Program 6CR-2

Arkansas Corn Research Verification Program

Presented by Kevin Lawson
Program Associate Corn & Grain Sorghum Verification Coordinator, University of Arkansas

In the 1980's, Arkansas' crop yields were declining, prices were low, and production costs were high. Producers requested that the University of Arkansas field test existing technologies to determine the profitability of production. Out of this request the research verification program was developed. Cotton was started in 1980, followed by rice and soybean verification in 1983 and wheat in 1986. In 2000, the Arkansas Corn and Grain Sorghum Promotion Board was formed, and they funded the corn and grain sorghum research verification program. The funding for the board comes from a one cent per bushel check-off on corn and grain sorghum. The overall goal of the Arkansas Research Verification Program is to verify that management according to University of Arkansas recommendations can result in increased profitability. The objectives of the program are:

1. Verify Extension recommendations
2. Establish an economic database
3. Demonstrate that high yields can be constantly achieved economically
4. To identify specific problems and opportunities that might arise
5. Promote timeliness in management decisions
6. Provide training and assistance to new County Agents

Counties request fields to the Corn and Grain Sorghum Verification Coordinator in the fall. The coordinator, the Extension Specialist – Wheat and Feed Grains, and District Directors work together to determine which counties need fields for the next growing season. After being selected, the County Agent is then responsible for selecting a cooperator to work with in the county. New County Agents, and cooperators new to corn or grain sorghum are given preference for fields. Fields are soil sampled and samples are analyzed at the University of Arkansas soil testing lab. All fertilize recommendations come from those soil samples. The coordinator, County Agent and cooperator meet and chose a hybrid from the University of Arkansas variety testing program. After the field is planted, the coordinator visits and scouts each field once a week, and the County Agent scouts twice a week. Each cooperator agrees to use University of Arkansas, integrated pest management (IPM) recommendations from the coordinator. All corn fields are irrigated. All inputs are recorded throughout the year and after harvest those inputs are sent to a University of Arkansas Division of Agriculture economist, who prepares an economic analysis of each field. This economic data is used by the University Of Arkansas Division Of Agriculture to produce crop budgets for producers in the state. An end of the year report is produced by the coordinator and posted to the Cooperative Extension Service website and the Arkansas Row Crops blog.

From 2000 to 2014, there have been 119 corn research verification fields in 32 different corn growing counties. Over that 15 year period the average planting date has ranged from March 25 to April 22 with an overall average of April 6. The seeding rate has increased over 15 years from 30,000 seeds per acre in 2000 to 34,000 seeds per acre in 2014.

Yields have ranged from a low of 158 bushels per acre in 2004 to a high of 238 bushels per acre in 2012. The 15 year average for corn verification is 190 bushels per acre while the state average for that same 15 years is 152 bushels per acre.