Diversified Greg Gruben

Pecan weevils' range growing warns AgriLife Extension expert

Homeowners and pecan orchard operators are urged to watch for pecan weevils that can decimate a crop right up to harvest, said a Texas A&M AgriLife Extension Service integrated pest management specialist at College Station.

"This is not a new pest, but what is new is that it's being sighted in areas where it's never been found," said Bill Ree. "It's a serious pest, ranking right up there with the ubiquitous casebearer that hits developing pecans early in the season practically statewide. Pecan weevils hit late in the season when the nuts are ready to be harvested.

"What's troubling is we are seeing a considerable geographic movement in a pest that was once fairly isolated. We are confident this migration is human-assisted."

Pecan weevil, Curculio caryae, is a native to North America, and has been collected from all the native hickory species, though detailed knowledge of its distribution is only known within pecan populations, Ree said.

"Individual producers must manage this pest if they find it in their orchards as I have seen an instance where no management was applied for several years and upwards of 95 percent of the pecans had pecan weevil damage," Ree said. "Unfortunately, management of pecan weevil requires at least two late-season insecticide applications, which also kill beneficial insects, thus indirectly causing problems with secondary pests."

In pecan producing states, Ree said, there is a potential for spreading the pest from infested to uninfested regions. In Texas, 130 of the state's 254 counties have recorded outbreaks. The most recent being in Hays and Comal counties with a suspected case in Lynn County.

"It is unclear if these new detections were the result of man-assisted movement or not," Ree said. "But the verified infestations should be a wake-up call for the Texas pecan industry because the detections show for the first time that the Guadalupe River Watershed is now at risk from being slowly but surely contiguously infested.

"If one looks at a topographical map of the area it's apparent there are no natural barriers to prevent further spread because these newly infested areas are adjacent to streams lined with wild, native and improved pecans that flow all the way to the Gulf of Mexico.

"I hear all too often of new detections in New Mexico and fear for its potential spread even farther west. That potential westward movement into the states of New Mexico, Arizona and California would be a very large industry problem."

Ree suggests one method to help prevent the westward spread is through an expanded multi-state quarantine. He said Texas has a pecan weevil quarantine for all counties except the five most western. The Texas quarantine includes all in-shell pecans as well as cracked pecans and any

pecan shipment containing shell pieces. Anyone in Texas in the quarantined area selling or shipping pecans to New Mexico, Arizona or California must meet the quarantine treatment requirements.

Ree said quarantines are effective on the commercial side, because most growers are aware of the problem and its potential consequences to the industry, but most homeowners are not. He recalled a pecan weevil outbreak in the early 1970s in Otero County, New Mexico, which took several years to control.

"Although the infestation was eventually eradicated, the source of this infestation was unclear, however, one of the residents in the infested area recalled having a grocery sack of 'bad pecans' that were collected from the native range of the pecan weevil and were later disposed of in his backyard."

Ree said eastern New Mexico and West Texas infestations most likely are the result of human assisted movement. He said these pop-up infestations are costly for the New Mexico Department of Agriculture to try to eradicate, which often takes years, and are a problem for the industry as a whole.

"I don't have a solution to this problem, but one way I try to address this issue is that I talk about the pecan weevil at all the AgriLife Extension meetings I'm a part of, regardless of whether the county has weevils or not," he said. "I really feel communication with not only producers, but also with the general public, is important in getting the word out of the seriousness of this growing problem.

"Better communication about this important issue from all those involved with the pecan industry to the general public will be a step in the right direction."

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