

Fall 2025 Newsletter

Department of Plant and Environmental Sciences | <https://aces.nmsu.edu/academics/pes/>

Phone: (575) 646-3405 - Email: pesadmin@nmsu.edu

December, 2025

Introduction

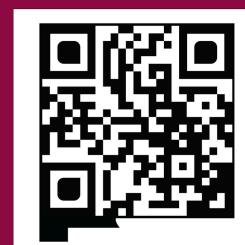
On December 12th, 2025, the Department of Plant and Environmental Sciences recognized and celebrated the graduation of eight undergraduate and five graduate students (two MS and three PhD). We all know it was a long journey for them, they had to go through some challenging situations at times. We must acknowledge their great accomplishments and help them on their way to their next experience. There are many recognitions and awards including the faculty and staff activities that are highlighted in this newsletter.

We know that our graduates will do very well in their respective career plans and desires. As usual, our faculty and staff are highly engaged in academic, research, training and workshop, outreach, and collaboration including international activities. There are other excellent stories in the newsletter, and I encourage you all to read them. I sincerely thank our faculty and staff, who spent significant hours mentoring and coaching our students and participating in all the excellent activities. Also, I thank our alumni, friends, and supporters of the department who provide financial and other resources in support of our student activities and academic and research programs.

Department Head



Dr. Anowar Islam



Start Your Journey
with Plant and
Environmental
Sciences!

Scan to connect!

<https://pes.nmsu.edu/>

In This Issue:

Page 2-3 **Soil Judging Regionals:**

Page 4 **NMSU & UACH Dual Degree Program:**

Page 5 **Saffron Research:**

Page 6 **International Agronomy Congress:**

Page 7 - 8 **New Mexico State Fair:**

Page 9 **Floral Club Highlights:**

Page 10 **Alum Highlight:**

Page 11 **Competition Winner Highlights:**

Page 12 **Excellence in Advocacy:**

Page 13 **Homecoming Door Decor:**

Page 14 **Holidays with PES & EPS:**

Page 15 **Student Awards:**

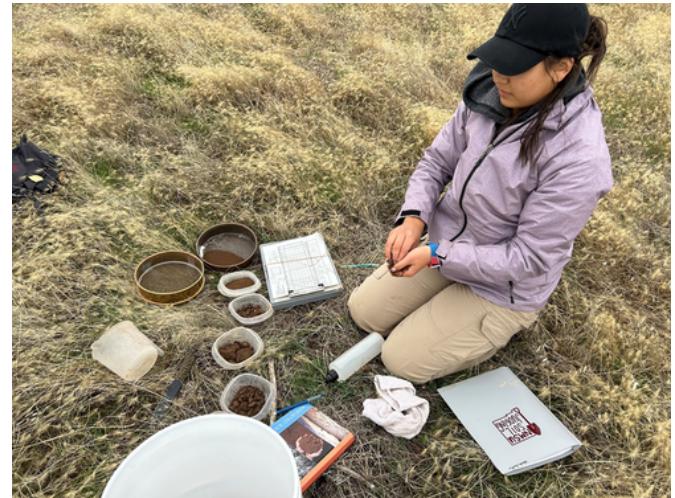
Page 16-19

Graduation & Ceremony

NMSU Soil Judging Team Secures 3rd at Western Regionals

On Saturday, October 25th, New Mexico State University's Soil Judging Team competed in the Western Regional Soil Judging Competition taking place near Chico Ca. Brooke White, Lucas Trujillo, Katie Stansell, Michael Rodela, and Kaitlin Velarde (representing NMSU) went against teams from San Luis Obispo, Humbolt, Fresno State, Modesto, and UC Davis.

The NMSU team earned 3rd place overall, securing qualification for the National Soil Judging Competition in the Spring Semester. In addition, Brooke White also achieved 3rd place in individual scoring, marking a notable achievement at the regional level.



NMSU's Soil Judging team member Kaitlin Velarde performs a texture-by-feel assessment of soil during the regional competition.



NMSU's 2025 Soil Judging Team and Coaches. From left to right: Lucas Trujillo, Josh Propfe, Michael Rodela, Brooke White, McKenzie Stock, Katie Stansell and Kaitlin Velarde.

NMSU Soil Judging Team Secures 3rd at Western Regionals (Cont.).

Soil judging requires competitors to describe, classify, and interpret four contrasting soils that they **have never seen before**. In this year's competition students battled rain, strong wind, and cold temperatures in grassland soils of California's Northern Central Valley. The opportunity for students to apply classroom learning in new landscapes is a fundamental part of soil judging. NMSU coaches Graduate Students Josh Propfe and McKenzie Stock were particularly proud of the team's strong showing, given they were working with soils very different from those found in southern New Mexico and competing against teams with more experience with these soil types. This win highlights NMSU's continued soil judging success.



Lucas Trujillo, Katie Stansell, Brooke White, Michael Rodela and Kaitlin Velarde of NMSU's soil judging team describe a soil profile during the regional competition.



NMSU and UACH Dual Degree Program



UNIVERSIDAD AUTÓNOMA DE
CHIHUAHUA

A new academic partnership between the Autonomous University of Chihuahua (UACH) and New Mexico State University was formalized, allowing the possibility for students to enroll in a dual degree program within agricultural pathways at each college.

The program focuses on two distinct pathways for students. The first dual degree merges the Animal Production Systems Engineering Degree from UACH and the Industry option of Animal Sciences from NMSU, while the second merges the Horticultural Engineering degree from UACH and the Horticulture degree from NMSU. The Dual Degree Program aims to expand academic mobility and provide students with stronger professional avenues.

The ceremony was attended by Mr. Luis Alfonso Rivera Campos, Rector of the Autonomous University of Chihuahua; Dr. Valerio Ferme, President of NMSU; Dr. Rolando A. Flores Galarza, Dean and Chief Administrative Officer of the College of Agricultural, Consumer and Environmental Sciences at NMSU; Dr. Alfredo Pinedo Álvarez, Director of the Faculty of Zootechnics and Ecology; Dr. Aarón González Aldana, Director of the Faculty of Agrotechnological Sciences; Ms. Lizza Ivett Solís Chávez, Director of International Relations at UACH; and Dr. Anowar Islam, Head of the Department of Plant and Environmental Sciences at NMSU. Read the full article [HERE](#)

For more information, contact:

Dr. Niall Hanan: nhanan@nmsu.edu or **Dr. Anowar Islam:** mislam@nmsu.edu



Saffron Research at Alcalde Offers New Opportunities for New Mexico Growers

Dr. Saeid Zehtab Salmasi, Associate Professor of Agronomy and Research Director located at New Mexico State University's Sustainable Agriculture Science Center (SASC) in Alcalde is leading groundbreaking research on saffron (*Crocus sativus*) - also known as the worlds most valuable spice.

Recent trials have shown saffron's adaptability to northern New Mexico's climate, thriving in both hoop-house and open field systems. with yields reaching up to 6kg/ha of dry stigmas and requiring minimal irrigation, Saffron offers a high-value, low-input crop option for small farms and water limited regions.



The program's impact was recently featured in the Santa Fe New Mexican article: "Striking Gold: Growers in Northern New Mexico try Saffron, Worlds Most Expensive Spice". Read the full article [HERE](#)

For more information, contact:

Dr. Saeid Salmasi

saeidzs@nmsu.edu (505) 852 - 4241

Department Head - Dr. Anowar Islam

maislam@nmsu.edu (575) 646 - 3405

Dr. Grover invited to speak at the 6th International Agronomy Congress held in New Delhi, India



Dr. Kulbhushan Grover traveled to India to participate in the 6th International Agronomy Congress held in New Delhi, India in November 2025 where he delivered an invited lecture as a lead speaker on "Strengthening diaspora linkages and fostering cross-border collaborations for sustainable agricultural advancement" and participated in a panel discussion on Indo-US collaborations. Dr. Grover also signed an MoU on behalf of the Association of Agricultural Scientists of Indian Origin, USA with the Indian Society of Agronomy to foster research and education collaboration opportunities between Indian and US institutions including NMSU.

During his trip in India, Dr. Grover also visited several research and academic institutions including Indian Council of Agricultural Research, and Indian Agriculture Research Institute, New Delhi; Punjab Agricultural University (PAU), Ludhiana; PAU Regional Research Station, Bathinda; PAU Agriculture Institute, Bathinda; and PAU Farm Science Center, Mansa. He delivered invited lectures and interacted with faculty, students, and administrators to explore opportunities for collaborations and promote student recruitment at NMSU. He received several honors including from Indian Society of Agronomy, PAU Directorate of Extension and Director of Agriculture Institute.



Dr. Grover delivered an invited lecture on "Opportunities for higher studies at NMSU and other US institutions" at PAU Agriculture Institute, Bathinda, India. He interacted with the faculty and students and discussed potential collaboration and recruitment of prospective students at NMSU.



Dr. Grover delivered an invited lecture on Research and Education in Agriculture: Opportunities and Challenges at Department of Agronomy, Punjab Agricultural University, Ludhiana, India

New Mexico State Fair



Demonstrations with the Master Gardener Program through Dona Ana



Dr. Dubois showcasing weather station research and the weather.nmsu.edu website



PES demonstrations at the NM State Fair, including Dr. April Ulery and Josh Propfe with a demonstration on soil cation exchange capacity (CEC)



Dr. Blair Stringam demonstrating with an irrigation system how water is connected throughout the environment

State Fair - Floral



Members of the Floral Club competed in the Adult Division of the Southern New Mexico State Fair Floral Design Competition, submitting 17 total entries. Some notable achievements include Best of Show awarded to Christian Ignacio and Best of Lot/Category honors earned by Helena Loest, Sabrina Montoya, Hope Cannedy, Addison Yoder, and Joshua Jones. The club also won numerous first, second, and third place ribbons.



Floral Club Highlights

The NMSU Floral team spent the fall and spring semesters accumulating the funds, skills, and qualifications to compete over the summer in the American Institute of Floral Designers student design competition (SAIFD) and the West Texas and New Mexico regional design competitions, Dorsey and Silver Cup.



WTNM was held the first weekend in August in Ruidoso, NM, and the floral team took 5 students, of which 4 were eligible to compete. At the regional WTNM convention, students were in competition with industry professionals in two categories. In the prestigious Dorsey Cup, Sabrina Montoya placed 1st, and 3rd place Joshua Jones. In the Silver Cup competition, Journey Lopez received 2nd place and Helena Loest placed 3rd. Additionally, students designed and presented floral concepts on stage during coach Sabine Green's and Dov Kupfer's educational lecture Opposite's Attract. Sabine was awarded the WTNM Member of the Year award for her efforts in floral education within the region.

Finally, the NMSU floral team and students from the beginning floral design class facilitated the Floral Artist's reception and silent auction for finals week with 24 arrangements total for the event.



The intercollegiate competition for AIFD was in Palm Springs, CA in July, and NMSU sent 7 students to the convention, 5 competing in the student competition, one testing for industry credentialing, and one for networking. Maxine Burford received her CFD (Certified Floral Designer) credentials, and Hope Cannedy placed 1st in the wearable flowers category. Sabrina Montoya placed 9th overall, in a group of 29 students.



NMSU Alum Highlight



Dr. Derek Barchenger, Senior Scientist and head of the Global Pepper Breeding Program at the World Vegetable Center, has been named the 2025 recipient of the Norman E. Borlaug Award for Field Research and Application. He has been recognized for improvements to pepper breeding with overall advancements in nutrition, yield, and climate resilience. His work directly aids and supports farmers around the world growing these peppers.

Raised in Oklahoma, Barchenger developed an early fascination with pepper diversity. This led him to obtain his doctoral degree in Plant and Environmental Sciences at New Mexico State University, where he explored the cultural and historical significance of chile peppers. He then went on to join the World Vegetable Center in 2016, quickly rising to lead the global

pepper breeding program in 2018. He expanded the program into a multidisciplinary, internationally coordinated effort with breeding programs and testing sites across Asia, Africa, Latin America, and the Caribbean.

Under his leadership, WorldVeg has bred and released 24 new pepper varieties and provides 72 new pepper germplasm lines annually to consortiums across Asia and Africa - material now used by more than 50 companies and reaching an estimated 300,000+ farmers. Barchenger has pioneered high- throughput phenotyping tools and has identified key traits for heat tolerance and disease resistance.

Barchenger's impact reaches science, conservation, and farming communities worldwide. He has shared over 1,000 chile pepper lines with partners in 45 different countries, created the first capsicum core collection, and contributed to the Global Capsicum Conservation Strategy. With over 45 peer reviewed publications, hundreds of trainees, and leadership in the upcoming International Pepper Conference, Barchenger's work has elevated pepper breeding across the world.

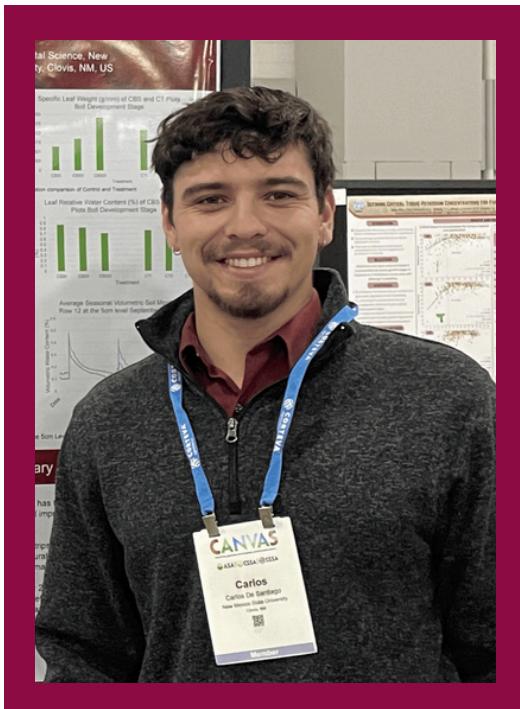
For more information, contact: **Dr. Chris Cramer** - cscramer@nmsu.edu / (575) 646-2654
Dr. Anowar Islam - maislam@nmsu.edu / (575) 646-3405

Competition Highlights



Anjila Devkota

**ASA Biochar: Agronomic and Environmental Uses
Community Poster Competition - 3RD PLACE**



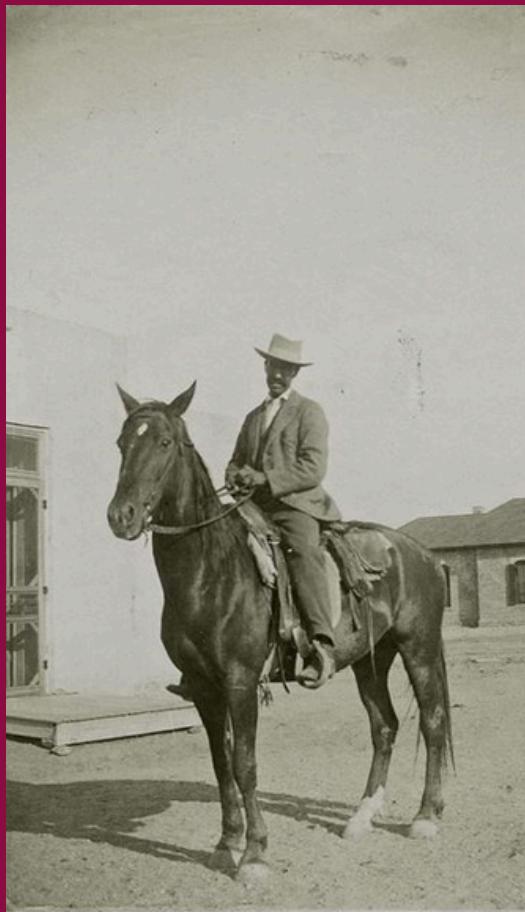
Carlos De Santiago

SSSA Soil & Water Management & Conservation Division - 5 Minute Rapid Oral + Poster Competition - 2ND PLACE

Excellence in Advocacy Award



Dr. KC Carroll of Plant and Environmental Sciences has been chosen by the American Society of Agronomy (ASA), Crop Science Society of America (CSSA) and the Soil Science Society of America (SSSA) as a recipient of the 2026 Excellence in Advocacy Award. This includes an all expenses paid trip to Washington, DC to participate in the 2026 Congressional Visits Day (CVD). Here, Dr. Carroll will receive advocacy training before meeting with members of Congress to support USDA research funding. We at PES want to congratulate Dr. Carroll on this well deserved recognition.



ACES Hero Highlight

Fabian Garcia

January 20th, 1871 - August 6th, 1948

Fabian Garcia graduated from New Mexico State University, then known as the New Mexico College of Agriculture and Mechanic Arts, as part of its first class in 1894. He went on to earn his master's degree in Agricultural Science in 1906.

Garcia is credited with developing new varieties of chile peppers, pecans, and onions, with a particular focus on breeding bright red chiles. He also introduced improved varieties of cotton, apples, grapes, peaches, and potatoes that were better suited to the climate of southern New Mexico.

In recognition of his achievements, NMSU has named several facilities in his honor, including the horticultural farm, the Faculty Senate Chamber, the student advising center, and a freshman dormitory.

PES Wins Door Decorating Contest



PES took first place in the Homecoming door decorating contest under the “Crim-Sin City” theme, earning a plaque engraving in Gerald Thomas Hall.



Holidays with PES and EPS

Happy
Holidays!



; Felices
Fiestas!



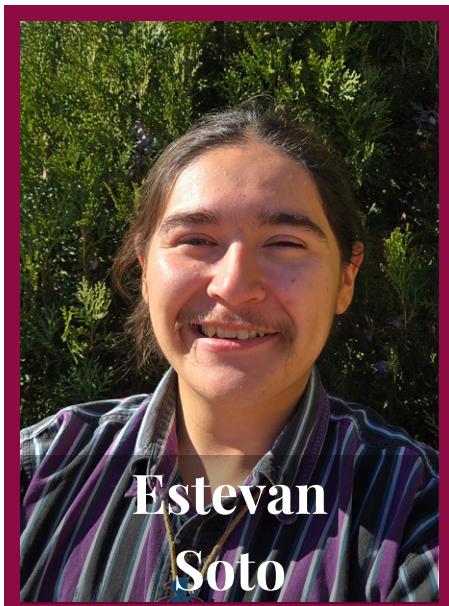
Student Awards and Honors



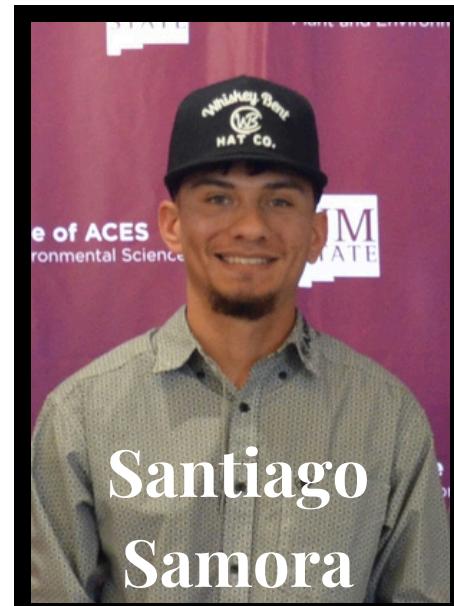
Deans Award of Excellence
for Undergraduates



Deans Award of Excellence
for Graduates



Departmental Outstanding
Student Award



Departmental Outstanding
Student Award

PES Fall 2025 Graduation Ceremony

The Department of Plant and Environmental Sciences held its Fall 2025 graduation ceremony on Friday, December 12th, in the Skeen Hall Rotunda. Friends, family, and faculty gathered to honor the accomplishments of the graduating students and recognize their dedication to academic excellence.

The ceremony began with remarks from Dr. Anowar Islam, who congratulated the graduates and acknowledged their hard work. Faculty members and advisors were also in attendance to support and celebrate the students' graduation.

We're incredibly proud of our students in the Department of Plant and Environmental Sciences. Over the years, they've shown resilience, dedication, and passion for their fields. This celebration marked not only the conclusion of their hard work but also the beginning of exciting new opportunities.

As our graduates step into careers, research, or further studies, they carry with them the skills and experiences they've built during their time here. Congratulations to the Fall 2025 graduates! We can't wait to see the amazing things you'll do in the future.



PES Graduating Class:



B.S. (Agriculture) - Horticulture

Wren Barber
Gus Curnett,
Zachary Gurule
Estevan Soto

B.S. (Agriculture) - Soil

Mario Rodriguez

B.S. (Environmental Science)

Thomas Rojo
Santiago Samora

B.S. (Genetics and Biotechnology)

Jaden Wachi



M.S. (Plant and Environmental Sciences)

Sangam Panta
Piumi Yaddehi Arachchillage

Ph.D. (Plant & Environmental Sciences)

Olufemi Adebayo
John Agnew
Abid Nazir



College of Agricultural, Consumer, and Environmental Sciences
Agricultural Experiment Station
Department of Plant and Environmental Sciences
New Mexico State University
MSC
Skeen Hall Room N127
Box 30003 MSC 3Q
Las Cruces, NM 88003

Phone: (575) 646-3405
Fax: (575) 646-6041
Email: taylorlh@nmsu.edu

PES Fall 2025 Graduation Ceremony



Zachary Gurule

Major: Horticulture
Advisor: Dr. Ryan Goss

Gus Curnutt

Major: Horticulture
Advisor: Dr. Ryan Goss



Estevan Soto

Major: Horticulture
Advisor: Dr. Ryan Goss

Thomas Allen

Major: Environmental Science
Advisor: Dr. Blair Stringam



Congratulations



Plant and Environmental Sciences congratulates all of our graduates, and wishes you success in all of your future endeavors.
Once an Aggie, Always an Aggie!

The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs. New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.



College of Agricultural, Consumer, and Environmental Sciences
Agricultural Experiment Station
Department of Plant and Environmental Sciences
New Mexico State University
MSC
Skeen Hall Room N127
Box 30003 MSC 3Q
Las Cruces, NM 88003

Phone: (575) 646-3405
Fax: (575) 646-6041
Email: taylorlh@nmsu.edu

PES Fall 2025 Graduation Ceremony



Santiago Samora

Major: Environmental Science
Advisor: Dr. Blair Stringam



Sangam Panta

Masters: Plant & Environmental Sciences
Advisor: Dr. Sangu Angadi



Piumi Yaddehi Arachchillage

Masters: Plant & Environmental Sciences
Advisor: Dr. Rajan Ghimire



Olufemi Adebayo

PhD: Plant & Environmental Sciences
Advisor: Dr. Rajan Ghimire



John Agnew

PhD: Plant & Environmental Sciences
Advisors: Drs. Omar Holguin & Kristen Bowers



Abid Nazir

PhD: Plant & Environmental Sciences
Advisor: Dr. Niall Hanan



Congratulations



Plant and Environmental Sciences congratulates all of our graduates, and wishes you success in all of your future endeavors.
Once an Aggie, Always an Aggie!