2002

Field Days and Farm Tours and 2001 Growing Season

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Abstract
Includes:

Field Days and Farm Tours

2001 Growing Season

Disciplines
Agricultural Science | Agriculture

Field Days and Farm Tours

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This year, the Western Research and Demonstration Farm had more visitors than in past years. We held our traditional field days on June 21 and August 23 that highlighted agronomic, horticultural, and livestock research along with tractor safety classes, manure applicator training, a pruning demonstration, and attendance by the Castana 4th grade science class. Once again, Loess Hills bus tours included our farm as a highlight on their annual fall tour schedules. An increase in farmer and general public use was noted, either as personal visit or as phone inquiry.

Your visit is always welcome, and staff will gladly give you a tour. Please call 1-712-885-2802 to make sure someone is available, or pick up a map for a self-guided tour. (Remember, this is a research farm; entering any livestock facility or picking any plants or plant parts is prohibited.) Please stop in or give us a call. We look forward to seeing you.

2001 Growing Season

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The 2001 growing season in west-central Iowa was no different than other years; it was full of challenges, from both environmental and pest standpoints.

Weather. The winter of 2000–2001 refused to release its grasp on western Iowa until well into March. A continuous snowpack throughout the winter prevented the ground from freezing. This allowed much-needed moisture from snow-melt to move into the soil profile, yet it also reduced freeze–thaw actions that can greatly reduce soil compaction problems from the previous year. The continuous snow cover also provided a protected haven for over-wintering insect pests.

April was warm and relatively dry, allowing much-needed fieldwork to occur. Most fertilizing activities occurred in the spring. A majority of the corn was planted the last two weeks of April, during which time little rain was received. The first of May brought a transition in the weather pattern; temperatures dropped significantly and frequent rainfall kept many producers out of the fields through much of the month. Many producers struggled to get remaining corn planted in May, and soybean planting extended well into early to mid-June in some areas.

The cool, wet climate persisted until mid-June, when the weather pattern again did a complete reverse. Daytime high temperatures were normal to above normal through July, and little to no rainfall accumulation occurred for 60 days. The corn crop went through most of its reproductive stages depending entirely on stored soil moisture. Moisture stress was evident in cornfields from late June through mid-August. The soybean crop was stressed from the cool, wet weather early in the season, then from hot, dry conditions at mid-season. Many soybean fields did not develop a full canopy.

August brought more of a moderation of weather. Temperatures remained above normal, benefiting late-planted corn and soybean fields,

and rainfall events were more abundant. A single rain event on August 20 saved many soybean fields from being baled for hay. September remained warm and wet, benefiting both corn and soybean crops. Soybean harvest did not get underway until late September and early October. Corn harvest did not begin until well into October due to higher grain moistures in the field. Good harvest conditions persisted into November, at which time most of the crops were taken from the field.

Grain quality in corn and soybeans was good to excellent across most of the region; this was a surprise given conditions during the year. Yields were variable yet surprisingly good, considering the environmental stresses to which crops were subjected.

Insect Pests. 2001 was the year of the insects. It started with problems with wireworm and black cutworm in cornfields. The cutworm problem was the worst in many years in some cornfields as well as in isolated soybean fields. European corn borer and the western bean cutworm were prevalent in many cornfields from mid-season to late season. Black and variegated cutworm chewed on alfalfa most of the summer. The garden webworm caused unprecedented injury and damage to third-crop alfalfa across much of the area. Soybeans were chewed most of the season by bean leaf beetles and grasshoppers. The soybean aphid made its first-ever appearance in western Iowa and may become an injurious pest to soybeans in future years.

Plant Disease. Early season root rots were a problem in both corn and soybean crops due to the cool and wet period in May. Mid-season and late season were relatively disease free for corn, except for a few cases of smut. Soybeans also were relatively disease free from mid-season to late season, except for some stress-induced diseases that included pod and stem blight, charcoal rot, and top dieback.

Table 1. Monthly precipitation, average temperature, and departure from normal for 2001.

	Precipitation (in.)		Temperature (^{o}F)	
	Total	*Departure from normal	Average	*Departure from normal
January	1.67	+1.07	24.66	+5.85
February	1.07	+0.42	18.50	-6.02
March	0.92	-1.04	30.82	-5.08
April	3.05	+0.09	51.25	+2.66
May	8.13	+3.72	60.18	-0.83
June	4.47	-0.22	68.60	-1.35
July	1.95	-2.01	75.73	+1.90
August	4.06	+0.39	73.27	+1.07
September	3.32	+0.04	62.73	-0.64
October	1.82	-0.50	50.82	-1.58
November	2.28	+0.92	48.50	-14.96
December	0.54	-0.45	12.24	+6.48
April – Sept.	24.98	+2.01	65.29	+0.36

*Deviation from 40-yr. avg.