BARC e-Update

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BARC is part of the USDA's Agricultural Research Service and encompasses programs at the Beltsville Agricultural Research Center; the U.S. National Arboretum in Washington, D.C.; and worksites in Chatsworth, New Jersey; Presque Isle, Maine; and McMinnville, Tennessee. BARC is the largest and most diversified agricultural research complex in the world. BARC's record of accomplishments and its ongoing programs have made it a world leader in agricultural research.

Blowing Our Own Horn!



WORLD COCOA FOUNDATION AWARD



Dr. Wanda Collins, Director of BARC's Plant Sciences Institute, received a Research Support Award from the World Cocoa Foundation in "appreciation for her dedicated service to sustainable cocoa." BARC has a large research

effort in the biological control of cocoa diseases, evaluation of cocoa germplasm collections, and integrated pest management strategies.

Did you know?

- *There are 5-6 million cocoa farmers
- *40-50 million people depend on cocoa for their livelihood
- *Annual cocoa production is 3 million tons
- *Annual global market value is \$5 billion

BARC SCIENTIST ELECTED SOCIETY PRESIDENT

The American Association of Veterinary Immunologists (AAVI) has elected **Dr. Joan Lunney**, Research Scientist in BARC's Animal Parasitic Diseases Laboratory as their 2007 President. Dr. Lunney was installed as President during the annual Conference of Research Workers in Animal Diseases meeting in Chicago. The American Association of Veterinary Immunologists (http://www.theaavi.org/about.htm) is dedicated to the development, promotion, and dissemination of knowledge in veterinary immunology. This includes immunology of livestock and poultry, companion animals, fish and marine mammals. The AAVI was formed in 1979 and is open to all veterinary immunologists internationally.

Community Interest...

ANNUAL BIRD COUNT

On New Year's Day morning 11 volunteers participated in the National Audubon Society's 107th Christmas bird count at BARC. The eastern part of BARC is part of the "Bowie Circle" which is 'counted' annually. The "Bowie Circle" is 15 miles in diameter, and divided into 12 areas. Not all the areas are equal in size but BARC's portion is about average and therefore, represents about 1/12th the total area.

Over 16,000 birds were counted on this part of BARC. The breakdown among the 67 species sited ranged from 4,298 starlings and 2,052 Canada geese to one Coopers Hawk and two bald eagles. A number of species counted were unique to BARC during this recent count. Because of our grassland and pasture habitats, Northern Pipets, Savannah Sparrows, and Killdeer were counted at BARC. The ponds and creek habits yielded Northern Shovelers and Green-winged Teal. None of the other areas in the "Bowie Circle" tallied any of these species.

Anyone interested in participating in upcoming bird counts or desires additional information should contact **Mr. Ed Clark** at Clark@ars.usda.gov.

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HEALTH & FITNESS EXPO

BARC employees participated in the 14th Annual NBC - 4 Health and Fitness Expo on January 13 and 14 at the Washington Convention Center in D.C. This annual event drew about 80,000 people from the Washington, D.C. metropolitan area. In addition to "family fun" activities, important health and medical information to help our community get healthy and stay fit was available. During the two days, BARC showcased research from our Beltsville Human Nutrition Research Center. Dr. Ellen Harris, Assistant Center Director, and a team consisting of Drs. Deirdra Chester and Dave Luthria, Linda Nix, Kiev Randall, Kevin Kuczynski, Rhonda Sebastian and Meg Kelly were on hand to provide literature, brochures and informational Attendees also had an opportunity to test their items. knowledge of fruits and vegetables via an interactive computerized nutrition challenge. Ms. Jenny Allen, our EEO Specialist/Outreach Coordinator can be contacted additional information at Jenny.Allen@ars.usda.gov/

On the Research Side...

RHIZOBIA TO IRAQ!

Dr. Peter van Berkum, Curator of the USDA ARS National Rhizobium Germplasm Resource Collection at BARC was contacted by Dr. Paul Savello, Consultant to Iraqi Ministry of Agriculture in the Iraq Reconstruction Management Office of the U.S. Embassy in Bagdad, Iraq, with a request on behalf of Dr. Amal Yousef, of the State Board for Agricultural Research in Abu-Ghraib, Iraq. Dr. Yousef's Rhizobium collection, which had been his source for research and inoculant production, had been destroyed during the events following the start of the conflict in Iraq in 2003. After a quality control check, Dr. Van Berkum's staff shipped 144 cultures along with instructions for their recovery and growth to Dr. Savello, who personally delivered them to the Iraqi Minister of Agriculture in Bagdad. Dr. Van Berkum can be reached at pberkum@ba.ars.usda.gov

Rhizobia are soil bacteria that form nodules on the roots of legumes which take up nitrogen from the atmosphere. More information on the National Rhizobium collection along with other systematic collections can be found at: http://www.ars.usda.gov/is/np/systematics/systematicintro.htm

NEPETALACTONES FOR YOUR ORGANIC GARDEN?

Catnip, a member of the mint family, produces volatile chemicals (nepetalactones) that can repel certain insects while attracting others. Current methods to isolate nepetalactones from catnip oil are prohibitively expensive. However, **Drs. Kamal Chaunan and Jeff Aldrich** of BARC's Chemical



Affecting Insect Behavior Laboratory have developed an efficient and economical process to isolate nepetalactones from commercially available catnip oil. This separation process avoids tedious separation techniques and minimizes hazardous waste. Using these natural compounds, a lacewing attractant (pheromone) was identified and synthesized. Lacewings are biological control insects whose larvae are active predators. Lacewings are biological control insects whose larvae are active predators. The attractant is being developed as a commercial lure for lacewings and will be available to home gardener, organic farmers and conventional growers of crops that are susceptible to damage from small soft-bodied insects. For more information contact Dr. Chauhan at Kamal.Chauhan@usda.gov

Mark Your Calendar!

BELTSVILLE AREA DISTINGUISHED LECTURE SERIES

This seminar is open to the public



James E. Womack, PhD, Texas A&M University, College of Veterinary Medicine, Department of Veterinary Pathobiology

Date: Wednesday, February 21, 2007 **Time:** 10:30 a.m. - 11:30 a.m.

Place: Building 003 Auditorium, BARC-West

Title: "Evolution of Animal Genomes and Animal Genomics"

BIOLOGICAL SYSTEMS MODELING CONFERENCE

April 17 – 19, 2007 – The 37th Biological Systems Simulation Conference will be held at the Holiday Inn in College Park, Maryland. The Biological Systems Simulation Group (BSSG) brings together an international group of scientists interested in using integrated systems approaches to study agricultural and natural systems. The conference will be hosted by the BARC's Crop Systems and Global Change Laboratory. The primary focus of this year's conference will be addressing knowledge gaps related to (1) modeling root growth and uptake of water and nutrients and (2) modeling plant responses to nutrient and

water deficits. Presentations will be on a broad range of topics related to the simulation of biological systems. For further information about the meeting, please visit the web site at http://www.ars.usda.gov/News//docs.htm?docid=14256.

ORCHID AUCTION



March 3, 12:00pm – 4:00pm – Orchid fans vie to bring home a special addition to their collections. This event is sponsored by the National Capital Orchid Society. You can preview auction items at

11:00 am. Free at the Administration Building Auditorium of the U.S. National Arboretum. For directions, check www.usna.usda.gov/Education/events.html.

JOB FAIR

Ms. Jenny Allen, BARC's Outreach Coordinator will be participating in Gallaudet University's Internship and Job Fair on February 21, 2007 from 10:00am – 3:00pm. The Fair will take place at Gallaudet's Campus which is located at 800 Florida Avenue, NE, Washington, DC.

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