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Did You Know?

Please submit story ideas and national award items to Mina Chung, mina.chung@ars.usda.gov, or call 301-504-1653.

Your Two Cents (Y2C)



www.ars.usda.gov/yourtwocents

Have you posted your personal cultural transformation experience video on the [ARS Cultural Transformation](#) site yet? What are you waiting for? We are soliciting videos from everyone to share on “[ARS Starring You](#).” The agency needs to hear from you...so get out your video camera, camera phone, etc., and submit a video! You’ll have to sign in with your ARSNET login information. We will take care of the editing. The rumors are true: ARS will be launching a brand new Intranet soon, with the goal of improving and streamlining communication throughout the agency. We also want to make it easier for the ARS family to find everything they need to do their jobs effectively and efficiently—a one-stop shop for everyone. Stay tuned for more information! [Your Two Cents \(Y2C\)](#) has begun to organize all the improvements suggested during the Y2C Summit last month. If you haven’t done so already, click [here](#) to watch an interview with ARS Associate Administrators Chavonda Jacobs-Young and Caird Rexroad, and see what they and other agency leaders said about Y2C. ❖

Around ARS

Entomologists at the **ARS North Central Agricultural Research Laboratory** (NCARL) in Brookings, SD,

partnered with the Brookings Public Library and South Dakota State University to host a “Creepy Crawly Night” at the library on October 30, 2012. In addition to specimen cases packed with insects

of all shapes and sizes as well as various living insects, NCARL staff brought along the “pet collection”—black widow spiders, tarantulas, hissing cockroaches, giant



Research Entomologist Jonathan Lundgren and his hissing cockroaches.

water bugs, ant colonies and predacious diving beetles. The Halloween-themed event was a tremendous success, with 265 people passing through the bug room in 1.5 hours, double the normal attendance at the Public Library’s “Science Night.” Scientists, technicians, and students all worked together to excite curiosity about insects to help cultivate the next generation of entomologists. ❖



Kids and their parents meet creepy, crawly creatures.



Tiny volunteer Michael Phipps holds up a sign for Hoofin' It For Hunger.

The first annual Hoofin' It For Hunger 10K, 5K and 1-mile run was held at the **ARS Fort Keogh Livestock and Range Research Laboratory** on October 14, 2012. Organized by Fort Keogh employees, Custer/Fallon County Farm Bureau Young Farmers and Ranchers, Powderville Pioneers 4-H Club, and the Montana Food Bank

Network, which supplies food to all the food banks in Montana. Canned goods also were collected and taken to the local food bank. About 100 people participated in this inaugural event on a beautiful Sunday, 24 of whom ran the 10K route weaving around the river and through the farm fields decked out in their fall splendor. Prizes and awards were given out to the top two finishers in each age category. ❀



Michael Phipps offers a sport drink to a thematically attired runner at Hoofin' It For Hunger.



Rohan Reddy.

This June, Rohan Reddy graduated from magnet school Lincoln Park Academy High School (LPA) in Fort Pierce, FL, as valedictorian, and with a GPA of 6.52 (weighted). He placed in the top 5 percent of the American Mathematics Contest 12 (AMC-12); won 1st place for Environmental Science, Senior Division, Florida State Science and Engineering Fair; and was

on the Dean's List of Indian River State College 2008-2011, where he was simultaneously enrolled as an undergraduate. While attending LPA, Reddy entered a mentoring program with Research Entomologist **Wayne Hunter**, ARS U.S. Horticultural Research Laboratory, Fort Pierce, FL. Under Hunter's guidance, Reddy advanced his understanding of genomics and RNA interference. Reddy was recently accepted into Harvard University and will be majoring in business and medicine. ❀

Over \$650 was raised at the 6th Annual CFC Chili Festival on November 14 at the ARS Beltsville Agricultural Research Center, Beltsville, MD, thanks to all who donated cash, food and supplies, and to the efforts of the CFC Chili Festival Team. ❀



CFC Chili Festival Team: (front row from left) Teddi Mitchell, Catherine Parsons, Tasha Sprague, Tina Paul, (back row from left) Whitney Hymes, Jessica Lahocki, Kimberly Mills and Michael Witles.

Thirty-three of 42 high school students said they were more likely to consider a career in agricultural research after attending the Scientist for a Day program at the **ARS U.S. Dairy Forage Research Center (USDFRC)** Farm in Prairie du Sac, WI, on September 19, 2012. The day-long outreach event featured six hands-on activities led by USDFRC scientists and technicians. Students measured phosphorus in barnyard run-off, soil compaction in fields, and grass growth in pastures. They also pollinated forage plants, learned about GMO techniques, and collected rumen fluid to view the microorganisms under a microscope. ❀



A student collects a rumen sample from a cannulated cow.

The **ARS U.S. Dairy Forage Research Center (USDFRC)** participated in three technology transfer activities at the World Dairy Expo in Madison, WI, October 2-6, 2012. The 2012 show attracted 72,000 dairy producers and industry representatives from across the United States and 95 other countries. First, the USDFRC is an organizing partner for the World Dairy Expo Forage Analysis Superbowl, an event that encourages farmers to grow high-quality forage for dairy cattle. Second, the Center organized a seminar series that attracted about 300 stakeholders and included two USDFRC speakers. Third, the Center created an educational display about the fate of nitrogen on dairy farms and how USDFRC research is finding ways to improve nitrogen use efficiency.



Students search for answers to quiz questions.

Also during the World Dairy Expo, the USDFRC's ODEO committee organized a special outreach activity for FFA students attending the Expo on October 2. The FFA Dairy Forage

Quiz brought 650 students to the USDFRC educational exhibit, where they searched for correct answers to quiz questions. This special event was organized by Agricultural Information Specialist **Lori Bocher**. ❀

On November 8, three ARS representatives from Beltsville, MD, participated in the 5th Annual Service Disabled Veteran Owned Small Business (SDVOSB) Outreach Event held by the USDA Office of Small and Disadvantaged Business Utilization



From left, James Mills, Jennifer Friel and Michael Wigfall meet with SDVOSB representatives.

on the patio of the USDA Jamie L. Whitten Building in Washington, DC. ARS Procurement Analyst and REE Small Business Coordinator **Jennifer Friel**, Acquisition and Property Division, ARS Contract Specialist **James Mills**, National Capital Region Business Service Center, and ARS Contracting Officer **Michael Wigfall**, Eastern Business Service Center, met with 14 SDVOSBs that provide supplies and services in such fields as information technology, scientific equipment, consulting, accounting and construction. Contact information is available upon request from Jennifer Friel at jennifer.friel@ars.usda.gov. ❀

Nutrition Information Specialist **Sara Wilson**, National Agricultural Library's Food and Nutrition Information Center (FNIC), SNAP-Ed Connection team, represented FNIC/SNAP-Ed Connection at its exhibit at the Academy of Nutrition and Dietetics Food and Nutrition Conference and Expo (FNCE), October 6-9, 2012, in Philadelphia, PA. FNCE is the largest conference for food and nutrition professionals, drawing over 8,000 registered dietitians, nutrition educators, scientists, and policymakers. The exhibit featured SNAP-Ed Connection products, including its Web resources for educators, the Recipe Finder Database and the new "Build a Cookbook" feature. ❀

ARS National Program Leader **Mark Boggess**, Animal Production and Protection, Beltsville, MD, represented the ARS' Office of National Programs at the ARS Dairy Forage Research Center Annual Stakeholder Meeting on November 27 and 28. He presented information on research prioritization for the dairy industries, strategies for research cooperation and collaboration, and opportunities to help develop increased support for ARS research. ❀



Students release air potato leaf beetles to combat air potato vine.

On September 21, 2012, at an event named "Meet the Air Potato Leaf Beetles! Aka Lilipalooza," students joined forces with scientists from the **ARS Invasive**

Plant Research Laboratory (IPRL) in Fort Lauderdale, FL, to release air potato leaf beetles (*Lilioceris cheni*) in an area infested by the air potato vine. Research Leader **Ted Center**, IPRL, and ARS South Atlantic Area Director **Deborah Brennan** provided updates on ARS research to combat air potato vine, an aggressive, invasive exotic plant that is displacing native species and disrupting ecological functions in many parts of Central and South Florida. The vine was named "air potato" because its vegetative propagation occurs primarily through aerial bulbils that form leaf axils resembling a potato-like shape during late summer. Held at the Long Key Natural Area and Nature Center in Davie, FL, the event was attended by representatives from many groups such as the Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife Service, Everglades National Park, University of Florida and North American Butterfly Association. ❀



Students release air potato leaf beetles.

Notable Awards



Kimberly Garland-Campbell.

Research Plant Geneticist **Kimberly Garland-Campbell**, ARS Wheat Genetics, Quality, Physiology, and Disease Resistance Research Unit, Pullman, WA, was named a Fellow of the American Society of Agronomy and a Fellow of the Crop Science Society of

America. Formal recognition took place during the joint society meetings October 21-24, 2012, in Cincinnati, OH. ❀

Research Entomologist **Franklin H. Arthur**, ARS Center for Grain and Animal Health Research, Manhattan, KS, received the Recognition Award in Entomology from the Entomological Society of America (ESA) for his significant contributions to agriculture through the field of entomology. He was formally recognized at the ESA Annual Meeting November 11-14 in Knoxville, TN. ❀



Franklin H. Arthur.

The Ogallala Aquifer Program, a research-education consortium led by ARS laboratories in Bushland and Lubbock, TX, was selected by the Water Conservation Advisory Council as one of four recipients of the Blue Legacy Award in Agriculture, an annual award that recognizes outstanding water conservation efforts. Among the leadership of the group are Research Agronomist **David Brauer** and Research Leader **Terry Howell**, ARS Conservation and Production Research Laboratory, Bushland, TX; Laboratory Director **John Burke** and Research Leader **Robert Lascano**, ARS Cropping Systems Research Laboratory, Lubbock, TX; and Area Director **Dan Upchurch**, ARS Southern Plains Area.

With approximately 80 State and Federal scientists participating, the Ogallala Aquifer Program includes the four major agricultural universities on the Southern High Plains—Kansas State University, Texas A&M University, Texas Tech University and West Texas A&M University. The award was presented on November 28 at the Texas Commodity Symposium in Amarillo, TX. ❀

ARS Deputy Administrator **Steven Shafer**, Natural Resources & Sustainable Agricultural Systems, Beltsville, MD, was chosen as the 2012 Outstanding Alumnus by the College of Agriculture and Life Sciences at North Carolina State University. The award recognizes significant contributions made to the university as well as to the community. He was formally recognized at a reception at NC State on November 2. Shafer has devoted his entire professional career to science in USDA, including ARS, APHIS and the Office of Risk Assessment and Cost-Benefit Analysis. ❀



Steven Shafer.

Research Plant Geneticist **Prem P. Jauhar**, ARS Red River Valley Agricultural Research Center, Fargo, ND, has been named a 2012 Foreign Fellow by the National Academy of Sciences, India, for his outstanding research on genetic regulation of chromosome pairing in polyploid species, genetic transformation of wheat, and genomic reconstruction of wheat. He was recognized at the 82nd Annual Session and Symposium on Nano-Science and Technology for Mankind on November 30 in Varanasi, India. ❀

Research Veterinary Medical Officer **Mark G. Ruder**, ARS Center for Grain and Animal Health Research, Manhattan, KS, received the Linda Munson Award for Wildlife Pathology Research from the American Association of Zoo Veterinarians (AAZV) for the best zoo or wildlife pathology manuscript published in 2012. Ruder was formally recognized at the AAZV Annual Meeting on October 24, 2012, in Oakland, CA. ❀

Did You Know?



This holiday season as you enjoy your sweet potato pie, casserole, yams, or other yummy staple, you might want to share some ARS sweet potato research stories with friends and family.

The sweet potato was grown in Peru as early as 750 B.C., and Native Americans were growing them when Columbus arrived in 1492. George Washington grew them on his farm in Mount Vernon, VA, and *George Washington Carver*

developed 118 different products from them—from soaps and cosmetics to adhesives, greases and paints.

Sweet potatoes are often called a “nutritional powerhouse.” They are very high in beta carotene and other nutrients. One cup of sweet potato contains 39.2 milligrams of vitamin C, 0.576 milligrams of vitamin B6, 950 milligrams of potassium and 6.6 grams of dietary fiber.

ARS scientists at the U.S. Vegetable Laboratory in Charleston, SC, have found that sweet potatoes also contain high levels of protective phenolic compounds called caffeoylquinic acids. These compounds are known for their antioxidant activity, with the highest levels found just under the skin.

ARS’ Food Science Research Unit in Raleigh, NC, developed a process to improve the texture and flavor of sweet potatoes so that they may be used to make savory snacks of patties and fries. A taste panel found that the new process yields products with a taste that’s more like fresh-baked sweet potatoes. The researchers found that slicing and slow-cooking sweet potatoes is the best way to retain flavor. This method has a benefit that could add value to the \$213-million sweet potato crop by offering companies a way to use sweet potatoes that normally would be discarded due to less-than-perfect shape or size.

ARS researchers have also developed new sweet potato breeding lines that can be grown with fewer pesticides because they are resistant to key sweet potato pests like root-knot nematodes, Fusarium wilt and soil insects. These new lines also grow and produce well in the South. ARS scientists also have played a key role in finding ways to protect the sweet potato against some of its worst natural enemies, including the sweet potato weevil, by identifying irradiation as a way to prevent the weevils from hitching a ride on sweet potato shipments.

Pretty sweet, huh?

So while you savor the soft, smooth, succulent sweet potato this holiday season, be sure to give thanks to ARS scientists for their research!

North Carolina’s Favorite Sweet Potato Pie

(Yield 8 servings)

- 2 1/4 C. cooked, mashed sweet potatoes
- 3/4 C. granulated sugar
- 1/2 C. firmly packed brown sugar
- 1/2 C. packaged French vanilla instant pudding
- 3/4 C. evaporated milk
- 2 large eggs, room temperature
- 6 Tbsp. butter or margarine, softened
- 1 Tsp. ground cinnamon
- 1 1/2 Tbsp. vanilla extract
- 1 unbaked pie shell (9-inch)

In a large bowl combine all ingredients and beat at medium speed until well blended. Spread evenly into unbaked pie shell. Bake at 450 degrees F. for 10 minutes. Reduce temperature to 350 degrees F. and bake for 40 minutes longer or until set. Cool on wire rack. If desired, garnish with whipped cream, raspberries and mint leaves.

Source: [The United States Sweet Potato Council](#)

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