Organic Farming Offers Opportunities to Kansas Farmers

"Dollars for organic research exist because of all of you," Dr. Michel Cavigelli, USDA ARS lead scientist for the Farming Systems Program told the crowd at a recent forum on organic farming in Salina, Ks. About 70 organic farmers, transitional or beginning farmers and a number of conventional farmers and non-farming landowners gathered to listen to Cavigelli's overview of organic research across the country, as well as to learn more about organic cropping systems, certification, marketing opportunities, and USDA NRCS resources for organic.

Cavigelli was referring to the growing farmer interest and consumer demand for organic products, and to the funds included in the past couple of farm bills dedicated to organic research needs. Organic production is one of the fastest growing sectors within agriculture averaging about 18 to 20% per year the past 15 years. While research funds have not grown proportionately, forum participants learned that USDA and a few universities around the country have still been able to establish some important long- term studies and begin collecting base data.

Cavigelli and others spoke at the day- long forum organized by the Kansas Rural Center, and cosponsored by the Kansas Organic Producers Marketing Association, and Kansas Center for Sustainable Agriculture and Alternative Crops.

All farming systems manage ecological processes to provide ecosystem services, Cavigelli explained. These services include food production, regulating of water quality, pests, and climate, and supporting soil

retention and nutrient cycling. Soil organic matter is the new buzzword in agronomy and conservation circles, largely due to concerns about soil health and carbon sequestration.

Soil organic matter, stated Cavigelli, provides ecosystems services of increasing fertility, stabilizing soils to prevent erosion, helping control some pests, increasing carbon sequestration, and building system resilience

in all agricultural systems. But organic farming, he explained, does all this without synthetic fertilizers, pesticides, or genetically modified organisms. "Improving organic matter and soil health have long been the

foundation of organic farming systems."

"Organic farming systems have a mean carbon sequestration rate similar to no till systems," he stated. While quick to acknowledge that more research is needed because the sites were not set up for one-to one comparison, organic systems fixed carbon in the soil at rates equal or higher than no till, especially at lower soil profiles at five long term agriculture research sites (LTARS). In addition to the carbon benefits, organic

systems also can have erosion or loss rates comparable to no till despite the tillage used in organic, although reduced tillage or no till within organic systems had better results than organic with tillage.

As for yields, organic yields are on average lower than conventional systems—about 85 to 90% of conventional yields on average in all of the LTAR sites. But a closer look at the research has shown that the longer rotation systems (i.e. a six year rotation such as a corn followed by a fall rye cover crop, then soybeans, followed by wheat and then 3 years of alfalfa) brought crop yields closer to conventional averages.

During dry years, yields were also better than conventional due to higher organic matter. The longer-term rotations also showed better weed control and lower soil erosion.

Cavigelli pointed to organic farming's research needs and challenges: improve manure management, integrate cover crops and perennial forages, and reducing tillage. "We have learned, " stated Cavigelli, " that you must pay as much attention to the cover crop as to the cash crop." Research and implementation of reduced or no till within organic systems could increase the environmental benefits of organic agriculture.

Crop rotations and soil building legumes and manure management practices were emphasized by Ed Reznicek, organic farmer and General Manager of the Kansas Organic Producers Association, as he outlined the challenges and opportunities in organic field crop production. Ib Hagsten, independent

certified organic inspector, laid out the basics of organic certification. If you are averse to record keeping, then organic farming is probably not for you, he advised.

"Demand for organic crops surpasses the available supply," stated Rodger Schneider, Kansas Organic Producers Association Marketing Director. "About 60% of the organic soybeans processed in this country are imported from China or India. That is opportunity for Kansas farmers." While conventional crop prices are at all time highs, premiums for organic crops have climbed too. "We need more organic farmers to meet the product demand."

USDA official numbers for certified organic farmers nationally was under 12,000 with 400 million in sales in 2002. By 2011, the number was nearly 13,000 with \$3.5 billion in sales. The official numbers for organic

farmers certified in Kansas ranges from 83 to 167, depending on which set of data you are looking at and which definitions of organic farmer they used. Numbers for surrounding states such as Iowa and Nebraska are much higher (Iowa 677 and Nebraska 211), according to USDA.

Lyle Frees, Resource Conservationist, with the USDA NRCS office in Salina described how the EQIP Organic Initiative can help transitioning or existing organic farmers. The NRCS program is there to provide cost-share assistance to transitioning organic farmers in adopting conservation practices (such as crop rotations, cover crops,

nutrient management, grazing management, etc.) to facilitate the transition, and to help

existing organic farmers in adopting needed conservation measures. Each county should have a staff person who participated in the organic training workshops coordinated by the Kansas Rural Center and State NRCS office in 2010 and 2011.

A range of farmers attended the meeting coming from all parts of the state and some from Nebraska and Northwest Missouri. At the beginning of the day forum organizer Mary Fund told the group, "This is exactly what we wanted to see today—a broad spectrum of experienced organic farmers and transitional or beginning farmers or just curious conventional farmers. I don't want to downplay what you will learn from the speakers today, but what you'll learn from each other will be just as important."

About a third of those attending were currently certified organic farmers, another third were landowners or non-organic farmers interested in learning more, and about a quarter were beginning or transitional organic farmers. Following the forum, Fund said, "98 percent of those responding to our forum evaluation asked for additional regional or local education and information meetings. KRC is going to see what we can do to help make that happen."

Presentations from the forum are posted on KRC's website at www.kansasruralcenter.org.

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