanut Pre-Cleaning/Blanching

- Addressing Aflatoxin and/or Damage in the 2010 Crop:
  - Remilling
    - Removing Both Problematic Peanuts and Foreign Material While Maintaining the Acceptable Peanuts as Redskins
    - Typically an Effective Solution to Aflatoxin and Damage Issues
    - Inconsistent Results on the 2010 Crop
  - Blanching
    - Removing Both Problematic Peanuts and Foreign Material While Converting the Acceptable Peanuts to Blanched or Skinless Peanuts
    - Typically an Effective Solution to Aflatoxin and Damage Issues
    - Consistent Success on the 2010 Crop but not Without Costs
      - ~3-5% Decrease in AVG 1st Run Passing Rate
      - ~6-10% Decrease in AVG Yield
      - ~4% Increase of Splits in Whole-Nut Blanch

# Olam Edible Nuts Peanut Pre-Cleaning/Blanching

- Addressing Aflatoxin and/or Damage in the 2010 Crop:
  - Customer Service
    - Assisted Various Manufacturers Who Historically Receive Redskins With Identifying Best Practice Opportunities to Minimize the Challenges of Processing Blanched Peanuts
  - Opportunities Identified but not Limited to the Following:
    - Screening
      - Installing New Screening Areas
      - Adjusting Existing Screening Setups
    - Maximizing Aspiration
    - Implementing Both Redskin Cleaning Equipment and Blancher By-Passes
    - Installing Roaster Belt Brush
    - Outsourcing of Roasting/Further Processing to Olam Edible Nuts

# Aflatoxin: Where We Are Today and The Road Ahead

- Why is Aflatoxin and/or Damage in the 2010 Crop so Problematic?
  - Calcium Related Issues?
    - The Peanut Grower, July 2009
      - “Managing The Newer Varieties: Is more calcium needed for the larger-seeded types?”
      - Amanda Huber, Editor The Peanut Grower
    - The Peanut Grower, May 2010
      - “Calcium In The Pegging Zone: Should you use gypsum, lime or liquid calcium?”
      - Dr. Glen Harris, University of Georgia Extension Soil Scientist

# Aflatoxin: Where We Are Today and The Road Ahead

- Why is Aflatoxin and/or Damage in the 2010 Crop so Problematic?
  - Calcium Related Issues?
    - Peanut Science and Technology (1982)
      - Dr. Harold Pattee and Dr. Clyde Young
    - Advances in Peanut Science (1995)
      - Dr. Harold Pattee and Dr. Thomas Stalker
    - Baldwinism: “If it don’t rain, it don’t matter.”
  - Adequately Staffed and Funded Peanut Research Programs Are Critical to Our Long-Term Viability
    - Land Grant Universities and Extension Programs
    - National Peanut Research Lab

Keep The Faith Because The Sun Will Come Up Tomorrow!!!



**Thank You For Your Time  
and The Opportunity To  
Present This Information**

