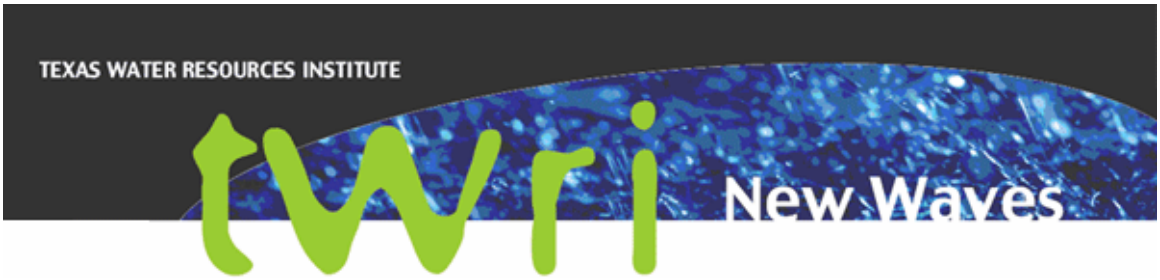

Breaking news about water resources research and education at Texas universities

March 13, 2006

1. Drip Irrigation Is Workable Option for Rolling Plains Cotton

Dr. John Sij, a Texas Agricultural Experiment Station agronomist at Vernon, says subsurface drip irrigation is a workable option for Rolling Plains crop producers. With two years of comparative data at hand and one year's data still in review, Sij believes subsurface drip irrigation has proven its worth on the Rolling Plains.

This research was funded by contributions from the Texas Water Resources Institute, the Cotton Foundation, the Texas Water Development Board and the Texas State Soil and Water Conservation Board.

To read the AgNews story go to http://agnews.tamu.edu/dailynews/stories/SOIL/Feb2006a.htm

2. Student researches endocrine disrupting compounds

Endocrine disrupting compounds (EDC) that remain in the water after wastewater treatment are a concern and were researched by a Southern Methodist University graduate student.

EDCs are chemicals that, in small doses, can interfere with normal hormone production, and can affect the endocrine system in humans and wildlife. SMU environmental engineering graduate student Adrian Dongell and his advising professor, Dr. John Easton, researched various removal strategies of EDCs.
“ Any effect on this system [endocrine] could cause reproductive and/or health effects," said Dongell, a recipient of a $5,000 2004-05 Texas Water Resources Institute-managed research grant.

To continue reading the story, go to: http://twri.tamu.edu/newsarticles.php?view=2006-03-12-03

3. Diffuse reflectance spectroscopy measures soil clay content

With an increased emphasis on precision agriculture and watershed planning, soil scientists need a more rapid and higher resolution in-field measurement of soil properties. Dr. Cristine Morgan, assistant professor, Texas A&M University Soil and Crop Sciences department, and her research team have found a way to measure the soils clay content faster and more accurately in the field.

Through a Texas Agricultural Experiment Station (TAES) funded Water Resources Research Grant, Morgan was able to use diffuse reflectance spectroscopy to measure the percent clay in fields in the North Bosque River watershed and create a model to predict the clay content.

To continue reading the story, go to: http://twri.tamu.edu/newsarticles.php?view=2006-03-12-02

4. Student researches the removal of atrazine

Texas A&M University soil science graduate student, Timothy Goebel and his advising professors, Drs. Kevin McInnes and Scott Senseman, are researching the removal of the herbicide atrazine from runoff water in agricultural fields.

Goebel said that his goal is to improve surface water quality by reducing pesticide load in runoff water before it enters streams and rivers.

"This research project attempts to find a solution to a real world problem since pesticide contamination is a current problem which needs to be addressed," said Goebel, a recipient of a $5,000 2004-05 Texas Water Resources Institute-managed research grant.

To continue reading, go to: http://twri.tamu.edu/newsarticles.php?view=2006-03-12-01

5. Annual report of national water resources organization on-line

The 2006 program executive summary of the National Institutes of Water Resources is available on-line. The report summarizes the accomplishments of the 54 national water resources institutes, including the Texas Water Resources Institute.

The Water Resources Research Act of 1964 authorized establishment of a water resources research and technology institute or center in each state. The institutes were charged with (1) arranging for competent research that addresses water problems or expands understanding of water and water-related phenomena, (2) aiding the entry of new research scientists into the water resources fields, (3) helping to train future water scientists and engineers, and (4) getting results of sponsored research to water managers and the public. The program is administered by the U.S. Geological Survey as the Water Resources Research Act Program under the general guidance of the Secretary of the Interior.

To download the report, go to http://niwr.montana.edu/docs/NIWR_Executive_Summary_2006.pdf .

6. Rice Researchers Focus on Water Conservation

Scientists at the Texas A&M Research and Extension Center in Beaumont are working with the Lower Colorado River Authority to help rice farmers save water. According to Dr. Yubin Yang, senior biosystems analyst, the team is developing a web-based on-farm water conservation analysis tool, called the Rice Water Conservation Analyzer. The tool estimates the potential water savings and evaluates the costs and benefits associated with different on-farm rice water conservation improvements.

To read the AgNews story, go to:
http://agnews.tamu.edu/dailynews/stories/DRGHT/Mar0106a.htm

7. Career Extension Employee Receives Texas Tech Distinguished Alumni Award

Texas Tech University presented a Distinguished Alumni award to Dr. Bob Robinson, regional program director of Texas Cooperative Extension's 66-county North Region. Robinson earned a doctorate from Texas Tech, a bachelor's degree from West Texas A&M University and a master's degree from Texas A&M University, all in the field of animal science.

To read the AgNews story, go to: http://agnews.tamu.edu/dailynews/stories/AGPR/Mar0306a.htm

8. Crop Rotation Adds Value to Irrigation

Texas Agricultural Experiment Station researchers are researching whether crop rotation can add value to irrigation water and help maintain or improve yields in limited irrigation situations.

Jim Bordovsky, Experiment Station agricultural engineer, and other scientists are investigating the feasibility of producing cotton and grain sorghum in rotation using dryland production strategies supplemented by very limited irrigation using efficient delivery systems.

To read the AgNews story, go to: http://agnews.tamu.edu/dailynews/stories/AGEN/Mar0706a.htm

9. Membrane/separations technology "Hands-On" course scheduled

Texas A&M's Separation Sciences Group at the Food Protein Research and Development Center is sponsoring the 16th annual Membrane & Separations Technology short course, April 2-6 in College Station.

"Fundamentals, New Developments, Applications and Pilot Plant Demonstrations" is designed for food, water, chemical, petroleum and environmental industry personnel.

Industry experts and researchers from across the United States and Germany will give lectures on the basic principles, system designs, case studies, membrane & separations equipment selection, and costs & economics of membrane and separations technologies.

To continue reading the story, go to http://twri.tamu.edu/newsarticles.php?view=2006-02-13-01

New Projects

"Irrigation Training Program for Texas Agricultural Producers"

This three-year project will develop and provide educational materials and training manuals to implement a statewide Irrigation Training Program for agricultural producers, agency personnel and others. The Texas Water Resources Institute and Texas Cooperative Extension irrigation specialists will develop the curriculum for this training in collaboration with the USDA Natural Resources Conservation Service and Agricultural Research Service and Texas Agricultural Experiment Station. Texas State Soil and Water Conservation Board and local Soil and Water Conservation Districts, partners in the project with TWRI and TCE, will help plan and host the training in major irrigation areas of Texas.

Principal Collaborators: Texas Cooperative Extension, Texas State Soil and Water Conservation Board
Funding Agency: Texas Water Development Board

"Irrigation Water Conservation Demonstration Project"

This project funds the Panhandle Agripartner program for the 2007 growing season. The program uses demonstration sites to collect data for irrigation water use, soil moisture measurements, rainfall, crop growth state, crop yields and other data. Actual irrigation water use is compared to the potential use estimated by the Texas High Plains Evaporation Network.

Principal Collaborator: Texas Cooperative Extension
Principal Investigator: Leon New

Funding Agency: Texas Water Development Board

"Precision Irrigators Network: On-farm Research and Demonstration to Evaluate Irrigation Scheduling Tools in the Wintergarden and Texas High Plains"

This two-year demonstration project will use potential evaporation transpiration data for scheduling and implementing various limited irrigation levels, collection of field data about irrigation water use, crop yield, input costs and other parameters on a weekly basis. Researchers will use existing farm enterprise models to evaluate the input data and make estimates of irrigation water use/economic impacts of current and alternative management practices.

Principal Collaborators: Texas Water Resources Institute, Texas Agricultural Experiment Station, Uvalde and Amarillo
Principal Investigators: Giovanni Piccinni, Daniel Leskovar, Thomas Gerik, Wyatte Harman, Thomas Marek, Bill Harris
Funding Agency: Texas Water Development Board

"News Waves," an email newsletter of Texas Water Resources Institute, publishes timely information about water resources news, results of projects and programs, and new water-related research projects, publications, papers and faculty, at universities in Texas. If you have information for possible inclusion in "New Waves" please e-mail items to kwythe@tamu.edu or 979.845.1862 and include your contact information. All submissions may be edited for grammar and style.

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