

Farm and Weather Summary

Vince Lawson, farm superintendent

Farm Comments

Developments. Drought and a falling water table revealed that one of our wells supplying a center pivot was inadequate for supplying enough water. A new 8 in. PVC well had to be installed at a depth of 90 ft in July and was a strong source of water for the rest of the season.

Field Days and Tours. The farm had three events conducted throughout the year, with a total of 500 people attending the various field days, classes, group tours, and meetings. The annual meeting was held on March 3, 2005, at the Island Methodist Church in Muscatine. Our vegetable research farm tour was held in the fall on September 13. Attendees had a chance to observe the new powdery mildew-resistant pumpkins and winter squash cultivars as well as sweet corn and bell peppers. The home demonstration garden tour and open house held on July 29 was well attended and continues to be our most popular event during the summer.

New Projects. Sweet Corn Herbicide Evaluation, and Pumpkin Cultivars with Resistance to Powdery Mildew Trial, Vince Lawson and Hank Taber.

Weather Comments

Spring 2005. We experienced a frost-free growing season of 173 days in 2005. The last freezing temperatures during spring occurred on May 2, 3, and 4 with a low of 24°F on May 3. This late freeze was quite damaging since it followed an unusually warm April and many plants were actively growing. Annual crops planted in April that had already emerged were

frozen above the soil line. Our winter rye crop was starting to pollinate at this time, and the injury reduced grain set and yield. Also noticeable after the freeze were damaged strawberry blossoms opening with black centers. Even so, after the near-record cold in early May, temperatures bounced back and were generally above normal for the rest of the season.

Summer 2005. Drought became the prominent weather feature during the summer with rainfall about half of normal for the whole season (Table 1). In fact, the National Weather Service reported that the southeast Iowa summer of 2005 was the fourth driest and eighth warmest on record. Crops like corn, cucurbits, and soybean, if irrigated, fared well and produced good yields. Cool-season crops like potatoes suffered. Luckily we didn't experience any strong winds or hail and the dry conditions lessened most disease problems.

Fall 2005. Fall continued the warm and dry trend. Freezing temperatures first occurred on October 25 (30.9°F) followed by hard freezes down to 27°F on October 26–28.

Acknowledgments

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Table 1. Muscatine Island Research and Demonstration Farm, Fruitland, monthly rainfall and average temperatures for 2005.

Month	Rainfall (in.)		Temperature (°F)		Days
	2005	Deviation from normal*	2005	Deviation from normal	90° or above
March	NA	NA	38.6	0.0	0
April	2.43	-1.13	54.9	4.5	0
May	2.03	-2.17	60.1	-1.4	0
June	1.98	-2.15	75.6	3.9	13
July	1.43	-2.36	76.2	1.0	16
August	2.97	-0.95	74.5	1.5	9
September	1.82	-1.78	67.5	3.1	10
October	<u>0.98</u>	<u>-1.66</u>	54.4	2.2	<u>0</u>
Totals	13.64	-12.20			48