

**TEXAS PECAN IPM ARTICLE FOR
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Stored Product Pests

With harvest underway I thought this would be a good time for a short discussion on that other group of insects that attack pecans, these being stored product insects. Although stored product insects are not a problem for the average producer they can be important to anyone that stores pecans or retails pecans through out the year.

In all of the pecan meetings I have attended over the years, the only insects that have been discussed are those associated with production. Obviously this is because of their importance and producers are always interested in the latest on pecan nut casebearer, pecan weevil and aphids. However, there is another group of insects that can be associated with pecan and these are the stored product pests. I think most everyone is familiar with this group. Who hasn't found a "weevil" or two in a box of corn meal or in the pantry.

Stored product insects can be a problem where ever food products are handled and stored and this includes pecans. Many producers today retail pecans in one form or another to try and maximize income. Retailing may be selling cracked pecans out of the house during harvest or selling "value added" products such as candies throughout the year.

When it come to controlling or managing stored product insects for any commodity, the first rule is always sanitation, a broom and cold storage will take care of 99.9% of the problems. For pecans, stored product pests can only attack exposed kernels. I feel that any problem from these insects would occur where exposed kernels are kept for an extended period and are not refrigerated.

There are several types or groups of insects that can be found with stored pecans, all of which are general feeders of stored foods. Some of the more common insects that could be found include; larvae of the Indian meal moth, almond moth and raisin moth; drugstore, cigarette and, sawtoothed grain beetles. Also, where inshell pecans have been held in refrigeration, pecan weevil larvae can also be found.

Larvae of the Indian meal moth feeds on a wide range of food materials including dried fruits, grains and grain products, dried milk, dog biscuits, herbs, milk chocolate, nuts and nuts in candy and seeds to name a few. The adult moth has a wing span of approximately 3/4 inch with the apical portion of the fore wings having a reddish brown to copper color. Female moths deposit eggs on exposed food materials and as larvae feed they spin silken threads and web food particles together. The life cycle takes six to eight weeks during the summer.

Drugstore and cigarette beetle adults are reddish brown and approximately 1/10 inch in length. The adults and larvae of both species feed on a wide range of foods including tobacco, seeds, grain and grain products and pharmaceutical drugs. The drug store beetle reportedly "eats anything except cast iron".

Several species of ants could can also be attracted to oil rich pecans. Controlling ants can be some what more difficult than other stored product pests.

Although not a stored product pest, pecan weevil grubs can be a problem in that they are difficult to separate from pecan pieces. Inshell pecans that are suspected to have pecan weevil can be held until the grubs emerge then the grubs and pecans can be separated.

On an occasion I receive requests for information on stored product pests of pecans and unfortunately most of the information is for stored grain. Currently along with entomologist from Oklahoma State University I am trying to put together some information on stored product pests of tree nuts. This information will contain color pictures and brief descriptions on biology. If you would like to provide some input on what form this information should be in - fact sheet, poster,

book, CD, etc please send me a note.

As I mentioned previously, the key to managing stored product pests is sanitation. When possible storage areas should be cleaned prior to storage food materials. If a problem does occur, the source of the infestation has to be found and eliminated. Pecans are a nutritious, healthy food, but I for one would rather not have any added protein crawling in my snack.