2011

On-Farm Research

Follow this and additional works at: http://digitalcommons.unl.edu/southeastresextreports

"On-Farm Research" (2011). Southeast Research & Extension Center Reports and Administration. 35.
http://digitalcommons.unl.edu/southeastresextreports/35
Program Impact:

- Ninety-seven percent of NSFGPP members indicate that considering all of the agricultural educational opportunities available to them they would rank the NSFGPP "above average" or "the best".
- "It educates all of us on proper scientific methods for on-farm testing of production questions."
- "There is a positive image of the program because of the joint effort among extension, industry and agricultural producers to help improve agricultural profitability."

"From my starter fertilizer plots, I learned that 10-34-0 was as effective as a more expensive starter fertilizer. This has saved me $5/acre annually on 500 acres of corn for the last 6 years. This has been a savings of $15,000 for me."

— On-Farm Research Participant

"Since joining the program, we have adapted a no-till corn, no-till soybeans, and bio-solids program. In tillage costs alone, we have saved $7-8/acre on 2,500 acres. I would recommend this program to anyone."

— On-Farm Research Participant

Contact Information:

Keith Glewen  
Saunders County  
402-624-8630  
kglewen1@unl.edu

Jenny Rees  
Clay-Webster Counties  
402-762-3644  
jrees2@unl.edu

Jim Schneider  
Hamilton County  
402-694-6174  
jmschneider7@unl.edu

Brandy VanDeWalle  
Fillmore County  
402-759-3712  
bdvandewal2@unl.edu

Dave Varner  
Dodge County  
402-727-2775  
dvarner1@unl.edu

Gary Zoubek  
York County  
402-362-5508  
gzoubek1@unl.edu

2011 On-Farm Research

Renewing the Land Grant Mission Through On-Farm Research

In production agriculture, it's what you think you know, that you really don't know, that can hurt you.

Farm Research Offers Answers.

Farmers are continually evaluating products and practices, often by comparing the current practice to an alternative that is promoted as new or better. Farmers working with University of Nebraska-Lincoln Extension Educators and Specialists in farm research groups realize the value of conducting valid, scientifically-based research on their own farms. Research studies are driven by farmer questions that they test in their own fields. UNL Extension Educators and Specialists work with farmers to make certain information generated and inferences made, are based on sound experimental design, statistical analysis and economic interpretation.

Studies are implemented using field length strips and the farmer’s equipment. Most trials have five or six replications and continue for three or more years. Trials may have fewer replications and include several farmers focusing on the same issue where data is aggregated over a shorter period.

There are currently two organized farm research groups in Nebraska:

- Nebraska Soybean and Feeds Grain Profitability Project (Saunders/Dodge county area)
- Greater Quad County On-farm Research Group (York/Hamilton/Fillmore/Seward/Clay/Nuckolls/Fillmore county area)
On-farm research education allows farmers to test production ideas in partnership with University faculty — receiving technical support from Extension and industry personnel while conducting their trials. Farmers report their results at an annual winter meeting to which non-participating farmers and crop advisors are invited. Participants noted that farmer research was a very important means to improving the area’s agriculture. Farmers highly value the interaction with other participants. As one farmer said, “Working with critical thinkers, farmers, and consultants is addictive and a formula for professional success.”

“I was interested in the potential return of lime and fertilizers in the soil. I just didn’t want to throw a great deal of money out on the soil without feeling secure of a potential return. The NSFGPP program provided me the academic and technical help to perform the study.”

— On-Farm Research Participant

The Research Process

- Meet with producers to determine their question(s)
- Private industry representatives typically involved
- Design research protocol
- Typical designs are paired comparisons and randomized complete block designs
- Comparisons are field size layouts—all work conducted with farmer’s equipment
- Growing season observations are documented
- Crop yield is measured using weigh wagons or yield monitors
- Meet with farmers to review their results and determine profitability of their comparison, then plan for the next growing season
- Facilitate data sharing among farmers
- Publish results

An evaluation of 2006 farm research programs in the Southeast District revealed participating farmers improved their annual whole farm profitability by $2,370 in planting, $3,643 in tillage, $5,188 in soil fertility, and $3,181 in pest management systems, respectively.

All results from the on-farm research programs posted on the Cropwatch website have been screened and reviewed by a team of University of Nebraska-Lincoln Extension Educators and Specialists.

Statistical analysis is conducted on all research data. In many cases, the economics of the study results are also included.

http://cropwatch.unl.edu/web/farmresearch

Documented Benefit

“With this group of producers, I trust the data. This is unbiased data collected from some very good producers in the region.”

— On-Farm Research Participant

From “Will this work on my farm?” to “These are the results on my farm,” the on-farm research process is shared by faculty, industry professionals and farmers. Collectively, this partnership yields valued and relevant applied research data. Research data is shared among agriculturalists at regional forums and on the UNL Extension on-farm research website.