# Agricultural Experiment Station

**Agricultural Science Center at Los Lunas** 

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Located on 200+ irrigated acres, just 20 miles south of Albuquerque, the Los Lunas Agricultural Science Center (ASC) evaluates crop adaptability, performance, and related cultural practices such as irrigation, pest management, plant growth and persistence, and propagation techniques. Having a research center centrally located within the state, near the largest metropolitan area, is a major asset and allows for broad rural and urban stakeholder service. Research and demonstration crops include alfalfa and other forage crops, beans, chile, cover crops, fruit trees, wine and table grapes, jujube, tomatoes, ornamental landscape plants, and others.

### VISION

Improving the lives and livelihoods of the diverse agronomic and horticultural stakeholders situated at the urban-rural interface through relevant and innovative research and Extension programs.

#### MISSION

The mission of the Agricultural Science Center at Los Lunas is to enhance the sustainability of natural resources in the Middle Rio Grande Valley through research and Extension programming on crops and other plant-based systems important to the region. The center cooperates with the USDA-NRCS Los Lunas Plant Materials Center (PMC) to solve critical water and soil conservation issues.

#### VALUE ADDED TO NEW MEXICO

- Hay and forage crop cultivation
- Alternative and cover crop usage
- Soil health and carbon management
- Urban agriculture, horticulture, and landscapes
- Agrivoltaics for small farms

# ONGOING RESEARCH

Researchers at the ASC are studying strategies to alleviate heat and water stress and reduce tomato fatality rates in an effort to increase production and improve the gardening experience. Evaluation of new hybrid table grape and jujube cultivars is ongoing, and wine grape hybrids continue to be evaluated to determine the bestadapted varieties suited to the region. Cover crop studies are conducted to investigate pest suppression in chile pepper and the potential to improve soil health.



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. Food and Fiber Production and Marketing water Use and Conservation Family Development and Family Development and Health of New Medicans Environmental Stewardship

ACES Pillars for Economic and

# RECENT IMPACTS

Research has demonstrated positive urban landscape management strategies that influence soil quality and

'NuMex Odyssey' was released recently. This cultivar possesses traditional New Mexican green chile pepper flavor, low heat, and provides a higher percentage of mechanically harvested marketable green chile fruit without mechanical damage compared to current, standard industry NM-type green chile pepper cultivars. The development of high-yielding, machine-harvestable chile pepper cultivars is important for NM growers due to the issues related to manual labor and the presence of different production constraints. A new cultivar is in development with anticipated release within the next year.

Preliminary results from a shaded tomato study suggest multiple benefits of shade cloth such as possible improved fruit quality, reduced water requirements, and potential exclusion of the the beet leafhopper (disease vector).

Forage programs improve regional production by increasing awareness of hay and pasture species and variety selection, water management, and alternative crop and high-value forage marketing opportunities.

Long-term jujube cultivar trials across New Mexico have demonstrated suitable cultivars adapted to each growing region, improving yield and economic income.

## COMMUNITY OUTREACH

The Los Lunas ASC hosts multiple Extension and outreach events each year. These include several seed saving, horticultural, and fruit educational workshops, forage and chile field days and farm tours, as well as a large array of online workshops and webinars. A large field day and open house are hosted every other year, where the community is invited to see research projects being conducted at the station. Faculty and staff respond to hundreds of stakeholder requests for information each year via phone calls, emails, office walkins, and site visits, including from surrounding states and internationally.

The Los Lunas ASC hosts twice-weekly outreach workdays for volunteers to help with various horticultural efforts at the center, like fruit tree pruning in winter, maintaining experimental tomato plots and data collection in summer, and perpetual weeding. Events like these provide an opportunity for community

participants to learn the basics of plant care and accumulate volunteer service hours. The NMSU Los Lunas Ag Science Center Learning Garden serves as a convenient site for visitors including youth and student outreach to learn about sustainable gardening and landscaping practices, integrated pest management, and pollinator ecosystem services. The garden is truly a place for 'cultivating' educational experiences.





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