Executive Summary

Nationally, OK pecan production ranks 2nd in native production and 4th in all pecan production. Pecans are troubled by insect and disease pests and require crop monitoring from budbreak in early spring until shell hardening in early fall. The Oklahoma Pecan Management Course has been offered annually since 1997 providing 130 growers instruction on orchard best management practices, IPM concepts and how components of the total orchard management program interact to influence pest control programs. The course has proven to be an effective tool for educating producers about IPM methods with approximately 50% of students using IPM methods. The focus of the Oklahoma Pecan program is on adoption of IPM practices by growers. One constraint to more widespread adoption is identification of growers and making educational opportunities available. A key component in breaching this constraint is the county extension educator. Accordingly, county extension educators must be familiar with IPM tools available for grower use. We expect this project to increase county extension educator proficiency in pecan management, allowing them to better serve their clientele. We further expect that from those growers enticed to participate in these programs will come early adopters that will form the core of cooperators and participants for future educational programs.

Final Report
FY 2001

Amount Requested: $12,751.00
Amount funded: $6,000.00

COOPERATORS:
Myrl Redman, Extension Educator Agric/4H, Choctaw County.
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Dr. Jim Shrefler, Area Extension Horticulture Specialist, WWAREC. Lane, OK
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Bill Stacey, Area Entomologist, Muskogee
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State IPM objectives addressed and Priority Methods Utilized:

- Educate agricultural producers and others about the use of IPM methods.
- Provide IPM to individuals involved in any or all phases of the food production, handling, processing and distribution system.

Objectives and Associated Accomplishments
A. To conduct an in-depth pecan management course.
   Accomplishment: A total of 22 growers and 4 OCES County Extension Educators
representing 12 counties completed The 2001 Oklahoma Pecan Management Course. The classes were held monthly from February thru October, except June. According to the initial survey the students represented over 850 acres of pecans including both native and improved varieties. Most of them, 15 of the 22, were not full time farmers. 13 of the 22 did not spray their trees the previous year and of those that did only 3 based their spray schedule on some kind of pest monitoring program. 17 of the 22 has access to the Internet and used it to some extent for information gathering. Eight students indicated that they had heard of integrated pest management. Six responded to the question of “What does IPM mean to you?” as follows:

1. A logical method of managing pests in an economical manner
2. Reduce pesticide use by us of beneficial insects and spray only when necessary
3. A means of reducing the pest load without harmful chemicals
4. Utilizing all possible methods of pest control in a flexible manner that adapts to changes from season to season and maintains environmental quality to the highest degree possible.
5. Working toward pest control before the pest control is necessary
6. Spraying only when insect or pests are in the orchard.

Student evaluations at the end of the course indicated a much better understanding of IPM concept by more students. About half of the students responded to the IPM question with terms including the following:

1. A holistic approach to lessen critter problems without relying on a single means.
2. Complete program
3. Not just spraying to be spraying but considering environment, economics and possible damage.
4. Develop management strategies that include other practices of control rather than just pesticides.
5. Working pest management into your total crop plan
6. Pest control program that changes with the situation
7. Less chemicals
8. Controlling pests without excessive use of chemicals
9. Use of nature to control pests
10. Cultural biological and chemical control
11. Keeping pest level low enough to avoid economical damage

Each student received instruction on total orchard management to include PNC and pecan weevil traps along with detailed instruction on how to employ them. As a “homework” assignment each student was asked to bring back to the next class a sample of the insects captured in the traps. All did so. It was and excellent teaching method. Each student was shown how to access the pecan scab model and how to employ it in a scab management program. All objectives established for conduct of the course were met or exceeded.
B. To amplify grower adoption of pecan IPM by providing quality in-service training programs to Oklahoma Cooperative Extension Educators. 

Accomplishments: An in-service program was planned by the designated state, county and area extension personnel. The resultant program was conducted in two parts for county Extension educators in the northeast and the southeast districts of Oklahoma. The first was a one day discussion session held in Henryetta, OK, February 15, 2001 where 25 county Extension educators accompanied by their district directors received familiarization with pecan management programs. The second phase was conducted November 13-14, 2001 where 22 county educators participated in a tour of pecan marketing and processing facilities in southern Oklahoma and central Texas. The tour focused on effects of the pecan management program on the quality of the finished product. The tour also included information pertinent to other horticultural commodities with emphasis on sustainability.

All objectives of this portion of the project were met.

C. To increase opportunities for growers to participate in pecan educational programs.

Accomplishments: As specified in the original proposal a county based educational program was organized by Myrl Redman, Choctaw County Extension Educator, and held at the county extension office in Hugo, OK. The program attracted 7 growers and included instruction on total orchard management including pest monitoring. Discussion was followed by a meal and an afternoon tour of local pecan orchards. The objective was achieved. The relatively small attendance reflects an entry level program and will increase as more meetings on pecan production and management are held in the counties. 

This excellent team of Extension pecan professionals is not discouraged.