

FEATURE – TOOL TO SAVE WATER IN PECAN ORCHARDS

INTRO: Researchers at New Mexico State University are using a US Dept of Agriculture grant to help pecan grower's use less water. USDA's Pat O'Leary has more. (1:59)

NEW MEXICO IS A LEADING PRODUCER OF PECANS. IN THE SOUTHERN PART OF THE STATE, GROWERS THAT GET IRRIGATION WATER FROM THE RIO GRANDE RIVER ARE LOOKING FOR WAYS TO USE LESS OF IT.

Richard Heerema, New Mexico State University: 70% of the Pecan acreage in New Mexico is located right here in the Mesilla Valley, near Las Cruces, New Mexico. And pecans do in fact use a lot of water.

John Mexal, New Mexico State University: So we have been measuring the amount of water that pecan orchards use to try and develop management strategies that would improve irrigation efficiency here.

THE TEAM IS USING THE USDA-SPONSORED RIO GRANDE BASIN INITIATIVE TO DEVELOP A TOOL TO HELP GROWERS IMPROVE FLOOD IRRIGATION OF THEIR ORCHARDS, BY KNOWING WHEN TO WATER.

Mexal: This is a pecan irrigation scheduling tool. And we just shortened that and came up with "pecanigator."

Heerema: The Pecanigator is a slide rule-type device. It shows four different soil types and the irrigation intervals for each of these soil types as they change throughout the season. AFTER A SUCCESSFUL TRIAL WITH THE HAND-HELD PECANIGATOR, AN ON-LINE VERSION WAS INTRODUCED, TO RAVE REVIEWS FROM GROWERS.

Greg Daviet, New Mexico Pecan Grower: Before the Pecanigator, a lot of our irrigation was done simply by calendar schedule. You'd figure it's been X number of days since the last time I watered so it must be time to water again. What the Pecanigator allows us to know, based on the last time I watered, in a typical year, how much time can go by where the tree will use the amount of water that I've applied to the field. It's quite an excellent tool for getting more out of the water that we're using.

Mexal: Some of the larger growers are probably over-irrigating and we can save them one irrigation. Some of the smaller growers are actually under-irrigating and we'll actually increase the amount of water they use and increase their income as well.

THE RESEARCHERS SAY THE PECANIGATOR IS AN IMPORTANT TOOL FOR KEEPING FARMS VIABLE IN THE VALLEY. AND THEY SAY IT'S A WORK IN PROGRESS.

Mexal: Our hope is that this would be a short term fix, because it does use historic weather data. And so eventually what we hope is, that growers can use real time, today's weather data to schedule their irrigations. And they can call up the computer, punch in their zip code, plug in their soil type and last irrigation and it would tell them when their next one needs to be.

IN LAS CRUCES NEW MEXICO, I'M PAT O'LEARY FOR THE USDA.