Farm and Weather Summary
Northwest Research Farm

Ryan Rusk, farm superintendent

Farm Comments

Developments. A John Deere 6000 high clearance sprayer was purchased and used to apply foliar fungicide treatments on three corn fungicide studies initiated in 2008 at the Northwest Research Farm and to four on-farm research trials in Osceola county.

Approximately 5,400 feet of tile was installed at the research farm this fall to help alleviate drainage problems.

The conference room at the research farm was updated this past year to better accommodate business meetings. Please contact us if you are interested in using this facility (712-446-2526).

Field Days and Tours. There were eight events held by the Northwest Farm. A total of 871 people attended field days and other programs.

New Projects. Biomass cropping systems, Ken Moore; Soybean fungicide × insecticide study, Alison Robertson/Matt O'Neal; Corn fungicide timing (C/C and C/Sb), Alison Robertson; Corn fungicide efficacy, Alison Robertson; Biological control of soybean aphids, Matt O'Neal; Evaluation of corn insect traits, Marlin Rice; Corn rootworm emergence cage test, Aaron Gassman; Soybean row width study and corn rootworm management, NWRF staff.

Crop Season Comments

Corn planting began April 23 and was completed May 19. Harvest began October 10 and was completed November 4. Corn yields following soybeans averaged 218 bushels/acre and continuous corn yielded 197 bushels/acre. Soybean planting started April 23 and was completed May 22. Harvest began September 24 and was completed October 9 with average yields of 58 bushels/acre.

Weather Comments

Spring 2008. Plentiful rain in the fall of 2007 and ample snowfall in the winter brought us into the spring with a full soil moisture profile. Field work began on April 7 with both oats and flax being seeded. Above average rainfall in both April and May, plus temperatures that were well below normal caused significant delays in planting. The cool and wet conditions also led to some early season crop stress on both corn and soybeans.

Summer 2008. Seasonal temperatures in June and July improved the overall condition of both corn and soybeans. Soybean aphids were well above threshold levels for the second year in a row and some fields required two applications of insecticide to manage this resurgent pest. Timely rainfall in July and cooler than normal temperatures in late July and August created ideal conditions for corn pollination and grain filling.

Fall 2008. Corn harvest was roughly two weeks behind normal due to later planting dates and delayed heat unit accumulation. These factors also attributed to higher corn grain moisture contents at harvest. Winds exceeding 60 mph were common on October 26 and resulted in widespread stalk lodging in the area. Corn yields were well above average in the area, but soybean yields were more variable. Above average rainfall in September and October slowed harvest

progress, but began to replenish soil moisture levels for the 2009 growing season.

Acknowledgements

We would like to thank everyone who attended field days this past year at the research farm and we hope that the information presented was valuable to your operation. We would also like to thank the Northwest Iowa Experimental Association and ISU Extension for their support throughout the year. We would also like to recognize the following businesses for their donations to the Northwest Research Farm this past season: Trimble, Monsanto, Pioneer Hi-Bred International, C-S Agrow Service, BASF, Calcium Products, Inc., Sutherland Lumber, Builders Sharpening and Service, and Security State Bank. Thanks again for all your support and we look forward to an exciting and rewarding 2009 growing season.

Table 1. Northwest Research and Demonstration Farm, Sutherland, monthly rainfall and average temperatures for 2008.

	Rainfall (in.)		Temperature (ºF)		Days
		Deviation		Deviation	90º or
Month	2008	from normal*	2008	from normal	above
April	3.47	0.89	43.1	-3.0	0
May	5.87	2.06	56.3	-2.8	0
June	5.21	0.76	67.7	-1.1	0
July	2.27	-1.21	72.2	-0.9	1
August	1.46	-2.61	68.3	-3.8	1
September	3.65	0.34	61.3	0.2	0
October	4.59	2.59	49.6	0.8	0
Totals	26.52	2.82			2

*Rainfall averages recalculated based on data from 1957–2007.