



# College of Agricultural, Consumer and Environmental Sciences

## Department of Extension Plant Sciences Profile

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### Mission Statement

The mission of the Extension Plant Sciences Department is to extend research-based knowledge and technology that enables our clientele to improve the quality of their lives and enhances the agricultural, economic, environmental, and social well-being of the state.

### Quick Facts

#### EPS Faculty/Staff:

- Reached over 40,000 stakeholders, including over 1,000 youth, through presentations at 402 Extension events (county-based Extension programs, crop conferences, field days, and workshops).
- Brought in over \$875,000 in grants, contracts, and gifts.
- Developed over 120 Extension publications and popular press news items.
- Published 17 peer-reviewed research articles and 13 non-refereed research publications, and presented their research findings in 56 talks at regional, national, and international conferences.
- Advised or co-advised 21 master's students and 12 Ph.D. students.

### Selected Program Impacts

- **The Master Gardener Program trains over 300 new Master Gardeners annually and has over 1,000 active Master Gardeners who return over 50,000 hours in volunteer time to the counties.** In the 2015–2016 program year, 1,278 Master Gardeners volunteered 61,115 hours. This time is valued at over \$1.4 million and is equivalent to over 29 FTE (Extension Agents).
- **The Pesticide Safety Education Program reaches over 500 individuals annually.** Through recertifying 350 licensed applicators and training 150 new license holders with an average annual salary of \$34,570, this program added or maintained over \$17 million to New Mexico's economy. Workshop evaluations indicate that 98% of participants learned a new pesticide application technique and 75% learned a new pest or plant management practice that will decrease pesticide use.
- **Forage research and Extension programs have shown practical ways that inputs such as water, fertilizer, and seed can be reduced by as much as 25%.** As a result of Extension training on conservation and profitability, acceptance and use of alternative, water-saving forages has increased in New Mexico.
- **The development of new cultivars and new crops is assisting growers in expanding their markets and staying competitive in an ever-increasing global marketplace.** For example, 'NuMex R. Vince Hernandez', a newly released paprika-type cultivar with a 30% higher dry yield, can potentially increase revenue for New Mexico paprika growers by more than \$1 million annually.
- **After attending an Extension program on tomato production, a survey of program participants from seven New Mexico counties indicated an increase in production of 17,970 lb of locally grown tomatoes.**
- **An Extension program designed to educate growers on the production of glandless cotton has reached 80% of New Mexico growers.** The information provided by this program has the potential to more than double the profits of New Mexico cotton producers who choose to grow glandless cotton, which produces high-value seed that can be used as fish food for the production of aquatic species.

### ACES Pillars for Economic and Community Development

Food and Fiber Production and Marketing

Water Use and Conservation

Family Development and Health of New Mexicans

Environmental Stewardship

Foundational Education and Training

New Mexico State University



## Selected Partnerships and Collaborators

- NM County Extension Programs
- New Mexico Crop Producers
- USDA, NMDA, BLM, NRCS, EPA, IR-4, NM State Engineer's Office
- American Association of Pesticide Safety Educators
- National Plant Diagnostic Network
- Agro Chemical Companies
- Navajo Agricultural Products Industry
- Western Pecan Growers Association
- Southwest Turfgrass Association
- NM Chile Association
- NM Hay Growers Association
- NM Cotton Growers Association
- Pecos Valley Farmers Association
- NM Vegetation Management Association
- NM Wine Growers Association
- NM Vine and Wine Society
- NM Dairy Producers
- NM Organic Commodity Commission
- Los Alamos and Sandia National Labs
- Seed Companies
- Irrigation Districts
- Other universities, including University of Arizona, University of California, Oregon State University, Washington State University, Texas A&M, UNM Medical School, Kansas State University, Texas Tech, Oklahoma State University, Colorado State University, University of Nebraska, University of Wyoming
- The University of Padova, Italy

## Selected Program Impacts (Cont.)

- **The Plant Diagnostic Clinic provides over 2,000 diagnoses and identifies, on average, five new diseases in New Mexico annually.** Proper identification of pest problems enables Specialists to assist clientele in developing effective and cost-efficient pest management plans.
- **The Extension Turfgrass Program has developed a research and teaching collaboration with universities in Italy.** This partnership has provided two graduate students and five summer interns an overseas educational experience.

## Faculty and Staff Expertise and Location

### Agronomy and Soils (1.65 Extension FTE)

- **Robert Flynn**, Agronomist, Artesia ASC
- **Kulbhushan Grover**, Crop Ecologist, NMSU Main Campus
- **John Idowu**, Agronomist, NMSU Main Campus
- **Mark Marsalis**, Forage Specialist, Los Lunas ASC

### Horticultural Crops (3.74 Extension FTE)

- **Gill Giese**, Viticulture Specialist, NMSU Main Campus
- **Richard Heerema**, Pecan Specialist, NMSU Main Campus
- **Bernd Leinauer**, Turfgrass Specialist, NMSU Main Campus
- **Marisa Thompson**, Horticulture Specialist, Los Lunas ASC
- **Stephanie Walker**, Vegetable Specialist, NMSU Main Campus
- **Shengrui Yao**, Fruit Specialist, Alcalde ASC
- **Position Vacant**, Master Gardener Program Manager, Los Lunas ASC

### Pest Management (5.24 Extension FTE)

- **Leslie Beck**, Weed Scientist, NMSU Main Campus
- **Natalie Goldberg**, Plant Pathologist, NMSU Main Campus
- **Cary Hamilton**, IR-4 Program Manager, NMSU Main Campus
- **Phillip Lujan**, Plant Diagnostician and Pesticide Program Manager, NMSU Main Campus
- **Jane Pierce**, Economic Entomologist, Artesia ASC
- **Carol Sutherland**, Entomologist, NMSU Main Campus
- **Position Vacant**, Urban & Small Farms IPM Specialist, Los Lunas ASC