

Sustainable Agriculture

Volume 8, Issue 9 – September 2000

Band production is a high health system for small swine farms

Smaller hog farms can use a "band" production system to become competitive, says Carlos Pijoan, a University of Minnesota veterinarian.

Band production differs from batch production in that facilities are fully utilized, Pijoan says. Traditional batch farrowing consists of farrowing all females twice a year. Although it results in large groups of pigs, there are also large downtime periods when the farrowing, nursery and finishing facilities sit empty. This results in high opportunity costs and a very expensive system from a financial standpoint.

The band system helps producers adopt high health technologies while remaining small in size and managing the farm with little or no outside labor, Pijoan says. Band production is used extensively in Europe to produce larger numbers of pigs from small farms.

It's very popular in France, with farrowing every 3 weeks and either 26 or 35-day weaning. However, Pijoan says the French system is very expensive since it requires two sets of farrowing crates.

A 3:2 band system advocated by Pijoan is based on farrowing every 21 days (3 weeks) and weaning between 15-17 days (about 2 weeks). Pijoan says the advantages of this system include the possibility of accessing Segregated Early Weaning (SEW), production of larger groups of pigs and the ability to put repeating females in the next farrowing group.

It also makes maximum use of existing facilities, especially farrowing crates. Crates are the most expensive part of the facility and are used to maximum capacity in the band system.

The 3:2 band system also allows a more focused work schedule. Each week is spent breeding, farrowing or weaning, allowing the producer to put more attention to these delicate jobs.

Pijoan and co-worker Montserrat Torremorell gave a paper on banding at the recent Allen D. Leman Swine Conference, sponsored by the U of M College of Veterinary Medicine. The band study was partially sponsored by the Minnesota Pork Producers Association.

A 29-page paper detailing the banding system is available for \$15 from Jan Swanson at (800) 380-8636, e-mail swans032@umn.edu. Pijoan may be reached at (612) 625-1233, pjoa001@umn.edu.

Simple method found to vastly increase crop yields

In one of the largest agricultural experiments ever, thousands of rice farmers in China have doubled rice yields and nearly eliminated its most devastating disease without using chemical treatments or spending an extra penny. Instead of planting large stands of a single type of rice, they planted a mixture of two

different types. This one change radically restricted the incidence of rice blast--the most important disease of rice.

"It's an important study," according to David Tilman, University of Minnesota ecologist. "It's going to raise a great deal of interest." The study was published in the Aug. 24 edition of Nature. (Condensed from the New York Times, by Carol Kaesuk Yoon)

New sustainable agriculture grants go to Minnesota producers, educators

Minnesota farm producers, educators and scientists have received grants totaling \$240,638 from the USDA's North Central Regional Sustainable Agriculture Research and Education (SARE) program.

The 12-state North Central SARE region awarded a total of \$2.1 million in 87 grants to teams of organizations, and individuals to improve agriculture and sustain communities in 2000 and beyond.

Minnesota projects and contact people receiving funding are as follows:

- Phosphorus mobilization and weed suppression by buckwheat, sorghum sudangrass and other cover crops, \$50,000. Jim Stordahl, University of Minnesota Extension Service, Clay County, (218) 299-7541, stord002@umn.edu.
- Managing intensive rotational grazing for farms affected by urban growth, \$13,629. Maria Fernandez, University of Minnesota Extension Service, Wright County, (612) 682-7394, ferna014@umn.edu.
- Assessing soil quality changes in alternative and conventional cropping systems, \$93,300. Deborah Allan, University of Minnesota, (612) 625-3158, dallan@soils.umn.edu.
- Minnesota sustainable agriculture education fund, \$19,000. Bill Wilcke, University of Minnesota Extension Service, (612) 625-8205, wilck001@umn.edu.
- Dream of wild health network, \$5,000. Sally Auger, farmer, St. Paul, (651) 646-8167.
- Heritage maize project, \$14,997. Frank Kutka, farmer, Barnum, (213) 389-3220.
- Expanding, enhancing and diversifying sales with team farmer marketing, \$14,850. Constance Karstens, farmer, Hutchinson, (320) 587-6094.
- Dairy marketing options, \$9,900. Mike Salber, farmer, Browerville, (218) 765-2470.
- Promoting and distributing pastureland products, \$10,000. Dan French, farmer, Dodge Center, (507) 635-5619.
- Evaluation of Christmas tree varieties for northern Minnesota, \$4,962. Jesse Hoffbauer, farmer, Duluth, (218) 624-3092.
- Specialty poultry and egg marketing to Asian markets in Twin Cities metro area for the B/S Poultry Cooperative, \$5,000. Chong X Vang, farmer, Stacy, (612) 724-7024.

Negotiations continue between U of M and Sustainers' Coalition

Negotiations regarding the future of the Minnesota Institute for Sustainable Agriculture (MISA) are continuing between the Sustainers' Coalition, the MISA board and the U of M. Topics include the history of MISA, the College of Agricultural, Food and Environmental Sciences (COAFES) strategic plan, MISA bylaws and funding, programming regarding partnerships and other COAFES efforts such as Regional Partnerships, and equity and balance in education, research and outreach.

Sustainers' Coalition negotiating team members include George Boody, Diane Jensen, Dave Nelson and Jan O'Donnell. Alternates are Sue Cristan, Carmen Fernholz, Dale Hennen and Rebecca Knittle.

MISA negotiating team members are Sister Mary Tacheny and Prof. Mike White, with Prof. Bruce Vondracek the alternate.

The U of M negotiating team consists of Sandra Gardebring, vice president; Charles Muscoplat, vice president and COAFES dean; Carla Carlson, COAFES chief of staff; and Bev Durgan, COAFES associate dean.

For more information, contact MISA at (612) 625-8235 or COAFES at (612) 624-3009.

Minneapolis gives preference to organic food vendors for contracts

The Minneapolis City Council has voted 11-1 to give preference to organic food vendors for all contracts. The council resolution also requests that state and national government bodies require labeling, safety testing and have liability assigned to the commercial developers of genetically-engineered foods. For more information, contact Terry Gips, president of the Alliance for Sustainability, at (612) 374-4765.

Internship, colloquium are key parts of Graduate Minor in Sustainable Agriculture

The Graduate Minor Program in Sustainable Agriculture at the University of Minnesota emphasizes systemic approaches to analyzing current agricultural production systems in the U.S. It also highlights the environmental, economic and social conditions that influence changes in agriculture. Two core elements of that curriculum are the Graduate Colloquium in Sustainable Agriculture (SAGR 8010) and the internship program.

Colloquium topics this fall include the history and future of farm policy; farmers, agriculture and rural sociology; rural economic development; urban sprawl and farmland preservation; food security and urban agriculture; being a farmer in the 21st century; and food safety and environmental quality issues related to agriculture. Interested? Join us! The course meets Thursdays, Sept. 7-Dec. 14, 11:45-1:50 p.m.

The internship requirement of the minor is a unique opportunity for students to gain hands-on experience working on diverse issues related to the long-term viability of agriculture. Three graduate minor students completed their internships this summer. Lynn Mader (M.S. student in Food Science and Nutrition), worked with the Land Stewardship Project's Western MN office on a project called "Linking Food, Land and People." Kristin Mercer (M.S., Agronomy) and Joel Wainright (Ph.D. candidate, Geography) received individualized, intensive training on agroecological research and production in Cuba.

Another sustainable agriculture learning opportunity available for students, faculty and the public are the "What's Up in Sustainable Agriculture" (WUSA) brown bag lunch series, held every Wednesday at Noon, in 306 Borlaug Hall. Click into the WUSA calendar through the MISA web page: www.misa.umn.edu.

For more information about the Graduate Minor in Sustainable Agriculture Systems, the Colloquium, or the WUSA series call Melinda at the Minnesota Institute for Sustainable Agriculture, (612) 625-2738.

Calendar of events, 2000

These events are sponsored by numerous organizations. More information is available on MISA's website: www.misa.umn.edu.

Sept. 13-14 **Grazing in Riparian Areas**, with international known grazier Charlie Opitz.

Sept. 13, Mark and Sue Edginton dairy, Cobb, Wis.; Sept. 14 Duane Hager dairy, Kellogg, Minn. Call toll-free 800-385-3103. Time: 8:30 a.m.-3:30 p.m.

Sept. 13 **Three Northwest Minnesota Grazing Group** Projects (c/o Burkel Grain Service Inc.) combined into one Field Day.

- *Project 1--Dairy Heifer and Dry Cow Supplementation on Pasture.* Schafer Farm, Strathcona, MN 56759. Call 218-528-3241. Time: 10:00 a.m.
- *Project 2--Dairy Heifer Feeding on Pasture.* Paul Duray, Greenbush, MN 56726. Call 218-782-2950 Time: 12:00 p.m.
- *Project 3--Dairy Heifer Growing on Pasture.* Barry Kirkeide, Greenbush, MN 56726. Call 218-782-3421. Time: 1:30 p.m.

September 15 **A Low-Cost Mechanism for Inter-seeding Cover Crops in Corn.** Tony Thompson, Willow Lake Farm, Box 128, 339 - 11th Street, Windom, MN 56101. Call 507-831-3483. Time: 10:00 a.m.

September 15 **Development and Continuation of a Community Based Sustainable Organic Growers Cooperative and Marketing System.** Patty Dease, 15832 County Road 7, South Haven, MN 55382. Call 320-236-7852. Time: 1:00-7:00 p.m.

September 15 **Five Steps to Better Pasture: How Does it Really Work?** Sarah H. Mold, 7560 Sunrise Road, Harris, MN 55032. Call 651-674-7212. Time: 1:00-3:00 p.m.

September 16 **Horse Pasture Improvement Through Grazing Management and Red Clover.** Dale and Kathy Ronning, 3803 Dempsey Avenue SW, Waverly, MN 55390. Call 612-682-7394 or 1-800-362-3667. Time: 8:00 a.m. Registration at Delano Library, 12:00 p.m. bus leaves after lunch for Ronning's.

September 19 **Reviving and Enhancing Soils for Maximizing Performance of Pastures and Livestock.** Doug Rathke & Connie Karstens, 61231 MN Highway 7, Hutchinson, MN 55350. Call 320-587-6094. Time: 1:00 p.m.

September 22 **Turkey Litter--More is not Always Better.** Meierhofer Farms c/o Jeff Koehler and Belgrade Co-op, Dennis Zenner, 21518 Farm Crest Road, Belgrade, MN 56312. Call 320-254-8231 (Belgrade Co-op). Time: Registration 10:30 a.m.

September 23 **Soil Ecology and Managed Soil Surfaces.** Peter Seim, Thomas Hansmeyer, Bruce Bacon, 7363 - 175th Avenue NW, Ramsey, MN 55303. Call 763-753-5099. Time: 11:00 am-4:00 p.m.

September 30 **Country Living Field Day.** Kenwood Farms (Carroll County, Ohio). Call 800-448-8027. Time: 10 a.m. - 5 p.m.

October 10 **Improving Quality and Quantity of Pasture Forage with Rotational Grazing Reducing the Need to Convert Forest to Pasture.** Michael Harmon, Route 2, Box 348, Shevlin, MN 56676. Call 218-657-2592. Time: 1:00 p.m.

October 12 **Flour Corn as an Alternative Crop--The Benefits of Growing and Using Corn Flour.** Buckwheat Growers' Association/Lynda Converse, RR 3, Box 54, Browerville, MN 56438. Call 320-594-2456. Time: 1:00-3:00 p.m. at the Marvin Duhn Farm.

October 26 **Applying Manure to Corn at Agronomic Rates to Achieve Desired Yield and Reduce or Eliminate the Need for Commercial Fertilizer Use.** Project site at Taylor Farms will demonstrate nutrient management utilizing hog manure. Call 651-480-7704 or 651-480-7781. Time 1:00-2:30 p.m.

About this newsletter...

For the past year we've been funded by the Minnesota Extension Service and the Minnesota Institute for Sustainable Agriculture (MISA) with support from the Minnesota Department of Agriculture.

We're always looking for story ideas. Send them to the editor: Jack Sperbeck, 405 Coffey Hall, University of Minnesota, St. Paul, MN 55108, (612) 625-1794. E-mail: jsperbeck@extension.umn.edu. Other editorial board members: Helene Murray (612) 625-0220, murra@021.tc.umn.edu; Tom Wegner (612) 374-8400, twegner@extension.umn.edu; and Bill Wilcke (612) 625-8205, wwilcke@extension.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.