

# **NEWSLETTER**

# NOVEMBER 2025

# Greetings, Peanut Fam!

We're excited to bring you this edition of the APRES Graduate Student Organization (GSO) Quarterly Newsletter!

Whether you're a seasoned researcher or just peanut-curious, we hope this newsletter informs, inspires, and entertains!

This Thanksgiving, we offer our sincere gratitude to all peanut researchers. Your dedication, curiosity, and commitment to advancing peanut science make a meaningful difference for growers, consumers, and communities.

Thank you for the hard work you do throughout the year. Wishing you and your loved ones a warm, joyful holiday season.

Stay nutty, APRES GSO Team



# In this issue, you'd see

- 2025 Peanut harvest statistics
- Graduate student spotlights
- Fun Thanksgiving crossword
- Thanksgiving peanut dessert recipe
- Previous and upcoming events

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Join the conversation and stay engaged with the APRES comm unity year-round

Please take a moment to fill out this questionnaire-your feedback is greatly appreciated.





Harvest season is officially a wrap! As we head toward Thanksgiving, here are a few USDA-forecasted peanut stats for 2025 to snack on.



Total production 2024: 6.48 billion lbs 2025: 7.47 billion lbs

Area Planted2024: 1.8M acres2025: 1.95M acres

State	Harvested Area (1k acres)	Yield per acre (lbs)	Production (1k lbs)
Alabama	192.0	3,300	633,600
Arkansas	47.0	5,000	235,000
Florida	167.0	3,900	651,300
Georgia	915.0	4,200	3,843,000
Mississippi	20.0	4,000	80,000
Missouri	26.0	5,500	143,000
North Carolina	139.0	4,100	569,900
Oklahoma	19.0	4,100	77,900
South Carolina	86.0	3,800	326,800
Texas	257.0	3,000	771,000
Virginia	33.0	4,200	138,600

Area Harvested 2024: 1.74M acres 2025: 1.9M acres

Productivity (per acre) 2024: 3,723 lbs 2025: 3.93 lbs

♣ Top five States (in production)

- 1. Georgia
- 2. Texas
- 3. Florida
- 4. Alabama
- 5. North Carolina

\*Source: USDA

Data as of Nov. 1, 2025



# Graduate Student Spotlight - Zachary Jones



# Can you share a bit about yourself and your major program?

My name is Zachary Jones, and I'm a Ph.D. candidate from Florence, South Carolina, in the Plant and Environmental Sciences department at Clemson University under the guidance of Dr. Sachin Rustgi.

# What is the focus of your research, and what drew you to this area?

My research can be divided into two main objectives: deciphering the genetic regulation of allergenic peanut proteins through the introgression of wild peanut species into cultivated peanut and creating reduced-immunogenicity peanuts using conventional breeding and gene editing. I was drawn most to this area because it allows me to combine my interests in medicine and plant science to help improve human health.

## How do you think your research could impact peanut farming or the industry?

The long-term goal of my research is to develop a reduced immunogenicity peanut line that can be used in dietary therapies to help train a patient's immune system to produce less severe allergic reaction symptoms.

#### What do you find most exciting or challenging about working with peanuts?

What excites me most about working with peanuts is the opportunity to share my research and hear people's enthusiasm for progress being made to reduce peanut allergies.

## What's your favorite thing about being part of APRES as a graduate student?

My favorite thing about APRES is getting the chance to meet others who work with peanuts and learn more about their research.

## What are some of your interests or hobbies outside of your research?

Outside of research, I enjoy playing golf and rooting on the Clemson Tigers football team.

## Looking ahead, what are your career goals after graduation?

After graduation, I would like to work in academia, continuing to research ways that plants could be utilized in the treatment of human diseases.

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PAGE 3

# Graduate Student Spotlight - Santiago Emil Johnson



#### Can you share a bit about yourself and your major program?

My name is Emil, and I came to the U.S. from the Philippines to pursue my Ph.D. degree. Having worked on fungi during both my bachelor's and master's, I knew I would want to go somewhere where I could keep working on what I loved. I'm currently a Ph.D. candidate in the Department of Plant Pathology at the University of Georgia.

#### What is the focus of your research, and what drew you to this area?

My research is all about *Aspergillus flavus*. The two main aspects of my research are that (1) I'm trying to understand this pathogen more through transcriptomics and large-scale population genomics, and (2) looking at new ways to deal with aflatoxin contamination either through novel use of biotechnology (like RNA interference) and the use of wild species. What I love about my research is how multidisciplinary it is. Coming from someone who used to exclusively work in the lab, my current projects get me out in the field all summer long, work with industry collaborators, a lot of bioinformatics work, and perform pretty cool experiments – all while still being able to work with more fungi than I could ever dream of.

# How do you think your research could impact peanut farming or the industry?

Recommendations for *A. flavus* and aflatoxin management have remained relatively unchanged for decades, despite the increasing economic losses due to these issues. Especially with the looming threat of climate change, which could potentially exacerbate *A. flavus* infections and aflatoxin contamination, the work we do in our lab always has the growers and the industry in mind. For example, not only can we learn a lot about the pathogen through our population genomics study, but we also plan to use our isolate and genome collection to be of use to the peanut community by potentially identifying geographic hotspots for aflatoxin contamination and monitoring fungicide resistance markers.



#### What do you find most exciting or challenging about working with peanuts?

I think the most exciting thing about working with peanuts is that I get to meet, and potentially collaborate, with other people who work with peanuts. Be it extension agents, industry collaborators, professors, or other graduate students, there's just something about hanging out with other people who enjoy working with such a cool crop.

#### What's your favorite thing about being part of APRES as a graduate student?

My favorite thing about APRES is how close the community is. I recently attended my second APRES meeting and it already felt like I was meeting old friends. Plus, I don't think any other conference can beat the APRES snack table.

#### What are some of your interests or hobbies outside of your research?

Lately, my fiancée and I have been trying to go to different Georgia state parks (we just visited our 10th park). I enjoy watching movies and just generally enjoy learning new hobbies or skills. Last year, I learned how to juggle from an old man at the Georgia Renaissance Festival. Currently, I'm learning how to ride a skateboard.

#### Looking ahead, what are your career goals after graduation?

While I might not know exactly where I will end up or what job title I want to have, I know that I would like to have a career that would allow me to put both research and teaching at the forefront. While I enjoy research, I am equally passionate about teaching and mentoring.

PAGE 4

# Graduate Student Spotlight - Yaswant K. Pankaj

#### Can you share a bit about yourself and your major program?

I am Yaswant K. Pankaj, a Ph.D. student majoring in Plant Breeding & Genetics at the Department of Soil and Crop Sciences, Texas A&M University. My program focuses on integrating genomics, high-throughput phenotyping, and data analytics to accelerate peanut improvement under drought and salinity stress.

#### What is the focus of your research, and what drew you to this area?

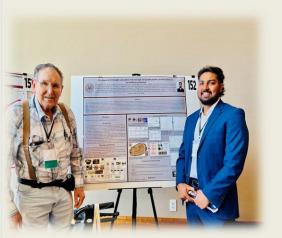
I work on developing and characterizing high-oil, drought- and salinity-tolerant peanut lines. My research combines field experiments, UAV and ground-based phenotyping, SNP chip and KASP genotyping, and machine learning models built on Raman spectroscopy data to identify markers and phenotypes associated with stress tolerance and oil quality. I was drawn to this area because it allows me to apply both classical breeding and cutting-edge genomic tools to improve a crop that is economically and nutritionally important.

#### How do you think your research could impact peanut farming or the industry?

By identifying and validating genetic markers and phenotypic signatures for drought and salinity tolerance and for oil quality traits, my work can help breeders release cultivars that are more resilient and have higher market value. This reduces production losses under water-limited conditions and meets the growing demand for high-oil peanuts for food and industrial uses.

#### What do you find most exciting or challenging about working with peanuts?

Peanut is a tetraploid, making its genetics complex, but that complexity also makes the research exciting. I enjoy bridging large-scale genotyping and novel phenotyping methods to dissect traits that were previously hard to measure in the field. The biggest challenge is managing the volume of data from multiple seasons, locations, and technologies and turning it into actionable breeding information.



#### What's your favorite thing about being part of APRES as a graduate student?

APRES provides a community where I can interact with scientists, breeders, and industry partners who are all passionate about peanuts. Presenting my work at APRES and receiving feedback from leaders in the field has been invaluable for improving my research and building professional connections.

#### What are some of your interests or hobbies outside of your research?

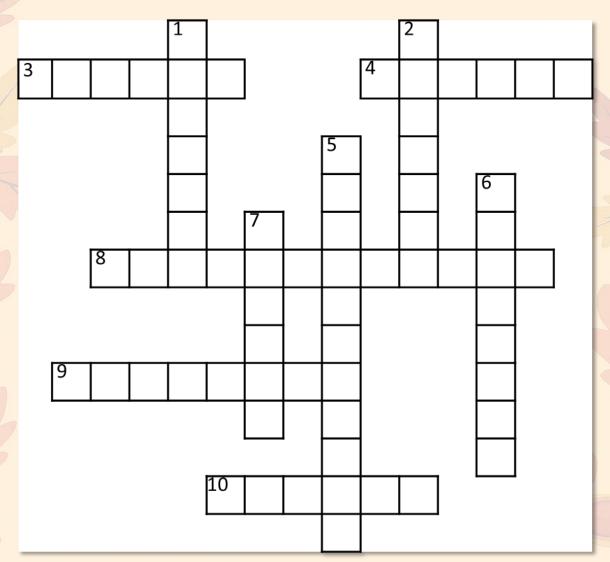
I enjoy graphic design, travelling to new places, going to concerts and movies, staying active, and exploring different foods and cultures. These activities help me recharge and bring creativity back to my research.

#### Looking ahead, what are your career goals after graduation?

After completing my Ph.D., I plan to continue working at the interface of breeding and genomics—either as a postdoctoral researcher or in a plant breeding/genomics role with a public agency or private company—developing resilient, high-quality peanut varieties and training the next generation of scientists.



# Thanksgiving Crossword



## Across

- 3. First county to grow commercial peanuts in the USA
- 4. Daily fuel for grad students
- 8. Popular spread made from peanuts
- 9. A company famous for Mr. Peanut
- 10. Peanut type, used for peanut butter

## Down

- 1. Leading peanut-producing state
- 2. Often used to describe Virginia peanuts
- 5. Method to determine peanut maturity (and great at impressing visitors)
- 6. Process to remove the seeds from peanut pods
- 7. Thanksgiving centerpiece

# Thanksgiving Dessert Peanut Butter Chocolate Cheesecake

## Ingredients:

- 4 up + 2 tbsp chopped unsalted peanuts (divided)
- 1 store-bought chocolate crumb crust
- 2 tbsp caramel topping (divided)
- 1½ cups peanut butter & milk chocolate morsels
- ❖ ¼ cup milk
- 8 oz cream cheese (softened)
- 4 ¼ cup powdered sugar
- 1½ cups frozen non-dairy whipped topping (thawed)





#### Directions:

- Prepare the crust layer: Sprinkle ¼ cup of the chopped peanuts over the bottom of the chocolate crust. Drizzle with 1 tablespoon of caramel topping. Set aside.
- Melt the chocolate-peanut morsels: In a microwave-safe bowl, combine the morsels and milk. Microwave on medium-high (≈70%) power for 45 seconds, then stir. If not fully melted, microwave for an additional 10-15 seconds, then stir until smooth.
- Make the filling: In a large mixing bowl, beat the softened cream cheese and powdered sugar until smooth and creamy.
- Combine: Stir the melted chocolate mixture into the cream cheese mixture. Then add the thawed whipped topping and fold/stir vigorously until the filling is smooth and homogenous.
- Assemble the cheesecake: Spoon the filling into the prepared crust, swirl the top for a nice finish. Sprinkle the remaining chopped peanuts on top and drizzle with the remaining caramel topping.
- Chill: Cover and refrigerate for at least 1 hour (or until the cheesecake is set/frozen) before serving.

Nutrition (approx. per 4.7-oz serving) Calories: 546 | Fat: 35 g Carbohydrates: 58 g Protein: 7 g

# Previous and Upcoming Events



Peanut research had a powerful presence at CANVAS 2025, held November 9-12 in Salt Lake City, Utah, where more than 40 peanut-focused abstracts were submitted across 14 scientific divisions, showcasing broad momentum and innovation in the field.

Researchers presented advances in agronomic production systems, climatology and modeling, land management, breeding and genetics, physiology and metabolism, crop ecology and quality, forage systems, genomics and biotechnology, biology and biochemistry, and soil fertility and plant nutrition. This work was driven by contributions from leading institutions, including the University of Georgia, Auburn University, Texas A&M, Texas Tech, Virginia Tech, Fort Valley State University, the University of Florida, Clemson University, and the University of São Paulo. The wide range of topics and strong participation highlight growing collaborative efforts aimed at improving peanut productivity, sustainability, and genetic advancement, reinforcing the crop's increasing importance within agricultural research.

APC 2025 Insights Summit December 10-11, 2025 Fairmont Washington, D.C., Georgetown -Washington, D.C.

USA Peanut Congress June 8-11, 2026 Ritz-Carlton - Amelia Island, Florida 58th Annual APRES Meeting July 14-16, 2026 Caribe Hilton – San Juan, Puerto Rico

If you have any news or information to share, please reach out to our team:

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