

Sustainable Agriculture

Looking forward for this generation
and the next...

at **UGA**

Fall 2011

Food Hubs for the Future

As I have travelled around the state working with farmers over the past several years, I have heard several issues brought up time and again. One of these is how difficult it is for small and mid-size farms to get their crops to a market.

We hear about growing demand for local food and the numbers seem to support this. For example, the number of farmer's markets has increased from 12 to 85 over the past six years. These markets are key for small farms whose primary market is direct to the consumer, but in many places this outlet is not robust enough to handle all the fruit and vegetables produced. There are additional challenges for those producing meats with limited access for processing and ways to sell directly to the consumers. In other cases, there are farmers who prefer not dealing directly with the public and are looking for ways to sell their produce to restaurants, schools, or grocery stores. This can be a challenge for small and mid-size farms because they may not be able to supply a particular item in enough quantity or over the period of time these wholesale markets want.

We need more infrastructure for these farms to help them combine production from several farms to reach these markets, to help match supply and demand, to help with storage, and possibly process produce or meats. One approach that is being tried is a "food hub". Food hubs are facilities that help aggregate, market, store, or process regional or local foods. A key feature of a food hub is that

Food Hubs for the Future

Oct 27th 2:30 – 4:30, Athens or online

Join us for this important event!

More information below.

the consumer knows the farm where the produce or meat is produced.

We think food hubs are an important part of recreating a mid-scale agriculture in Georgia. We see potential for them to supply consumers, schools, and institutions with more regional/local food. We see potential for them to help revitalize rural communities by building on our agricultural heritage. We see potential for them to help young people who want to enter farming to be able to start with smaller, more affordable operations and grow.

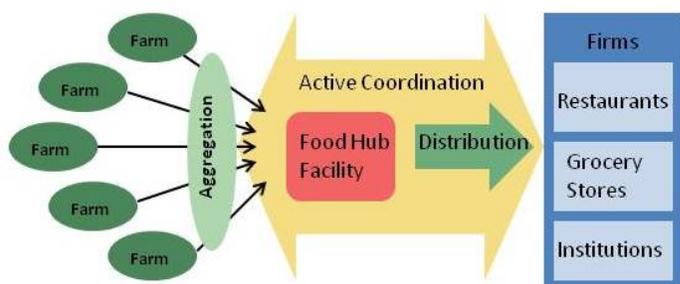


Diagram of a food hub. Courtesy of Craig Page.



To tap into this potential, the University Georgia, Fort Valley State University, and the Georgia Department of Agriculture along with Georgia Organics, Georgia Farm Bureau and other partners are forming the Georgia Sustainable Agriculture Coalition. One of our goals is to develop at least two food hubs in Georgia over the next five years.

Come join us for our kick-off event – **Food Hubs for the Future, Thursday, Oct. 27th** at the Mahler Auditorium in the Georgia Continuing Education Center, Athens, Georgia. If you cannot attend in person, login to the webinar. Dr. James Barham, USDA Agricultural Marketing Service, a nationally known expert of food hubs is our featured speaker. We will also have a panel discussion with Dean Angle, Dean Kannan, Commissioner Gary Black, Mr. Don McGough of Farm Bureau and Ms. Alice Rolls of Georgia Organics.

For more information, go to:
http://extension.uga.edu/calendar/event.cfm?pk_id=928.

or contact me at: jgaskin@enr.uga.edu

Join us and see how you can be involved in creating a bright future for local, sustainable food in Georgia. Hope to see you there.

*Julia Gaskin
Sustainable Agriculture Coordinator, UGA-CAES*

Research

Mobile Slaughter Units for Pastured Poultry Growers

The interest in and demand for locally produced food in the US continues to grow. Some projections indicate revenue from local food production will increase from about \$4 billion in 2002 to \$7 billion in 2012. Pastured poultry farmers are at a disadvantage when it comes to marketing their locally produced chickens. Farmers in the

Southeast of the United States have limited access to facilities to process these birds; consequently, most pastured poultry is produced and processed



on-farm, under a federal inspection exemption when less than 20,000 birds are killed and processed per year. This exemption limits pastured poultry sales to household consumers and very few food-service market venues such as farmers' markets and restaurants.

One alternative being discussed to increase marketability and profitability for farmers is a Mobile Processing Unit (MPU). This approach has been used in several other states. The current MPU initiative being discussed among pastured poultry farmers and Georgia Organics proposes creating MPUs as an inspected facility that could eliminate regulatory impediments. The USDA-FSIS "Mobile Slaughter Unit Compliance Guide" has recommendations for farmers who wish to obtain USDA-inspected status in accordance with FSIS regulations.

Due to a lack of data, the guide recommends assessment of the food safety of MPU processing and resulting products, and an assessment of the impact of processing waste disposal on the farming environment. The University of Georgia, University of Arkansas and the Southern University Agricultural Research & Extension Center have

obtained a Southern SARE grant to obtain this data, which will help farmers to fulfill a large part of the federal inspection requirements for MPUs. Food and environmental safety will also be assessed for on-farm processors and at small-sized USDA facilities. Since MPU processing would require a substantial economic investment by farmers, the grant will include an evaluation of the economic feasibility of MPU processing and marketability of the products in comparison with current processing methods.

The project begins this fall and results will be available in summer of 2012.

Written by Dr. Walid Alali

Extension

Principles of Integrated Weed Management in Organic Crop Production

If you were to ask organic crop producers what is their greatest challenge, most if not all would agree on weed management. The University of Georgia College of Agricultural and Environmental Sciences held a workshop earlier this summer to teach the basic Principles of Integrated Weed Management in Organic Crop Production to over 40 participants, mostly extension agents and NRCS personnel. Held at the Tift County Extension office, the first two hours were spent in the field, demonstrating various pieces of equipment and allowing participants to look at organic weed control research. The group then moved indoors for the classroom portion of the training session.

Classroom instruction utilized a systems approach to organic weed management wherein tools such as crop selection, crop rotation, cover crops, hand weeding and tillage are all used to address particular weed problems. For example, some crops such as onions are better grown following weed suppressive cover crops or other practices that reduce weed pressure, because onions are not

good weed competitors. Cover crops that are used primarily for weed suppression are successful because they compete with weeds; they block light, thus preventing the germination of weed seeds, and they kill small weed seeds with allelopathic chemicals.

Of course, cultivation and hand weeding certainly have a place in weed management in organic systems. Participants learned several reasons why cultivation regimes should begin before weeds have emerged. Initial weed emergence is linked with crop emergence and cultivation just prior to the initial flush of weeds allows for aggressive cultivation without injury to the non-emerged crop. Another reason is that all cultivators are more effective on tiny weed seedlings that are often not readily visible. Finally, in organic crop production, we have limited options to control weed escapees and any weeds that escape control will likely need to be removed by hand. Cultivation is a cost-effective option to reduce the numbers of weed escapees. Participants learned that the best time to control weeds with hand tools is in the morning on a sunny day with weeds around one-half inch tall or less.



Workshop participants examining several experimental approaches to weed control in peanuts.

Chemical control and thermal control of weeds were also discussed. Participants learned that all currently approved organic herbicides are non-selective, which means they will damage crops as well as weeds if the spray touches the crops. Propane flame weeding is also a non-selective technique. It works when heat from the propane flamer causes plant cells to swell and rupture.

The most important take-home message is that weed control in organic production systems requires a systematic approach where the farmer uses a collection of techniques to reduce weed pressure. Timely management to control weeds when they are small will result in a more successful crop.

The workshop benefitted from the expertise of several USDA ARS, UGA, and FVSU researchers including Dr. Carroll Johnson, Dr. Harry Schomberg, Dr. George Boyhan, and Dr. James Brown. Practical information was also provided by Mr. Dan Evarts and Mr. Robert Tate. The program was one of a series to help county agents and other agricultural professionals provide science-based information to organic producers.

Written by Joy Schomberg

Grower's Corner

Can Fish Products Work to Reduce Diseases and Insect Pests in Blueberries?

Organic blueberry acreage is expanding in Georgia, but as with many other crops, our climate makes pest management challenging. Production is threatened by several leaf diseases that cause defoliation in the summer, reduced flower bud set in the fall, and lower yields the following year. The blueberry leaf beetle can destroy the tender new vegetative growth produced after berry harvest during the summer. Fields containing natural weed growth in the aisles, such as most organic blueberry farms, can have a serious problem with this pest, and several months

of young growth can be destroyed in a short period when beetles are numerous. Another related challenge is nutrient supply. Without proper nutrients in sandy, highly acidic blueberry soils, there is reduced shoot growth and flower bud formation that can reduce next year's yield. Organic management options are limited, and the best results are most often obtained with a systematic approach.



Fish emulsions may have some success in reducing disease, repelling insects and reducing feeding as well as providing nutrients through plant leaves. On-farm trials were conducted in organically managed rabbiteye and southern highbush blueberry fields to evaluate a

number of fish byproducts applied as foliar sprays after fruit harvest during the summer and early fall. Although cultivars, cultural practices, and disease and pest pressures differed among the three trials, several conclusions can be drawn from this 2-year project.

Research indicated several fish products successfully suppressed Septoria leaf spot and leaf rust. There was no clear "winner" among four formulations that were tested. Different products worked best in different trials. Among the products evaluated, Omega Grow, Organocide, and SeaCide were the most effective¹.

There were no clear, consistent results for leaf beetle damage. One trial showed that damage from leaf beetles was lower after applications of

SeaCide, but in another trial there was no reduction in damage. It appears that any leaf beetle suppression with fish product use is incidental, with the greater impact being on leaf disease management.

Whether or not the fish products increased plant growth and leaf retention depended on site conditions. Organocide and SeaCide both improved leaf retention and plant growth at a low-vigor site with rabbiteye blueberries, but not a higher-vigor site with southern highbush. Improvements in plant growth seem to be limited to conditions with weaker growth potential. None of the treatments translated into a higher flower bud set for the next growing season.

The fish products did provide some extra nutrients and micronutrients. In two of the three trials, phosphorus concentrations were higher in leaf tissue following application of some fish products. The host resistance inducer - KeyPlex, which was tested only in one of the trials, markedly increased iron, zinc, and manganese levels in treated plants.

Consistently across three trials, use of Omega Grow resulted in considerably higher sodium concentrations in leaf tissue of treated plants. Although these high sodium levels did not appear to reduce plant growth, this product should be used in rotations with other products to make sure there are no potential negative effects.

Overall, although fish products are not “silver bullets” for managing blueberries organically, they do contribute consistently to leaf disease suppression and foliar nutrition and can have added, more incidental benefits on leaf beetle suppression.

*Written by Harald Scherm, Amy T. Savelle,
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¹The use of trade names in this publication is for the information and convenience of the reader. Such use does not constitute an official endorsement or approval by the University of Georgia of any product or service to the exclusion of others that may be suitable.

For more information on this study, contact Harald Scherm, Scherm@uga.edu

Upcoming Events

**October 7, 2011, 2011 -- Ornamental Horticulture
Research Field Day,
Tours of Organic Vegetable Production
UGA Horticulture Farm, Watkinsville
8:30 am-2:00 pm**



**October 14, 2011 – Outside the Box Farming:
Permaculture and Aquaculture
Newton, GA**



**October 18-20, 2011 -- Sunbelt Expo,
Moultrie, GA**



**October 26, 2011 -- White Oak Pastures
Field Day, Bluffton, GA**



**October, 27, 2011 – Food Hubs for the Future
Athens, GA**



**November 11-13, 2011 -- Carolina
Farm Stewardship's
26th Annual Sustainable Agriculture Conference,
Durham, NC**



For more information go to:
www.SustainAgGA.org
Look at the Events page

