

## ARKANSAS CORN AND GRAIN SORGHUM PROMOTION BOARD PROGRESS REPORT – JANUARY 2010

**Title:** Developing Planting Date Guidelines for Arkansas Corn and Grain Sorghum

**Investigator:** Jason Kelley - Wheat and Feed Grains Extension Agronomist

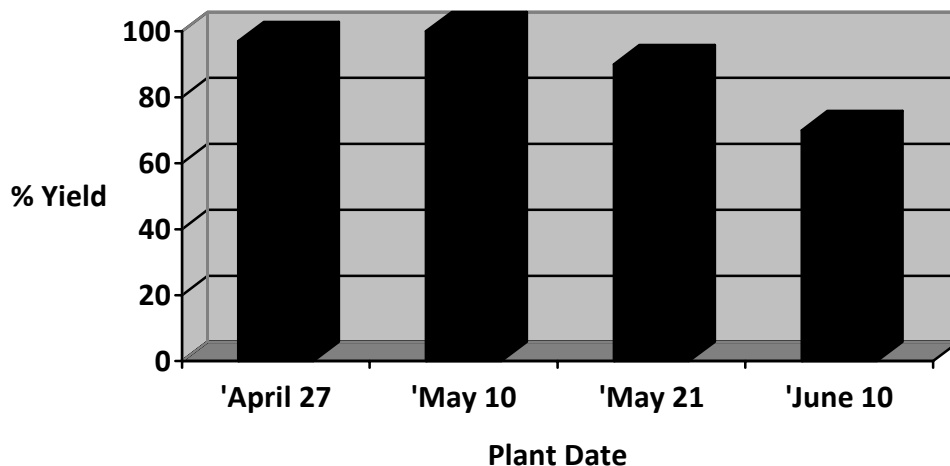
**Cooperators:** Glenn Studebaker - Extension Entomologist, Keiser  
 Scott Akin - Extension Entomologist, Monticello  
 Paul McLeod - Professor of Entomology, Fayetteville  
 Scott Monfort - Extension Plant Pathologist, Stuttgart

**Corn Studies:** Corn planting date trials were conducted at Keiser (Northeast Research and Extension Center, Marianna (Lon Mann Station), and Rohwer (Southeast Research and Extension Center). Planting dates at each location were as follows:

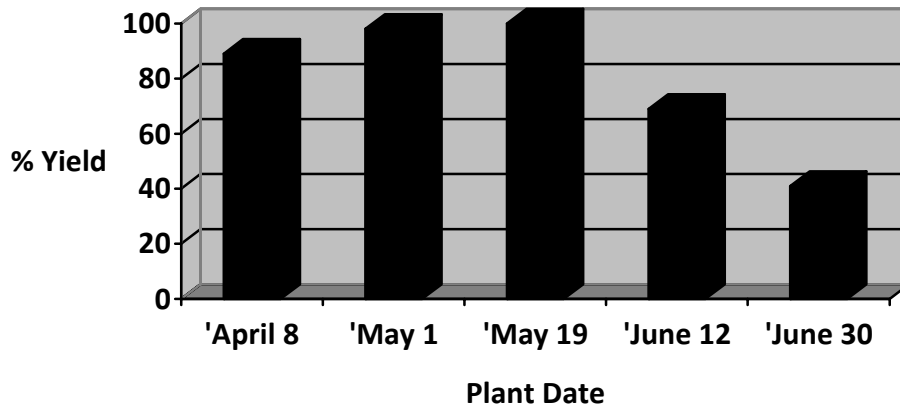
<b>Keiser</b>	<b>Marianna</b>	<b>Rohwer</b>
Weather Delayed	April 8	Weather Delayed
April 27	May 1	April 16
May 10	May 19	April 30 – poor stand
May 21	June 12	May 19
June 10	June 29	June 2

Wet weather delayed initial plantings again this year at all three locations. The April 30<sup>th</sup> planting at Rohwer was planted but heavy rains two days after planting resulted in poor stand, therefore data is not presented. In general yields were maintained at near 100% of maximum yield as late as Mid-May (Bt hybrids) at all three locations. The earliest planting at all three locations did struggle with cool wet weather early in the season. Even though stands were as good as later plantings, yields were generally slightly higher with later plantings, indicating the importance of good early season growth may be more critical than the actual planting date. The exceptionally wet and cool July and August may have also increased yields of later planting. Hybrids evaluated included; Dekalb 61-72 (VT3) , Dekalb 64-79 (VT3), Dekalb 64-83 (VT triple Pro), Dyna Gro 58V24 (VT3), Belle 1844(RR, YGCB), Pioneer 31P40(RR), Pioneer 31P42 (RR, Hx), and Pioneer 31D59 (RR, Hx)

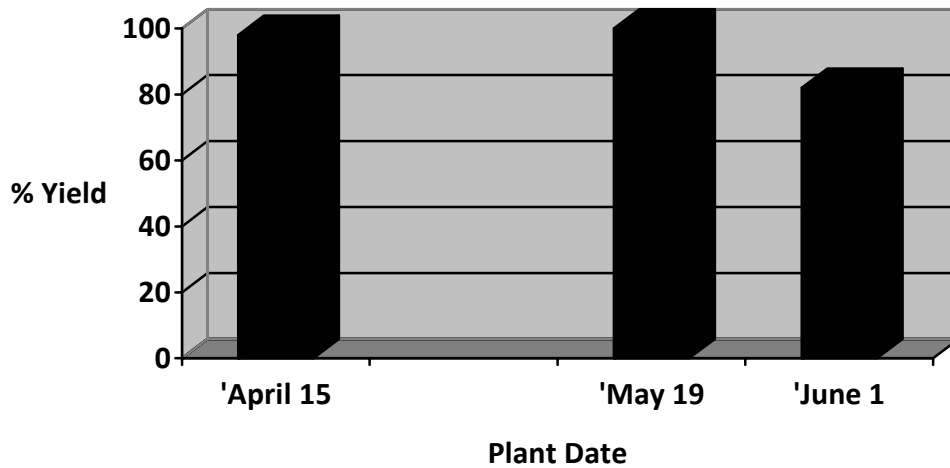
### Effect of Planting Date on Corn Yield - Keiser 2009



### Effect of Planting Date on Corn Yield - Marianna - 2009



### Effect of Planting Date on Corn Yield - Rohwer 2009

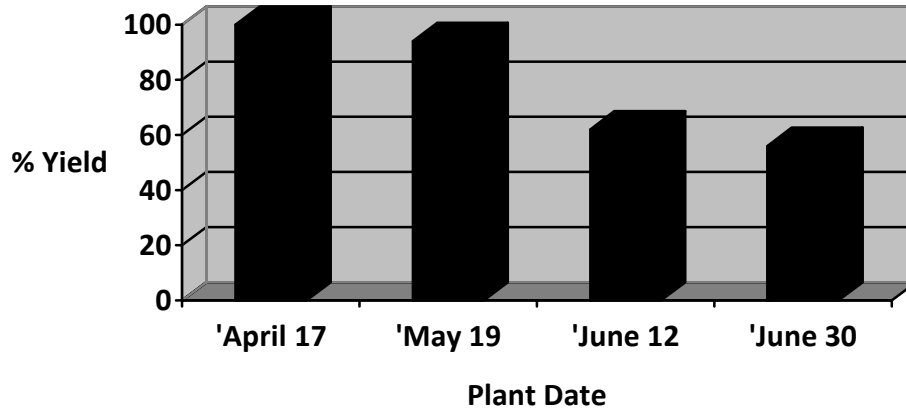


**Grain Sorghum:** Grain sorghum planting date studies are being conducted at Marianna on the Lon Mann Station and in the grain sorghum research verification field in Woodruff County. Planting dates for each location are listed below.

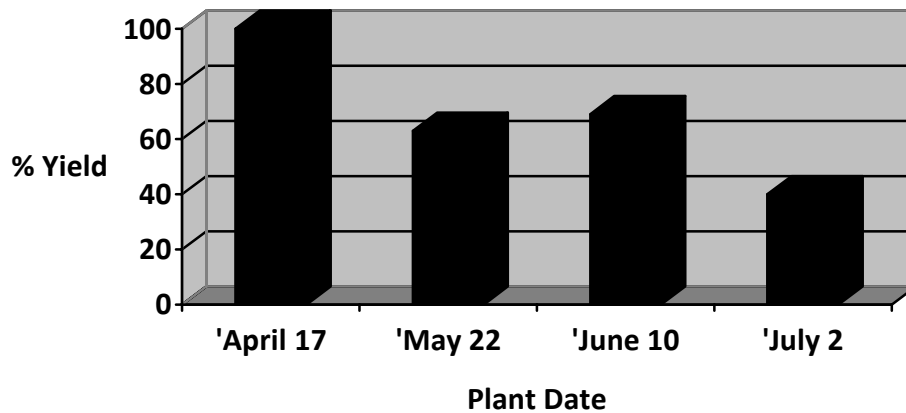
Marianna	Woodruff County
April 17	April 17
May 19	May 22
June 12	June 10
June 29	July 2

Four hybrids were evaluated and include; Pioneer 84G62, Triumph 82-G, Terral 96H81, and Dekalb 54-00.

### Effect of Planting Date on Grain Sorghum - Marianna 2009



### Effect of Planting Date on Grain Sorghum - Woodruff Co 2009



Much like the corn planting date studies, wet weather delayed initial plantings at both locations. Weather had a great impact on yield this year. Plentiful rains created a foliar disease epidemic for anthracnose. Yields of Pioneer 84G62 and Terral96H81 were greatly reduced by anthracnose, while Triumph 82G and Dekalb 54-00 were less affected. Sprouting and low grain quality was a problem at harvest. Grain samples were saved and an official grade is being determined (results not back yet, but will present at board meeting). In general earlier planting (and earlier harvest) produced the highest yields and highest grain quality. Late plantings were plagued by low yields and poor grain quality.