



Down to Earth: Reports from the field

Innovative Small Farmers' Outreach Program (ISFOP): West Central Region

SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION (SARE) GRANT PROGRAMS

SARE promotes farming and ranching practices that are profitable, environmentally friendly and good for the community. If you have a good farming idea that fits any of these criteria, whether you are a farmer, youth, youth educator, a graduate student or a trained researcher, you may want to submit grant proposals for funding consideration. Funds are also available for conducting professional development trainings and workshops. For additional information, visit www.sare.org/ncrsare.

Farmer Rancher (F/R) grants support producers with great ideas for protecting natural resources, enhancing communities and boosting profitability. Individual farmers could receive up to \$6,000 and a group of three or more farmers could receive up to \$18,000. The call for proposals generally comes out in early September with a deadline for submission of a F/R grant proposal in early December. Youth grants are available for conducting on-farm research, demonstration, or education projects by youth ages 8-18, or for attending a sustainable agriculture conference or a camp. Youth Educator grants are available to educators for providing programs on sustainable agriculture for youth. The maximum grant monies available under these two categories are \$400 and \$2,000, respectively. The deadline for submitting applications is usually early September. Please call or write Debi Kelly at (573) 882-1905, kellyd@missouri.edu or K.B. Paul (573) 681-5584, paulk@lincolnu.edu for additional information. CALL FOR PROPOSALS COMING SOON!



In The Spotlight: PJ Mushroom Farm

We would like you to meet Paul and Judy Miller of PJ Mushroom Farm. The Miller's small farm is located near Leeton in Johnson County. Paul and Judy produce shiitake and oyster mushrooms from certified organic inoculated blocks they purchase. In addition to mushrooms, they also sell farm fresh brown eggs from their chickens.

The Millers started out growing their mushrooms in a root cellar, but needed a better way to control the environment. Their innovation led them to growing mushrooms in an abandoned reefer trailer they have converted into a growing facility. They use mostly recycled or reused materials throughout the unit. Judy and Paul harvest and pack the mushrooms fresh then take to them to farmer's markets in and (continued on page 2)

Table with 2 columns: Inside this issue: and PAGE. Rows include SARE Grants Coming (1), PJ Mushroom Farm (1-2), Urban Agriculture (2 & 4), IPM (3), Upcoming Events (4), and ISFOP program info (4).



PJ Mushroom Farm (continued from page 1)

around the Kansas City area. They also sell them from their home. As part of their marketing strategy, they provide their customers nutritional information about the products they offer, along with delicious recipes on how to best prepare the mushrooms.

The brown eggs they sell are from a flock of 100 free range hens. When visiting their farm, Paul asked if we would like to

see his “smart chickens.” In another unique twist, they have devised an unusual nesting facility converting a retired school bus into a chicken coop. Paul has fitted the bus with nesting boxes and roosts for the hens. It gives them a safe and easy-to-clean environment to lay in and easy access to a large grass area where the hens run freely. The Millers enjoy producing safe, healthy, local

food. Judy says, “It is important that we know where our food comes from and how it’s grown.”



Urban agriculture changes in Kansas City

Kansas City recently received national attention for passing a progressive urban agriculture ordinance. But what does this mean for the home or community gardener and urban farmer? The ordinance is long and cumbersome, so let’s focus on its highlights and important aspects. Before deciding to undergo an urban agriculture venture in Kansas City, Missouri, you are encouraged to read the ordinance in its entirety. The link to it can be found at the bottom of this page.

What the ordinance does is separate urban agriculture into four categories:

- 1) **Home Garden** is tended and maintained by the people who live on the property where the garden is located.
- 2) **Community Garden** is managed and looked after by a group of individuals who can organize the garden beds individually or collectively. It can be located in vacant lots (with permission for use) and/or shared lots with another structure (like a home or church).
- 3) **Community Supported Agriculture (CSA)** is defined as a farm that is managed by one person or group of people whose goal is to grow produce for the shareholders of the farm. In this category shareholders also work on the farm in exchange for produce.
- 4) **Crop Agriculture** is managed by one person or a group of people who grow agricultural or horticultural products for off-site sales or donation.

For **home gardeners** it is now legal to sell excess produce from your front yard. If you are someone who is looking for extra income, you can start a home garden or turn your existing garden into something that not only provides fresh food for you and your family, but what you don’t eat you can sell to neighbors and others in the community. This is a positive thing for neighborhoods who have limited access to full service grocery stores and do not have their own transportation. The only restrictions on your home vegetable stands are: You can only sell from May 15th to October 15th.

Signs are legal, but can be no larger than 6 feet wide and 3 feet tall, and can only be up during time of sale. Only raw, whole or uncut vegetables from your own garden can be sold, NOT anything else. And finally, if you are selling on-site you may not grow “row crops” in your front yard. You can find the definition of “row crops” in the ordinance.

Community gardens fall under some of the same stipulations as home gardeners, except if the garden is located on a property where people live then it is not legal to sell on-site. In other words if it’s a vacant lot you are free and legal to sell on-site.

If you want to take your home garden a

step further and try your hand at larger scale production, the **CSA** model is a very good one. However, if your CSA is located within the city limits, you will need to get a special use permit to operate it. The special use (*continued on page 4*)



You can find the complete ordinance here:

<http://cityclerk.kcmo.org/liveweb/Documents/Document.aspx?q=gwQ25M6kfLBpQAH2KArtCVOTuNiMyZkVhPHNtnlPCMYJ%2b2FvKs5bOtLbpVG3Tq5a>

This ordinance will be reviewed in six months and again in 18 months. If you want to get involved in the review process, contact the Kansas City Center For Urban Agriculture at (913) 831-2444 or send email to: katherine@kccua.org

Basics of Integrated Pest Management (IPM)

By Dr. Jaime Piñero, State IPM Specialist

IPM is an approach to solving pest problems by applying extensive knowledge about pests to prevent them from damaging crops. Key to this process is a precise identification of the pest and regular monitoring of populations of both the pest and beneficial organisms. IPM emphasizes that the presence of a pest does not necessarily constitute a problem. Before a potentially disruptive control method is employed, appropriate decision making criteria are used to determine whether or not pest management actions are needed. When action is needed, IPM strategies integrate a combination of all suitable techniques in a manner as compatible as possible. Extensive information about IPM is already available through the land grant university's Cooperative Extension services and other sources. There are several preventive measures that should be adopted to minimize pest pressure.

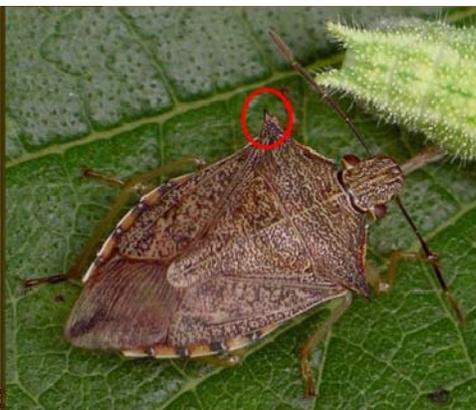
Top Ten IPM Tips for Effective Insect and Disease Management in Vegetables:

- 1. Soil Preparation.** Give plants a head start on pest problems by choosing the proper site, testing the soil, rotating crops, creating raised beds where necessary, and providing sufficient organic matter.
 - 2. Planting.** For disease prevention, select disease-free transplants, and plant closely related vegetables in separate areas of the garden.
 - 3. Good fertilization and irrigation programs.** Healthy, fertile soils will produce more vigorous plants that are more able to withstand damages caused by arthropods and diseases. Whenever possible, avoid overhead irrigation to minimize long leaf wetness periods. Space plants to provide
- adequate air movement to quickly dry foliage, flowers and fruits.
 - 4. Maintain good weed control.** This reduces competition for nutrients, makes scouting easier, and reduces alternate habitat for the insect pest, in particular those that are vectors of pathogens. Use of organic mulches is an ideal organic anti-weed treatment. As they decompose, nutrients are released. They also enhance the presence of predatory beetles and spiders.
 - 5. Maintain good sanitation.** Remove and destroy diseased plant material. Remove plant refuse soon after harvest. Also, disinfect garden tools.
 - 6. Identify the pest.** Understand that not every insect on a crop is a pest. Learn to recognize beneficial insects and make every effort to save them.
 - 7. Understand the biology and behavior of the pest.** IPM strategies require knowledge of the pest's life cycle for monitoring and for best timing of insecticide treatments (if needed).
 - 8. Promote buildup of natural enemies.** By limiting the use of insecticides and by incorporating a variety of plants in the landscape, populations of beneficials are enhanced, keeping pests in check.
 - 9. Determine, through pest monitoring, if control is needed.** Growers should inspect representative areas of the fields regularly to determine whether pests are approaching a damaging level. Until that threshold is reached, the cost of yield and quality loss will be less than the cost for control.
 - 10. If control is needed, use the least-toxic option.** Several organic insecticides (e.g., bt [*Bacillus thuringiensis*], neem, rotenone, pyrethrin) and reduced-risk fungicides (e.g., Quadris) are available for use by vegetable growers. Always refer to the pesticide labels before use.

Identify the pest. Predatory bugs (right) have prominent spurs on the "shoulders" (thorax). Plant-feeding stink bugs (left) have a slender beak that is used to pierce the plant tissue.



Brown stink bugs, *Euschistus* spp., cause serious damage to ripening fruits (whitish-yellow spots or rings under the skin of ripening tomatoes).



Spined soldier bug, *Podisus maculiventris*, is a beneficial bug. Both nymphs and adults feed on caterpillars and the larvae of pest beetles.

Other Resources on Organic Insect & Disease Management:

<http://attra.ncat.org/horticultural.html>

<http://www.nysaes.cornell.edu/pp/resourceguide>

<http://extension.missouri.edu/explorepdf/agguides/hort/g06220.pdf>

ISFOP



If you are a small farmer and have a need for information, please contact one of the following Farm Outreach Workers. These people live and work in your community. They can provide information on ways to better manage your resources, reduce expense and increase income. They can also provide information on other available programs and resources that may increase your income and overall quality of life for your family.

You are eligible to participate if:

- Your family lives on a farm, rural or urban.
- Farm products or income from the farm are necessary for you to live where you do.
- Your family provides the management and most of the labor for your farm.
- Your total annual family income is less than \$50,000.

To learn more contact:

Katie Nixon
NixonK@lincolnu.edu
816-809-5074

Jeff Yearington
YearingtonJ@lincolnu.edu
816-779-6762

Susan Jaster
JasterS@lincolnu.edu
816-589-4725

Jim Pierce
PierceJ@lincolnu.edu
660-232-1096

Or call (573) 681-5312

Lincoln University Cooperative Extension
Box 29

Jefferson City, MO 65102-0029

Lincoln University of Missouri, and the U.S. Department of Agriculture Cooperating. Dr. Steve Meredith, 1890 Administrator, Cooperative Extension. Distributed in furtherance of Food and Agricultural Act, 1977 PL 95-98. Dec. 22, 1981.

Publications are distributed without regard to race, color, national origin, sex, age, religion or handicap.

An equal opportunity employer

ISFOP Program Staff

- ◆ Dr. K.B. Paul, ISFOP Director
- ◆ Dr. Sanjun Gu, Assistant Program Director and State Horticulture Specialist
- ◆ Vonna Kesel, Program Secretary

Urban Ag (continued from page 2)

permit will allow you to have shareholders and paid or volunteer apprentices work on your farm.

Finally, with **crop agriculture** the only restriction you face is if you want to do on-site sales. In this case you must apply for a special use permit through the Board of Zoning and Adjustment.

It is important to note that in ALL four categories you may ONLY sell whole, raw agricultural products which you have grown on that property. You may NOT sell other people's produce or non-agricultural products.

This article just skimmed over the surface of what is in the ordinance. There are other restrictions and

rules that need to be followed. Please read the ordinance for yourself to fully understand the rules.

The Kansas City Center for Urban Agriculture (KCCUA) is working on a guide sheet that simplifies the code so the average person can understand it. (See bottom of page 2 for contact information.)



Event Corner:

August 7th: Nature and Agriculture in the City Field Day from 10 a.m.-2 p.m. at Manheim Community Gardens, 4233 Forest Kansas City, Missouri

September 11th: Fall Family Festival at the Kansas City Community Gardens. Visit www.kccg.org for more details.

September 24th & 25th: Viticulture Tour and Festival at Fahrmeier's Farm in Lexington, Missouri.

October 9th: S.A.R.E. Grant Writing workshop. Location TBA. Contact Katie Nixon (contact above) for more details.

Every Month: Green Hills Farm Project tours. For more information go to: <http://agebb.missouri.edu/mac/agopp/mac7.htm>

Annie's Project coming to the West Central Region. Contact Whitney Wiegel (WiegelW@missouri.edu) or Kelly Dyer (kdyer@ucmo.edu) for more information.