Agricultural Experiment Station
Leyendecker Plant Science Center
leyendeckersc.nmsu.edu | 575-646-2281

VISION

Leading the arid southwest in climate-smart and precision agricultural manage- ment systems for sustainable and climate-resilient irrigated cropping systems.

MISSION

The mission of the Leyendecker Plant Science Research Center is to improve the lives of New Mexicans, the nation, and the world through research, teaching, and Extension.

- Features approximately 200 acres of land dedicated to a variety of research and demonstration trials to enhance the sustainability of southern NM.

- NMSU Weed Science Program is hosted at the Leyendecker PSRC and has developed several farmer-friendly weed control techniques for weed suppression in farm fields.

- Long-term soil health research field established to evaluate how different practices affect crop productivity, carbon sequestration, soil resiliency, and greenhouse gas emissions.

Value Added to New Mexico

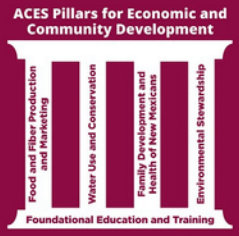
- Evaluating interaction between chile growth and solar panel energy production
- Development of guayule trials with potential to facilitate domestic demand
- Evaluating and breeding commercial varieties of Alfalfa

The Leyendecker Plant Science Center (PSC) headquarters was purchased by the University in 1969 and consists of 203 acres. Projects occurring at the Leyendecker PSC include cotton, chile, alfalfa, and onion plant breeding, precision farming, pecan research, drip irrigation research, soil health research, and a multitude of other projects and programs.

ONGOING RESEARCH

Research conducted at the Leyendecker Plant Science Research Center is purposed to improve the lives of New Mexicans, the nation, and the world through research, teaching, and Extension. The Leyendecker Plant Science Research Center serves as the outdoor agronomic laboratory for researchers located on the NMSU main campus in Las Cruces. Leyendecker is an emerging hub for the application of digital agriculture tools to southwestern agriculture.

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.



RECENT IMPACTS

- In 2022, research conducted at Leyendecker Plant Science Research Center advanced agricultural productivity and sustainability in southern NM. Specific impacts of these research projects include the development and dissemination of the best management systems and improving the yields of commodity crops such as chile, alfalfa, cotton, pecan, guayule, guar, and corn. Diseases, weeds, nutrients, and irrigation management strategies were developed and shared with producers and stakeholders in southwestern NM during field days that occurred at the station.

- Research at the center demonstrated a 13% increase in crop yield and improvements in multiple soil indicator measurements after the application of soil health practices. Funding for research projects was procured from several agencies, including the US Department of Agriculture-National Institute of Food and Agriculture; the Foundation for Food and Agricultural Research; the New Mexico Chile Commission; Western Sustainable Agriculture Research and Education; the New Mexico Department of Agriculture; and private companies.

- Leyendecker PSRC provided opportunities for training for different categories of clientele, ranging from K–12 school students to university students, agricultural professionals, farmers, and stakeholders in southern NM, by using research plots as living labs. Research and outreach activities at Leyendecker PSRC are well-positioned to address the needs of producers, agricultural support professionals, students, and other stakeholders in southwestern NM.

COMMUNITY OUTREACH

The Center is an integral asset in outreach efforts purposed to engage with youth, undergraduate, and graduate students, along with state, national, and international academics and stakeholders. The Center hosts numerous educational events throughout the year. Annual field days are hosted at the Center. These free events enable participants to learn about research being conducted at the Center while providing the opportunity to ask questions and engage with research personnel in a one-on-one, in-person environment.

Leyendecker Plant Science Center
New Mexico State University
7200 Plant Science Circle, Las Cruces, NM 88003
Phone: 575-646-2281
Email: lyendeck@nmsu.edu