

New agreement will enhance Minnesota's organic agriculture sector

Minnesota leads the nation in production of organic corn and soybeans and boasts more certified organic acreage than all but five other states. The state's organic agriculture sector has grown rapidly in recent years, but industry watchers see room for even more growth.

To help make that happen, five state and federal partners recently signed a memorandum of understanding (MOU) in which the organizations agreed to work together to enhance the productivity, profitability and economic opportunities of Minnesota's organic agriculture industry. This organic partnership is the first of its kind in the country.

The Minnesota Department of Agriculture (MDA); the University of Minnesota College of Agricultural, Food and Environmental Sciences; the University of Minnesota Extension Service; and the Minnesota offices of the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service and USDA Farm Service Agency each provide important services to organic farmers in the state. By signing this MOU, each agency is making greater coordination of these outreach efforts possible.

"Organic agriculture is an important and growing part of Minnesota's farm economy," MDA Commissioner Gene Hugoson says. "We each do our part to help Minnesota maintain and build on its leadership status in organic production. By more closely coordinating our efforts, each of us will have a greater impact than we would have working individually."

The MOU partners recognize that organics are a choice preferred by a growing number of farmers and consumers, and will undertake complementary efforts to assist organic producers' efforts to improve profitability, identify new market opportunities and conserve natural resources. The agencies will focus on activities including:

- Developing and implementing conservation farm plans for organic crop production;
- Providing staff support for organic professional development, service delivery and outreach efforts;
- Sharing information about innovative organic programs taking place in other states or countries; and
- Encouraging the use of demonstrations and field days with organic field operations to showcase conservation and organic production.

"The University of Minnesota serves all the farmers in the state," says Charles Muscoplat, dean of the College of Agricultural, Food and Environmental Sciences. "We are happy to work closely with the Minnesota Department of Agriculture and USDA to provide the information needed to enhance the productivity, profitability and environmental responsibility of all farmers in the state.

"We're leaders in organic research," Muscoplat says. "Our Elwell agroecology farm has 160 acres devoted to organic research, and 130 of those are certified organic acres. That's 80 percent of all certified organic research acres at land grant universities in the U.S.

"We provide farmers the information needed to make decisions about how to raise their crops," Muscoplat adds. "One example is the Variable Input Crop Management System research project at

the University's Southwest Research and Outreach Center. This is a long-term study that looks at ways to minimize input use while maintaining productivity and profitability.

"We're also partners in Minnesota Institute for Sustainable Agriculture, which provides a powerful catalyst for encouraging research and discussion about sustainable agriculture."

A complete listing of organic-related websites is available through the MDA site at www.mda.state.mn.us/esap/organic.

Precision Agriculture for everyone?

Have you read about precision agriculture and concluded that you could never afford to do it? Some of the farming magazine articles about precision agriculture make it sound like you need tractors with onboard computers and GPS units, harvesters with yield monitors, and soil sampling of your entire farm on a grid pattern. Take heart: a new technical note from Natural Resources Conservation Service (NRCS), "Affordable Opportunities for Precision Agriculture," tells how to do precision agriculture on your farm with tools no more sophisticated than photocopied maps, transparency sheets and felt-tip markers.

The most important tools for precision agriculture are your brain and your eyes, not the computer and GPS. This new publication from NRCS is intended to help farmers who may or may not own a computer, but who are interested in long-term management strategies for improving their farms. The experiences of a number of farmers from around the United States are included to show ways that you can map variability on your farm; and then use varying management techniques to deal with the variations in soil, slope, drainage and other factors.

Yield monitoring without expensive yield monitors is also covered in this technical note. There are ways to do some simple yield testing to find out if your precision management is working. The publication states, "Farmers who check site-specific yields soon realize that looks can be deceiving. Grain yield does not always match how quickly the crop got started in the spring or how tall, dense, or green the crop looks at the end of the season."

Thinking in terms of precision agriculture is one part of a farming system that may also include crop rotation, integrated pest management, use of fertilizers and pesticides, or any number of other management techniques and inputs. The techniques outlined in "Affordable Opportunities for Precision Agriculture" are designed to help farmers make the most judicious use of their labor and inputs—and that is something to interest any sustainable farmer.

Affordable Opportunities for Precision Agriculture can be found online at: http://policy.nrcs.usda.gov/scripts/lpsiis.dll/TN/TN_SA_1_A.pdf

Or contact your local NRCS office to ask for a print copy. Find the office in your county at: http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/pgCountyMap?st=MN&state_name=Minnesota&st_cd=27

—By Jane Jewett

Finding options for organic poultry feed

Ever wonder why the cost of organic meat is so high? The answer is simple: it's expensive to give an animal organic feed. Jacquie Jacob, a poultry nutritionist at the University of Minnesota, is studying organic poultry diets, looking to find nutritional options that are simultaneously economically feasible for farmers.

More and more small crop farms are switching over to organic crop production and are growing alternative crops in crop rotations as part of their new practice. The main challenge to this system? There are no strong markets in place for nontraditional crops such as oats, buckwheat, rye, flax, and field peas. For Jacob, that's precisely where poultry feed comes in.

"Organic poultry is a niche market in which small-farm operators have a competitive edge," Jacob explains. The opportunity exists for both poultry and crop producers to benefit from each other. The missing link, then, is to research nutritious options for organic poultry feed.

Finding the best nutritive option is complicated. No one crop is perfect: oats are too fibrous, rye inhibits growth, wheat slows digestion, and so on. Flax seed, wondrously high in protein and in oil,

affects egg flavor when used as more than 10 percent of the feed. “Each one of them has something,” explains Jacob. The challenge becomes finding a diet that is high in protein and essential amino acids, and minimizes the effect of the anti-nutritive aspects of each crop.

“For traditional feed, there’s a very strong database of nutrition information,” says Jacob. “We don’t have that kind of nutritional information for organic feeds.” That’s where Jacob’s work, which has received a USDA grant, begins. She and graduate student Allegra Toll will test organic crops for nutrient availability, and design and test poultry feeds on both broiler and layers. “We’re just trying to help out those farmers who are choosing to go organic and find nutritionally and economically feasible options for them,” she says.

For information on poultry nutrition:

<http://www.ansci.umn.edu/poultry/resources/nutrition.htm>

For information on organic poultry production: <http://www.ansci.umn.edu/poultry/links/organicproduction-links.htm>

Jacque Jacob’s web page:

<http://www.ansci.umn.edu/faculty/jacob.htm>

—By Daniel Ungier, MISA intern

State of Michigan bars herbicide linked to water pollution

Michigan has barred use on cornfields this year of a herbicide that has been blamed for contaminated water in other states. The Michigan Department of Agriculture rejected a request to allow Balance Pro use on the state’s 2.2 million acres of corn this spring, Deputy Director of Agriculture Keith Creagh says.

Agriculture Director Dan Wyant followed a staff recommendation that warned of the product’s potential risks. Those included contamination of surface and groundwater, its classification as a probable human carcinogen and the state’s inability to monitor the product’s active chemical, isoxaflutole, the Detroit Free Press said.

Michigan also declined to approve the herbicide in 2001 and 2002, saying there was insufficient testing data. Michigan could approve the use of Balance Pro next year if the company and state are able to create a program to teach farmers how to use the product without damaging the environment, Creagh says. Officials also would want to see additional test results and would need to upgrade their ability to analyze the product’s environmental impact, he says.

Balance Pro is used in 17 states and has been detected in streams in several of them, according to the U.S. Environmental Protection Agency. “Lakes and reservoir samples in Nebraska and Missouri continued to show levels of Balance metabolites, some as late as 10 months after a single application,” Kenneth Rauscher, director of the Pesticide and Plant Management Division of the Michigan Agriculture Department, wrote to Balance Pro’s manufacturer, Bayer Crop Science.

The company has said there is no danger to groundwater and minimal concern over the chemical’s accumulation in the environment. Levels of the herbicide found in Nebraska have been well below those that would signal any danger to health, says Tim Creger, pesticide program manager for Nebraska’s Department of Agriculture.

Monitoring by the state and careful application by farmers have further reduced residual levels of the chemical, Creger says.

Last year, Wisconsin approved its use but with so many restrictions that the manufacturer decided not to sell it there. Minnesota also imposed severe restrictions on its use.

Sustainable agriculture program calls for grant preproposals

Members of institutions and organizations from the North Central Region are invited to apply for 2004 Research and Education Grants through the North Central Region Sustainable Agriculture Research and Education (NCR-SARE) program. NCR-SARE estimates that about \$1.5 million will be available for 10 to 15 grants by the summer of 2004. Individual grants cannot exceed \$150,000.

Grants can be one to three years in length and must address sustainable agricultural topics with in-depth research or education/demonstration projects. Successful preproposals will address the

long-term enhancement of agricultural profitability, environmental quality and societal well-being.

“We are pleased that interested citizens and the federal government support the SARE program and make these funds available for research and education projects that will make agriculture more sustainable,” says Bill Wilcke, regional coordinator for the NCR-SARE program. Wilcke is also an engineer with the University of Minnesota Extension Service.

NCR-SARE encourages projects that include holistic approaches, interdisciplinary team involvement, agricultural producer participation, significant outreach and measurable results. Projects should pertain to issues within the North Central Region.

The call for preproposals is available at the NCR-SARE office at (402) 472-7081 or through its website at www.sare.org/ncrsare. Preproposals will be accepted in the NCR-SARE office until June 10, 2003, at 4:30 p.m. CDT. Successful preproposal authors will be invited to submit full proposals due fall 2003.

The Research and Education Grant Program is one of four NCR-SARE grant programs. It funds collaborative teams of scientists, farmers, educators, institutions and organizations to explore sustainable agriculture through research, education or demonstration.

NCR-SARE is a competitive grants program, funded by the U. S. Department of Agriculture, which strengthens rural communities, increases farmer/rancher profitability and improves environmental quality by supporting research and education. States included in the North Central Region are North and South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana and Ohio.

What we're about...

This newsletter is supported by the Minnesota Institute for Sustainable Agriculture (MISA)—a partnership between the Sustainer’s Coalition and the University of Minnesota College of Agricultural, Food, and Environmental Sciences (COAFES), the University of Minnesota Extension Service, the North Central Region Sustainable Agriculture Research and Education (NCRSARE) Professional Development Program (PDP), and the Minnesota Department of Agriculture (MDA).

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You can find more University of Minnesota Extension Service educational information at www.extension.umn.edu. Also check MISA’s home page at www.misa.umn.edu.

Our mission statement: To help bring people together to influence the future of agriculture and rural communities to achieve socially, environmentally, and economically sustainable farms and communities.

To stimulate thinking and discussion about sustainability, we try to present items that reflect different points of view. This being the case, we aren’t promoting and don’t necessarily agree with everything we publish.