

## Student Activities

Field Research NMSU & Commercial Farms  
 Howard Hughes Research Scholar Internships  
 K-12 Presentations/Workshops  
 Science Fair Mentor/Judge  
 Special Topics for Eastern NM Students  
 NM Natural Resources Consortium Internships



## Goal

To develop and provide tools to enable New Mexico farmers to increase profits by cost effectively managing insect pests of field crops.



## Alfalfa Hay



- New Mexico Value: \$172 Million
- Primary Insect Pest: Alfalfa Weevil
- Losses/Cost of Control: >\$3 Million/year
- Project: Biological Control of Alfalfa Weevil  
 Maintaining/Releasing Alfalfa Weevil Parasitoids
- Estimated Savings: >\$1 Million/year



## Pecan



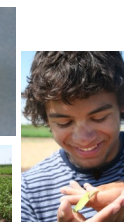
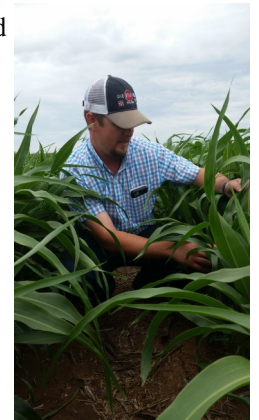
- New Mexico Value: \$120 Million
- Primary Insect Pest: Pecan Nut Casebearer
- Cost of Control/Potential Savings: >\$760,000/year
- Project: Biological Control of Pecan Nut Casebearer in New Mexico
- Estimated Savings \$1.6 Million/year



## Sugarcane Aphid

Sugarcane aphid is a new insect pest of sorghum in New Mexico. It is a very serious pest causing \$31 Million in losses in just 4 South Texas Counties and \$4.6 Million losses in New Mexico annually.

We are developing pest management strategies for the NM/TX High Plains area that are focused on using plant resistance in conjunction with biological control from predators and parasitoids and cultural controls to reduce the need for insecticide applications





## Glandless Cotton

Glandless cotton seed lacks the toxin gossypol which allows the seed to be used as a protein source for humans and a variety of animals that cannot consume seed from conventional cotton. One barrier to successfully producing glandless cotton seed is that glandless cotton is more susceptible to insect pests. We are evaluating the risk of damage from New Mexico insect pests and possible management strategies to mitigate this risk.



### Selected Cooperators

- Texas A&M University
- USDA/APHIS Methods Development Lab
- UNM Medical School
- Cotton Incorporated
- New Mexico Department of Agriculture
- Dow AgroSciences
- University of Kentucky
- Cotton Foundation
- US Forest Service
- Pecos Valley Farmers Association
- Seed Companies
- University of Arizona



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# Economic Entomology



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