

## Lincoln University Cooperative Extension Takes Part in Governor's Harvest Festival

On Saturday, October 4, the 2014 Harvest Festival took place at the Governor's mansion and garden in Jefferson City, Missouri. Several student members of Lincoln University's Agriculture Club took part. The students—Jeri Rippeto, Mikel Thompson, Kaitlin Taylor and Trisha Timpy—brought two adult Katahdin ewes (female sheep). The students talked with attendees, explaining about Katahdins and about student life at Lincoln. In addition, Dr. Jaime Piñero, State Extension Specialist-Integrated Pest Management; Dr. Nadia Navarrete-Tindall, State Extension Specialist –Native Plants; and

Dr. Charlotte Clifford-Rathert, State Extension Specialist—Small Ruminants, represented a few of the signature programs from Lincoln University Cooperative Extension (LUCE). Clifford-Rathert displayed three baby goats (kids) for children to name. She also had a table where children were busy coloring pictures



of farm animals. LUCE exhibited value-added products from goats and sheep. Program literature was provided about LUCE and the College of Agricultural and Natural Sciences (CANS). Hundreds of youth and their families attended this event. A number of comments were made showing that most people that attended did not know how much Lincoln University had to offer. Missouri's First Lady later recognized each person's participation with a handwritten thank you note. Dr. Charlotte Clifford-Rathert - Small Ruminants

Pictured left to right: Dr. Charlotte Clifford-Rathert, Kaitlin Taylor, First Lady Georganne Wheeler Nixon, Governor Jeremiah W. (Jay) Nixon, Mikel Thompson, Trisha Timpy and Jeri Rippeto.

### Plant Pathology Helps to Organize Ag Day Events at Local High Schools

Lincoln University Cooperative Extension (LUCE) Plant Pathology staff coordinated and participated at Ag Day events at three high schools in Columbia, Missouri. The events were held at Rock Bridge High School on Thursday, October 23, Battle High School on Thursday, November 6, and Hickman High School on Friday, November 7, 2014. The Columbia Area Career Center, the Columbia Public Schools vocational agriculture program and the Columbia chapter of the Future Farmers of America (FFA) sponsored these events.

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LUCE provided informative displays for students and teachers. Dr. Clifford-Rathert, State Extension Specialist – Small Ruminants, exhibited goats and represented Lincoln's animal science programs. Dr. James Wetzel, Principal Investigator, brought displays about aquaculture. Agronomy exhibits were provided by Dr. Nsalambi Nkongolo, Principal Investigator. Stephen Kirk, Commercial Vegetable Program Field Supervisor, brought posters highlighting common horticultural crops produced in Missouri. Dr. Hwei-Yiing Johnson, State Extension Specialist—Composting, had examples of compost and worms. *(continued on page 2)* 

# Lincoln University Cooperative Extension (LUCE)



Ms. Yvonne Matthews Interim Extension Administrator MatthewY@LincolnU.edu

(573) 681-5550

900 Chestnut Street Room 103A Allen Hall Jefferson City, MO 65101

Karen Galbreath Administrative Assistant (573) 681-5375 GalbreathK@LincolnU.edu

### **State Extension Specialists**

Dr. Emmanuel Ajuzie State Extension Specialist - Agricultural **Economics** AjuzieE@LincolnU.edu

Dr. Adrian Andrei Assistant Professor - Wildlife Science AndreiA@LincolnU.edu

Dr. Charlotte Clifford-Rathert State Extension Specialist - Small Ruminants Clifford-Rathert C@Lincoln U.edu

Dr. Touria Eaton State Extension Specialist - Horticulture EatonT@LincolnU.edu

Mr. Charles "Chuck" Hicks State Extension Specialist - Aquaculture HicksC@LincolnU.edu

Dr. Hwei-Yiing Johnson State Extension Specialist - Composting JohnsonH@LincolnU.edu

Ms. Yvonne Matthews State Extension Specialist - Human Resource Development and Intergenerational Programs MatthewY@LincolnU.edu

Dr. Zelalem Mersha State Extension Specialist - Plant Pathology MershaZ@LincolnU.edu

Dr. Nadia Navarrete-Tindall State Extension Specialist - Native Plants Navarrete-TindallN@LincolnU.edu

Dr. Kamalendu Paul State Extension Specialist - Small Farms PaulK@LincolnU.edu

Dr. Jaime C. Piñero State Extension Specialist - Integrated Pest Management PineroJ@LincolnU.edu

#### **LUCE Regional Satellite Offices**

Ms. Patrice Dollar, Coordinator St. Louis Urban Impact Center (SLUIC) DollarP@LincolnU.edu (314) 867-4915

Ms. Brenda Robinson-Echols, Coordinator Southeast Missouri RobinsonB@LincolnU.edu (573) 471-3059

Ms. Marion Halim, Coordinator Kansas City Urban Impact Center (KCUIC) HalimM@LincolnU.edu (816) 932-2631

# **Innovative Small Farms' Outreach Program**

Dr. Kamalendu Paul, Director PaulK@LincolnU.edu

www.lincolnu.edu/web/cooperative-extension • Jefferson City Offices: (573) 681-5543



# Cooperative Extension

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Pamela Donner, Coordinator and Senior Editor Nancy Browning, Assistant Editor Cherilyn Williams, Graphic Designer Yuki Teramoto, Multimedia Technician Andrew Erb, Video Conference Technician Bené Williams, Web Designer

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Plant Pathology ... (continued from page 1) Kaitlyn Kliethermes, a research assistant in LUCE's Integrated Pest Management (IPM) program, displayed insects. Martha O'Connor, Plant Pathology Technician, brought corn and soybean plants. She also informed students about plant science careers. Julius Moody, Lincoln's USDA 1890 Program Liaison, provided handouts about the AgDiscovery program and United States Department of Agriculture (USDA) scholarships available at land-grant universities such as Lincoln. 

Dr. Zelalam Mersha - Plant Pathology

## **Kansas City Urban Impact Center Celebrates Breast Cancer Awareness Month**

On Saturday, October 25, 2014, the staff and youth at Lincoln University Cooperative Extension's (LUCE) Kansas City Urban Impact Center (KCUIC) took part in the American Cancer Society walk: Making Strides Against Breast Cancer. The event was a three-mile walk or run. Each year, the number of participants in this walk has increased. This year there were 353 teams, for a total of 2,434 walkers of all ages. This is the fourth year that KCUIC has walked as a team. SLUIC first got involved at the suggestion of one of the youth. Her mother had succumbed to breast cancer when she was a sophomore in high school. The following year, one of the staff was diagnosed with breast cancer. Involvement in the walk intensified. Youth recruited classmates, friends and family to register and participate. (continued on page 3)

KCUIC... (continued from page 2) The staff and team joined in the warm-up exercises. They celebrated when one of their classmates sang the "Star Spangled Banner" to start the race.

The walk began and ended at the Liberty Memorial. The route took walkers around Union Station, past the Kansas City Power & Light District. Breast cancer survivors received special recognition. Walkers received healthy snacks and liquids to drink throughout the walking route. T-shirts were provided to the LUCE KCUIC team by one of the local churches that was a part of the Lincoln team. At the end of the walk, the team members recharged themselves with more healthy snacks and relaxation.

The walk relates to one of the four pillars of KCUIC's Leadership Academy, which addresses giving back to the community and leadership. Youth have chosen this walk annually as one of KCUIC's community service projects. Youth also reviewed how the activity focuses on all or part of the 4-H pledge: "I pledge my head to clearer thinking. my heart to greater loyalty, my hands to larger service, and my health to better living, for my club, my community, my country, and my world." The pledge was brought to life as our youth and staff also assisted in eradicating breast cancer. ■ Marion Halim - Kansas City Urban Impact Center

## Midterm Impacts from a Train-the-Trainer Workshop on Integrated Pest Management

On Wednesday, November 20, 2014, Lincoln University Cooperative Extension's (LUCE) Integrated Pest Management (IPM) program offered a one-day train-the-trainer workshop on the invasive insect, the spotted wing drosophila (SWD). Missouri Sustainable Agriculture Research and Education program (MO-SARE) sponsored the event. LUCE and Michigan State University personnel served as trainers. Trainees were from LUCE (15), University of Missouri Extension (15), the Missouri Department of Agriculture (MDA) (8) and the Missouri Department of Conservation (4). As a result of this workshop, educators reported significant increases in their knowledge and awareness of the topics presented. However, the midterm outcomes are of greater significance for Extension. On October 5, 2014, a web-based 10-month post-workshop survey was conducted of 42 Extension educators who attended the 2013 workshop. The survey's response rate was 57.1% (24/42).

# Impacts are listed below:

- Six-hundred-fourteen clients were assisted, showing that the effect of such a workshop multiplies; on average, the 24 educators each shared workshop information with 25 farmers.
- Thirty-one newsletter articles, newspaper columns, and/or radio shows were produced.
- Eighty-eight percent of educators used information for farm visits and/or one-on-one interactions, providing advice on the SWD.
- Two-hundred-forty-three farms were visited since this training.
- There were 136 one-on-one interactions with farmers.
- Forty-one percent of educators interacted with minority/limited-resource farmers.
- Educators interacted with 92 minority and/or limited-resource farmers.

LUCE's IPM program also received some important news. The USDA's National Institute of Food and Agriculture (NIFA) funded a new Extension IPM grant for \$143,659 (LUCE sub-award) for a three-year period (2014-2017).

Also, the MDA Specialty Crop Block Grant Program awarded a new grant to Dr. Jaime Piñero, Principal Investigator, in the amount of \$33,102 for two years (2014-2016).

An article was accepted for publication in 2015: Piñero, J. C., Quinn, J. Byers, P. L., Miller, P., Baker, T., and Trinklein, D. (Forthcoming) "Knowledge and Use of Integrated Pest Management by Underserved Producers in Missouri and the Role of Extension." Journal of Extension. Dr. Jaime Pińero - Integrated Pest Management

## **Fall Composting Highlights**

Dr. Hwei-Yiing Johnson, State Extension Specialist-Composting, helped two vegetable producers who sought her out.

First, on Saturday, November 1, 2014, Johnson visited Happy Hollow Farm in Jamestown, Missouri. The farm contacted her because their bin was composting too slowly. Next Johnson visited the Evans Funny Farm in Holts Summit, Missouri. Here, the compost pile was not heating up. On Monday, November 3, 2014, Johnson went to the Funny Farm and helped build a round bin. Two days later, she and owner, Ray Evans, constructed a larger bin.

Because of her visits to these local farms, the composting problems were solved. The composting piles heated up the day after each of her visits and are still heating. The final product of this effective composting will improve garden soil quality and support next year's gardening.

Johnson assisted a Lincoln University student with composting 200 pounds of Japanese beetles. This was done in wire bins with paper shreds at the Charles E. Dickinson Plant and Soil Science Greenhouse Complex.

On Thursday, November 6, and Friday, November 7, 2014, Johnson also visited two high schools—Hickman and Battle—in Columbia, Missouri. The schools invited her to speak at their agriculture days. Johnson presented information about worms and practicing vermicomposting (composting with worms).



Johnson showing worms to students during Agriculture Day at Battle High School in Columbia, Missouri

The procedure Johnson uses and recommends for composting has five principles:

- 1. Build larger piles using bins or vertical supports (pallets or lumber) at least 4-feet wide and 4-feet deep, to hold more heat and moisture.
- 2. Alternate layers of 2-3 inches of high-carbon materials, such as leaves or paper shreds, and high-nitrogen waste, such as grass clippings or garden waste.
- 3. Maintain moisture at 50 percent (best for microbial activity; microbes are living things that cannot be seen without a microscope); do so by watering each layer or presoaking materials before adding them to the pile.
- 4. Place twigs at the bottom of the pile; add small tree twigs or wood chips to each layer to provide air pockets (pores for microbes to breathe/ventilate).



5. Top the pile with a layer of leaves or paper shreds as a biofilter (a device to control pollution that uses living organisms to decompose pollutants) to absorb possible odor. Cap the pile with several layers of cardboard to hold heat and moisture. 

Dr. Hwei-Yiing Johnson - Composting