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Weather and Growing Season Summary, 2006

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Weather and Growing Season Summary, 2006

Abstract

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Weather Summary

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Crop Yield and Quality

Disciplines

Agricultural Science | Agriculture

Weather and Growing Season Summary, 2006

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Weather Summary

The 2006 growing season had near normal mean monthly temperatures, but was much drier than normal through the first three months of the growing season (Table 1). This year there were 25 days with high temperatures above 90°F and seven months with below normal precipitation.

This growing season will be remembered for the exceptionally dry conditions in May, June, and July (6.3 in. below normal); followed by a very wet August and September (6.6 in. above normal). However, the beginning of the growing season in March and April was near the 30-year average for both precipitation and average monthly temperature. To round out the year, temperatures in November and December were warmer than normal.

Growing-degree days were accumulating above the 5-year average by 140 to 190 units during June, July, and August. Growing-degree days were not at a deficit for the 2006 growing season.

Growing Season

The spring planting season started very early in April with good moisture and soil temperature conditions. Planting conditions remained good through May except for a near or below freezing temperature event in late May. Harvest conditions were excellent from mid-September through late October. Rainfall events in November delayed corn harvest, but all crops were removed from the field by early December.

Insect Pests

Insect pests were relatively light through most of the season. Bean leaf beetles reached economic thresholds with high counts especially during the second generation. Western bean cutworm infestation levels in corn were also scattered and for the most part, were not an issue in most areas.

Plant Disease

The 2006 season saw many diseases show up in both corn and soybean fields. Anthracnose was abundant across west-central Iowa. *Aspergillus flavus* and aflatoxin was reported in isolated areas across Monona County. Soybean sudden death syndrome, brown stem rot, phytophthora, and soybean cyst nematodes were also prevalent. One disease noticeably absent during the growing season was Asian Soybean Rust. Once again for the second year in a row, Asian Soybean Rust was anticipated and planned for, but failed to become a threat to Iowa soybean fields.

Crop Yield and Quality

Low corn yields were observed across most of west-central Iowa, particularly in Monona, Woodbury, and Ida counties. This was due to an extended dry period in June, July, and August. Soybean yields were relatively good considering dry conditions.

Table 1. Monthly precipitation, average monthly temperature, and					
departure from normal for 2006.					
	Precipitation		Ter	nperature	Days 90°F
	Total	Departure *	Mean	Departure *	or above
January	0.40	- 0.19	32	12	
February	0.23	- 0.37	24	- 2	
March	2.70	0.54	36	- 1	
April	3.83	0.57	53	3	
May	2.01	- 2.26	61	0	2
June	0.87	- 3.70	72	2	3
July	1.39	- 2.63	78	3	16
August	7.66	4.31	72	0	4
September	5.43	2.29	60	- 5	
October	0.97	- 1.26	48	- 4	
November	0.21	- 1.33	39	2	
December	0.00	- 0.78	31	7	
Total	25.70	- 4.81	n/a	n/a	n/a

Table 1. Monthly precipitation, average monthly temperature, and d

*Deviation from 30-year average as recorded at the ISU Western Research Farm weather station.

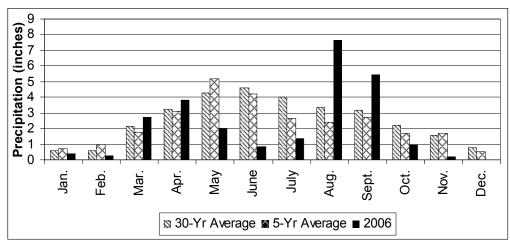


Figure 1. Monthly average precipitation compared with 30-year and 5-year average precipitation recorded at the ISU Western Research Farm weather station.

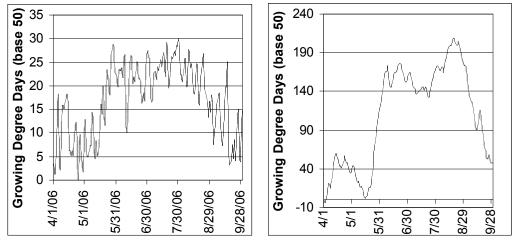


Figure 2. Daily growing degree-day units (base 50) for the 2006 growing season from April 1 to September 30 (left) and 2006 growing degree-day deviation from the 5-year average (right) based on ISU Western Research Farm weather station high and low temperatures.