Farmer Assisted Research Results for 2011
By Joel DeJong, ISU Extension & Outreach Field Agronomist

Since 2006 ISU Extension, the ISU Ag Experiment Station and the NW Iowa Research Farm Association have joined together to work with many farmer cooperators in NW Iowa to learn. How? By planting, harvesting and collecting other data from field length, replicated trials in fields around NW Iowa. Formerly called the NW Iowa On-Farm Research project, this model has been adapted and is now spreading to other parts on Iowa. It has a new name, ISU F.A.R.M. (which stands for Farmer Assisted Research & Management). This year 39 different cooperators worked with us to complete over 90 in-field comparisons on a wide array of agronomic comparisons. Next year more trials in additional parts of Iowa will be added. With more information, crop producers can make better decisions – that’s our goal of this project. I look forward to the growth of this effort!

The first widely repeated on-farm project was a comparison of soybean plant populations. ISU’s Pale Pedersen, in 2006, had recommended soybean seeding rates of 125,000 to 140,000 seeds per acre, but most were planting quite a bit more than that at the time. Soybean growers were hesitant to lower populations, it seemed, so we did 22 replicated trials over the next 5 years comparing 125K to 175K seeding rates. 21 of the 22 showed no significant yield difference in yields. Follow-up surveys showed that many farmers used this data to successfully lower seeding rates from previously higher levels.

Another area that has seen a lot of comparisons has been in corn fungicides at R-1 (silking). Yield responses have been quite erratic from field to field – even if using the same hybrid sometimes. This year, even though diseases were almost absent, 5 of 13 showed a statistically significant response to fungicide application. We also looked at spraying a fungicide at the V-6 (six leaf) stage of growth in six fields. None showed a significant yield increase. Some of the other trials completed in 2011 include soybean fungicides, several different seed treatments, no-till/tilled soybean comparisons – and how that might affect corn yield the following year, some sulfur response and other nutrient comparison trials, corn rootworm Bt trait hybrids with and without insecticides, aphid resistant soybeans, row spacing, plant populations, and more.

The final report of all the 2012 work is now complete. I encourage you to take a look at it. The report, in its entirety, can be found on the Plymouth County Extension web page: http://www.extension.iastate.edu/plymouth/news/researchfarmresults.htm. Also, we found the funds to get a few more hard copies printed this year. If you do not have internet access, but would still like a copy of the report, contact Joel DeJong at the Plymouth County Extension Office at 712-546-7835.

Interested in becoming a cooperator? Also contact DeJong and he will put you in contact with one of the project specialists.

Swine Feed Efficiency International Conference
By Matt Swantek, ISU Extension & Outreach Swine Program Specialist
The International Conference on Feed Efficiency, co-hosted by Iowa State University and Kansas State University was held on November 8-9, 2011 in Omaha, Nebraska. Over 400 attendees representing 23 states and 18 countries of producers, consultants, nutritionists, veterinarians, geneticists, and academics were present to listen to the technical aspects of pork production.

The format was to try and address the different factors that influence feed efficiency and where each may be able to provide a means or perspective that would make a difference to pork producers in these turmoil times of feed costs.

What may have been a surprised for some is the struggled with tracking and monitoring feed costs especially when it represents the largest portion of cost of production. The Regional Swine Grower’s meeting in March will outline some of the causes of this problem.
Another awareness was that even though cost of gain is important measure of performance, most have realized that cost of production doesn’t drive the cash flow but rather that producers are paid on swinging carcass weight and that most production systems must have barn through put in order to schedules and not bind up the production system.

Others aspects to understanding feed efficiency has been the move away from least cost formulation to best cost feeding programs based on ingredient purchases and feed mill efficiencies. Cost of gain is important, but savings by computer least cost formulations cannot always be realized due to restrictions or constraints in feed manufacturing and feed deliveries. Whole system efficiencies and throughput have costs as well and a $0.50 savings may cost more somewhere else due to slow downs or increased efforts to implement that savings.

Integrated production systems are now considering modeling economics on a whole system approach as a management tool. In the past livestock were a means to add value to corn, today the reverse may be true where the value of utilization of manure as fertilizer reduces production costs of corn production.

Health status of the pig was discussed by several speakers at the conference. Disease and poor environmental conditions reduce gains and pigs are less efficient in feed conversions. A regional initiative has begun to try contain the wide spread effect of PRRS after a unit has had an outbreak. The hope is that by changing trafficking and health protocols not just for the affected producer/unit, but for those within a radius of the epicenter of the outbreak.

In summary the conference addressed management practices, nutrition, health, genetics, economics and computer modeling and the relationship to feed efficiency. But if production records are not being implemented and utilized then how will improvement be made?

Global Influences on Agriculture in Iowa
By Kris Kohl – ISU Extension & Outreach Ag Engineer Program Specialist
The world of agriculture is influenced by many changing factors – climate, world economy and the food, feed, fuel discussions, to name a few. Iowa farmers, with Iowa State University Extension and Outreach providing relevant university research, have met past challenges. At the workshop Mega Trends in Agriculture on March 28 in Rockwell City, ISU Extension and Outreach specialists will update farmers with current research so they can position themselves for the next decade.

“At this workshop we’ll share current information from university researchers to look at what is happening now and what is expected to happen,” said Kris Kohl, ISU Extension and Outreach ag engineer. “We’ll explore the big picture of what is happening in agriculture, look at how the Corn Belt is going to grow and what actions farmers should consider now to be in a position to capitalize on the changes.”

The program is planned for March 28 from 10 a.m. to 3 p.m. at the Calhoun County Extension Office in Rockwell City. Program speakers include Chad Hart, ISU Extension and Outreach economist and grain marketing specialist; Tom Olsen, ISU Extension and Outreach farm management specialist; and Kohl.

The Mega Trends in Agriculture program will examine the following topics:
• The world economy and how Iowa fits in
• Ethanol oil and corn – the fight between feed, food and fuel
• The changing environment CO2 – friend or foe. Will Iowa be a winner or loser, and what can Iowa farmers do to be the winners?

The cost for the program is $30 per person or $40 per couple, which includes lunch. To register, call the Calhoun County Extension office at 712-297-8611. For more information, contact Kohl at 712-732-5056.

Swine Update
By Dave Stender - ISU Extension & Outreach Swine Program Specialist
Introducing Group Tracker version 1.5
Group Tracker is computer program to record pig flow and expenses for a group of pigs that will provide a closeout summary of the performance and economic returns. The reports provide the motivation. Example reports are enclosed.

Group Tracker is a spreadsheet that is designed for Microsoft Excel. Requires Excel 97 version or newer. The spreadsheet approach allows producers to enter their own raw data in predefined forms. A database will be maintained to for all producers willing to share their information.

The benefit of the database is the ability to benchmark, make comparisons and look for trends. This comparison can be within a farm to look at different buildings or genetics; among farms that sources pigs from same pig source and the ability to benchmark with the larger database.

The Iowa Pork Industry Center is distributing the program which has been developed by Mark Storlie, Swine Field Specialist for NE Iowa. Program was developed with on-farm feed manufacture in mind; however, given some operation purchase feed or wish to enter totals the program allows several different approaches to enter the needed data. Flexibility is important.
Thomas Scherer, North Dakota State University Extension engineer, will discuss new control systems for pumped outlets and their success in the Red River Valley of North Dakota. In addition to Scherer, ISU Extension ag engineers and farm management specialists are morning presenters.

The afternoon session will include discussions on the long term benefits of tiling, implications of drainage water management, discussions on controlled drainage, bioreactors and managing drainage water quality with wetlands. Iowa State University agricultural engineers will present afternoon sessions.

The registration fee is $35 per person and includes lunch and refreshments. See workshop locations and registration information for each site:

- March 13 – Mason City, 4-H Learning Center, North Iowa Fairgrounds, 2023 S. Federal Ave. Registration deadline is March 9. To register, call 641-423-0844.

Call by deadline to avoid a $10 late fee.

ISU Weed Management Program

Plan to attend an ISU Extension and Outreach program on management of resistant weeds on Monday, March 12, 2012. The location is the Clay County Regional Events Center in Spencer. The meeting will be held from 9:00 (8:30 registration) to 12:00 and will end with a no cost noon lunch.

There is no charge to attend the meeting but you are encouraged to pre-register.

They can pre-register or you can register at - http://www.aep.iastate.edu/weeds/homepage.html

Drainage Meetings

By Kris Kohl- ISU Extension & Outreach Ag Engineer Program Specialist

Subsurface drainage, commonly known as an ag tile system, is an important part of agricultural systems in Iowa. An Iowa State University Extension and Outreach drainage workshop will examine various aspects of farmland drainage, according to Iowa State University Extension and Outreach engineers organizing the workshop.

The 2012 Drainage Design Workshop will cover the basics of planning a new drainage system or retrofitting an existing system. The workshop will be offered in three north Iowa locations – March 13 in Mason City, March 14 in Algona, and March 15 in Le Mars. The program begins at 10 a.m. and will adjourn at 3 p.m. at all locations.

“‘To function most efficiently, all components of a subsurface drainage system should be designed to work together,’” said Kris Kohl, ISU Extension and Outreach agricultural engineer. “While the economic benefits of tiling are well recognized, there are also environmental impacts from drainage. We will be discussing pumps on outlets and other new technologies that may be useful in minimizing negative environmental impacts.”

The morning session will focus on drainage design concepts, economics and working with rental agreements to get tiling done.

ISU Weed Management Program

By Paul Kassel- ISU Extension & Outreach Field Agronomist

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Program Cost:
Within the State of Iowa $30 for operations that share information into the confidential database.

Website for Foaming Pit Issues
The following link has information about what is known about the foaming pit issues present in the Midwest again this summer/fall and what producers should do from a safety standpoint. Several Midwestern Universities are working together to try and understand this issue better and are pooling their findings at: http://www.manure.umn.edu/applied/health_safety.html

Factsheet on Selling and Buying Manure in Iowa is Available
The latest Iowa Manure Manager Series fact sheet, Selling and Buying Manure In Iowa, has been finalized and posted to the web at: http://www.agronext.iastate.edu/immag/pubs/imms/vol10.pdf.

Resource for information on manure, manure plans, etc.:
- IMMag Web site at http://www.agronext.iastate.edu/immag/

Managing Tough Times is an ISU resource to address economic challenges for Families/Households, Businesses/Communities and Farms. Visit the Site address: http://www.extension.iastate.edu/toughtimes/