

2012

Muscatine Island Research Farm Summary

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Muscatine Island Research Farm Summary

Abstract

Includes Farm and Weather Summary and Research Farm Projects.

Keywords

RFR A1126

Disciplines

Agriculture

Muscatine Island Research Farm Summary

RFR-A1126

Muscatine Island Research Farm Association

President..... Ron Shepard, Fruitland
 Vice President..... Rick Bartenhagen, Muscatine
 Secretary-Treasurer..... Vince Lawson, Fruitland
 Director Keith Bartenhagen, Muscatine
 Director Greg Wilson, Muscatine

Research Farm Superintendent Vince Lawson

Ag Specialist..... Justin Rinas
 Ag Specialist..... Myron Rees

Research and Demonstration Farms Manager Dennis Shannon
 32 Curtiss Hall, ISU

Research and Demonstration Farms Coordinator Mark Honeyman
 32 Curtiss Hall, ISU

2011 Acknowledgements

The following companies have provided products or financial support during 2011.
 Their cooperation and support is greatly appreciated.

Crookham Co., PO Box 520, Caldwell, ID 83606
 Dubois Agrinovation, Inc., 478 Notre-Dame, C.P. #750, Quebec, Canada
 Eastern Iowa Light & Power Coop, PO Box 3003, Wilton, IA 52778
 Halane Farms, 2312 Fruitland Rd., Muscatine, IA 52761
 Harris Moran Seed Co., PO Box 4938, Modesto, CA 95352
 Hollar & Co., PO Box 106, Rocky Ford, CO 81067
 Hook’s Point Irrigation, 3850 Xavier Avenue, Stratford, IA 50249
 Rogers Brand, Syngenta Seeds, Inc., P.O. Box 4188, Boise, ID 83711-4188
 Rispens Seeds, Inc., 1357 Dutch American Way, Beecher, IL 60401
 Rupp Seeds, Inc., 17919 Co. Rd. B, Wauseon, OH 43567
 Seneca Vegetable Research, 5267 Flat St., Hall, NY 14463
 Siegers Seed Co., 13031 Reflections Dr., Holland, MI 49242
 Stokes Seeds, Inc., PO Box 548, Buffalo, NY 14240
 Sweetland Ag Tech, 3094 170th St., Muscatine, IA 52761

Farm and Weather Summary

Vince Lawson, farm superintendent

Farm Comments

Developments. Justin Rinas, our new agricultural specialist, started work at the research farm on May 2, 2011. His duties include taking care of the greenhouse in the spring, supervising summer help, and overseeing many of the daily activities at the research farm. Justin is a recently returned Peace Corps Volunteer and an ISU graduate ('03). He served as an Agriculture Volunteer in the Ecuadorian Andes of South America where he worked with indigenous farmers to increase production of potatoes, seed high quality pasture for sheep and dairy cattle, and establish a community agro-forestry nursery among other activities

The two center pivot irrigation systems on the research farm received an upgrade this season making them more efficient and easier to operate. Recently installed REC power lines next to the farm made it feasible to trench electrical wire across the field to the center pivots. Submersible electrical pumps were installed in the wells and irrigation pivots were re-nozzled allowing them to operate at lower water pressures for power savings. This work was finished just in time as the dry and hot summer demanded frequent irrigations for good crop production. A big thank you goes out to Tom Langan, Halane Farms, Mark Latta, Latta Well and Pump, and to Mark Stumpenhurst, Hooks Point Irrigation, for their contributions in making this project successful.

Field Days and Tours. The annual meeting of the Muscatine Island Research Farm Association was held on March 1, 2011 at the Rendezvous Banquet Hall, Muscatine, Iowa. Association business, including election of

directors, was conducted and an update on research farm activities was presented. Approximately 75 visitors attended the Home Demonstration Garden Tour on what seemed like the hottest day of the year, August 2.

New Projects. New this season was a trial evaluating several foliar applied products for ability to control soybean diseases as part of a project to optimize pest management practices in soybeans. Another new project looked at the response of potatoes and soybeans to sulfur fertilization. New cultivar trials included an evaluation of sixteen fresh market tomato cultivars.

Weather Comments

Overall, the 2011 growing season was dry and warm with rainfall 6.2 in. below normal and average monthly temperatures above normal for all months except March and September (Table 1). This created heavy reliance on irrigation for good crop production but reduced nutrient leaching and foliar disease development. As a result, crop yields and quality were generally good. The growing season, as measured by days with temperatures above freezing was 176 days in 2011. A low of 28°F was recorded on May 4 and the first freezing temperatures (26°F) in the fall were recorded on October 28.

Acknowledgements

Special thanks to the crew who helped get the work done: Justin Rinas, agricultural specialist; Kathleen Miller, summer intern; and Skylar Pieper, summer helper. Also thank you to Rick Peters and Shelley Lawson, who volunteered their time to help with melon harvest.

Table 1. Muscatine Island Research and Demonstration Farm, Fruitland, monthly rainfall and average temperatures for 2011.

| Month | Rainfall (in.) | | Temperature (°F) | | |
|-----------|----------------|-----------------------|------------------|-----------------------|-------------------|
| | 2011 | Deviation from normal | 2011 | Deviation from normal | Days 90° or above |
| March | NA | NA | 38.6 | -0.5 | 0 |
| April | 3.73 | 0.05 | 50.9 | 0.2 | 0 |
| May | 4.22 | -0.02 | 63.9 | 1.7 | 3 |
| June | 6.11 | 1.66 | 72.3 | 0.9 | 5 |
| July | 1.95 | -1.95 | 81.5 | 6.0 | 21 |
| August | 0.55 | -3.53 | 76.1 | 2.9 | 12 |
| September | 2.89 | -0.62 | 61.1 | -2.9 | 3 |
| October | <u>0.86</u> | <u>-1.83</u> | <u>54.4</u> | <u>2.1</u> | <u>0</u> |
| Totals | | -6.24 | | 10.4 | 44 |

Research Farm Projects

Project

AAS vegetable trial
 Home demonstration garden
 Cherry tree cultivar demonstration
 Degradable mulch evaluation
 Evaluation of SCN-resistant soybean varieties
 Potato response to boron and sulfur fertilizer
 Soybean white mold control study
 Soybean response to sulfur fertilizer
 Sweet corn cultivar trial
 Tomato cultivar trial
 Melon cultivar and spacing observations

Project Leader

V. Lawson
 C. Haynes
 J. Hannan
 V. Lawson
 G. Tylka/C. Marett/G. Gebhart
 V. Lawson
 A. Robertson/S. Wiggs
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