

Farm and Weather Summary, Ag Engineering and Agronomy Farm

Mike Fiscus, ag specialist
Dave Starrett, ag specialist
Richard VanDePol, ag specialist

Farm Comments

Field Days and Tours. Four events and field days were held with a total of 300 people visiting the farm.

Ag Engineering and Agronomy. Activities at the AEA Farm in 2005 included tractor safety certification for 4-H youths in the 15–16 year old age group. Other activities included a ventilation school relating to livestock facilities, field days associated with Dr. Fehr's soybean breeding program, and Dr. Liebman's long-term sustainable ag study.

Developments. Facilities improvements were started with the demolition of two Quonset buildings near the main entrance of the farm. Plans are to construct a new storage machine shed and a new shop near the main building, which will be attached to the existing ag engineering shop. Also, the ISU landscape horticulture class was involved in designing and installing new landscaping on the west side of the main headquarters building. Sod was removed, and new plantings of trees, perennial flowers, grasses, and shrubs were completed along with the installation of a new sidewalk. New doors were also installed at the west and north entrance of the main building to help reduce energy costs.

New Projects. Organic plot establishment on the Marsden Farm (Jannink, Lamkey, Brummer); manure N residual trial (Sawyer); and a trial on spray applications with Brazilian-type, air-assisted sprayer for Asian rust treatments (Robertson, Hanna).

Crop Season Comments

Corn planting started on April 25 and was completed on June 2. Harvest began on October 20 and was completed by November 22. Yields were good to excellent with a range of 175–200 bushels/acre.

Soybean planting began on May 10 and was completed on June 13. Harvest began on September 21 and was completed on October 19. Average yields were 45–70 bushels/acre.

Weather Comments

Winter. A total snowfall of 20.2 in. was recorded with the largest single snowfall of 8.5 in. on January 6, 2005. Total moisture equivalent of snowfall and rainfall was 2.71 in. The ground had snow cover from January 5 to February 5. Snowfalls after February 5 provided snow cover for only 9 days.

Spring. A total of 11.23 in. of rainfall was recorded, including a 5-in. spring snow on March 25. The last frost date was May 4. Oats seeding started on March 17. Soil temperatures at the 4-in. depth began to average 50°F on April 4. Corn planting started on April 25 and soybean planting started on May 10.

Summer. A total of 15.86 in. of rain fell during the summer months, with a total of 6.76 in. during August. Adequate and regular rainfalls contributed to near-perfect growing conditions for both corn and soybeans. Oat harvest was completed with good yields of approximately 100 bushels/acre.

Fall. A total of 4.85 in. of rain fell in the fall with the first snowfall on November 15. The first frost date was on October 7 and the first killing frost on October 28.

Table 1. Monthly rainfall and average temperatures during the 2005 growing season at the Ag Engineering/Agronomy Research Farm, Boone, Iowa.

Month	Rainfall (in.)		Temperature (°F)		Days 90°F or above
	2005	Deviation from normal	2005	Deviation from normal	
March	1.38	-0.69	37.5	0.4	0
April	3.29	0.13	55.1	5.3	0
May	4.38	-0.11	59.9	-1.4	0
June	4.89	-0.88	73.5	3.1	6
July	4.10	0.67	75.3	1.5	9
August	6.76	3.13	71.9	0.4	3
September	4.36	1.08	68.6	4.4	4
October	<u>0.35</u>	<u>-1.84</u>	54.1	1.9	<u>0</u>
Totals	29.51	1.49			22