



New Products

► Introducing products, services for cattlemen; compiled by *Linda Robbins*, assistant editor

Nitrogen stabilizer

Eco Agro Resources has announced that testing during the 2014 growing season has confirmed that N Yield™ CX makes stabilized nitrogen fertilizer more affordable and is equally effective. Testing showed just 2 quarts of its nitrogen stabilizer with Penxcel™ Technology performed just as well as a labeled rate of the industry standard product.

The company announced that the new product label includes the high-efficiency, lower rate for the 2015 season as a result of the testing. The unique patent-pending formula of the nitrogen stabilizer delivers more stabilizing power by volume, while maintaining nitrogen efficiency and performance in the field, according to the release.

The Penxcel delivery system drives active ingredients to penetrate deeper into the prills of urea fertilizer, so it works more consistently. It coats more evenly for faster, more consistent coverage of the batch, according to the release.

The low viscosity of the new stabilizer helps it pour easily and quickly coat fertilizer, even in the cold. The company says it blends 15% faster in tests performed in drum blenders and is easier to handle than other industry standard formulations, saving time

during the critical application season. The company says the new nitrogen stabilizer performs just as well in UAN liquid fertilizer, so one product can meet both needs.

For more information visit www.ecoagroresources.com.

Largest crossover hydrostatic tractor

Kubota Tractor Corp. has introduced the MX8500, a four-wheel-drive HST model delivering 61.4 gross hp. The new tractor meets Tier 4 Final emissions standards, and, according to the release, boasts increased engine power and operator comfort.

Available in November at dealerships nationwide, the diesel engine in the new tractor provides a smooth transfer of power, low noise and quick starts. A common rail system (CRS) and diesel particulate filter (DPF) deliver cleaner emissions, and electronic common-rail direct fuel injection maximizes fuel economy.

The MX5800 features hydraulic servo HST

systems that increase pedal responsiveness and shifting ease regardless of load size.

The tractor comes equipped with easy-turn hydrostatic power steering, and a touch-and-turn electric PTO (power takeoff) switch is positioned to the right side of the console for convenient operation with a push and turn start.

Additional comfort features include a convenient cup holder, behind-the-seat toolbox, and a newly designed LCD dash panel with large, easy-to-read gauges. The tractor features a larger fuel tank with a 13.5-gallon (gal.) capacity for longer, more productive operation, with fewer stops to



Kubota MX8500 tractor

fill up. Attaching and working with large implements is simplified with the Category I and II three-point hitch, as well as the telescoping link ends and stabilizers that come standard on the new tractor.

For more information call 1-888-458-2682, ext. 900, or visit www.kubota.com.



Books & Looks

Midwest Cover Crops Guide

Soil researchers and educators from the Ohio State University (OSU) College of Food, Agricultural and Environmental Sciences have collaborated on a newly updated *Midwest Cover Crops Guide* that can help growers learn how to improve the state's water quality while improving soil health, increasing yields, lowering input costs and earning higher farm income.

Jim Hoorman, OSU Extension educator and an assistant professor studying cover crops, along with OSU Extension educators Rafiq Islam, Alan Sundermeier, Curtis Young, Sarah Noggle and Randall Reeder, and researchers from the Ohio Agricultural Research and Development Center, assisted agronomists and researchers with the Midwest Cover Crops Council in revising the cover crops guide. The Midwest Cover Crops Council also includes members from several universities, including Ohio State, Hoorman said.

With all the increased interest in the impact of nitrogen and phosphorus on watersheds that drain into Lake Erie, this guide can offer really good insight to farmers on some of the benefits of using cover crops and how to grow them, Hoorman said.

The question of whether agriculture can significantly reduce off-site movement of soluble nutrients can be addressed through the use of cover crops, Hoorman said.

Experts say soluble phosphorus runoff from farms is an important cause of harmful algal blooms plaguing Lake Erie and other lakes in recent years. In August, a toxic bloom in western Lake Erie led to a two-day drinking-water ban in Toledo.

Ohio soil test data using phosphorus speciation shows that phosphorus is tied up by calcium, magnesium, iron oxides and aluminum oxides, Hoorman said.

The *Midwest Cover Crops Guide*, second edition, is now available for \$5 and can be purchased from OSU Extension county offices and through the Midwest Cover Crops Council at www.mccc.msu.edu.

Farm Bill Resource

The National Sustainable Agriculture Coalition (NSAC) has published a comprehensive digital guide to the key federal farm and food programs that support sustainable farm and food systems. The *Grassroots Guide to Federal Farm and Food Programs* will help farmers and nonprofit organizations navigate the numerous farm bill and other USDA programs that have been championed by NSAC.

The Grassroots Guide includes up-to-date information on conservation, credit, rural development, research and food programs authorized in the farm bill and other pieces of federal legislation, including recent policy changes made in the 2014 Farm Bill.

This new resource details more than 40 federal food and farm programs that provide funding to farmers and organizations for conservation assistance, farm real estate and operating loans, outreach to minority and veteran farmers, beginning-farmer training programs, value-added enterprises, support for farmers' markets and farm-to-school programs, and more. The *Guide* is organized into eight topic areas.

For each program included, the *Guide* provides plain-language explanations of how the program works, who can utilize the program, examples of the program in action, step-by-step application instructions, additional resources, and a brief overview of the program's history — including legislative and administrative changes and historical funding levels.

This digital *Grassroots Guide* will be updated continually as new programs are finalized and modified both by USDA and Congress in the years to come. To access the *Grassroots Guide to Federal Farm and Food Programs*, visit NSAC's website at <http://sustainableagriculture.net/publications>.

Biography of Monsanto Scientist

Will D. Carpenter has a seemingly endless list of achievements from a life dedicated to improving agricultural practices and global food production. He has sat at the helm of modern history's most significant scientific developments, from heading the team that brought Lasso® and Roundup® to market to influencing world leaders and playing a significant role in the drafting and signing of The Chemical Weapons Treaty. *Will d... a life in science*, by Thomas Lawrence, tells the definitive story of Carpenter's career, and its release has brought him back into the public's eye with some definitive views on the modern world's lack of appreciation for its food supplies.

"The bottom line is that people these days don't fully understand or appreciate how cheap and healthy their food is," explains Carpenter. "Advances in science and technology over the past half-century require the average household to spend just 10%-14% of their disposable cash on food. If they were spending the same percentage people did in the 1960s, they could forget being able to afford monthly Internet, throw their expensive running shoes away, and most of the world's cruise lines would shut down!"

Ensuring food for millions of people who would otherwise go hungry was the conviction that would drive Carpenter in his efforts to test and promote products that would benefit global agricultural communities. His new biography offers insight into these developments, as well as a myriad of other accomplishments.

Will d... a life in science is available now. For complete details on

Carpenter's life and career, please visit his website, www.willdcarpenter.com.

Public availability

VIVO, a Web application used internally by USDA scientists since 2012 to allow better national networking across disciplines and locations, is now available to the public. USDA VIVO will be a "one-stop shop" for federal agriculture expertise and research outcomes.

"USDA employs over 5,000 researchers to ensure our programs are based on sound public policy and the best available science," said USDA Chief Scientist and Undersecretary for Research, Education, and Economics Catherine Woteki. "USDA VIVO provides a powerful Web search tool for connecting interdisciplinary researchers, research projects and outcomes with others who might bring a different approach or scope to a research project. Inviting private citizens to use the system will increase the potential for collaboration to solve food- and agriculture-related problems."

The idea behind USDA VIVO is to link researchers with peers and potential collaborators to ignite synergy among our nation's best scientific minds and to spark unique approaches to some

of our toughest agricultural problems. This efficient networking tool enables scientists to easily locate others with a particular expertise. VIVO also makes it possible to quickly identify scientific expertise and respond to emerging agricultural issues, like specific plant and animal disease or pests.

The USDA Agricultural Research Service (ARS), Economic Research Service (ERS), National Institute of Food and Agriculture (NIFA), National Agricultural Statistics Service (NASS) and Forest Service are the first five USDA agencies to participate in VIVO. The National Agricultural Library, which is part of ARS, will host the Web application. USDA hopes to add other agencies in the future.

VIVO was in part developed under a \$12.2 million grant from the National Center for Research Resources, part of the National Institutes of Health (NIH). The grant, made under the 2009 American Recovery and Reinvestment Act, was provided to the University of Florida and collaborators at Cornell University, Indiana University, Weill Cornell

Medical College, Washington University in St. Louis, the Scripps Research Institute and the Ponce School of Medicine.

VIVO's underlying database draws information about research being conducted by USDA scientists from official public systems of record and then makes it uniformly available for searching. The data can then be easily leveraged in other applications. In this way, USDA is also making its research projects and related impacts available to the federal RePORTER tool, released by NIH Sept. 22, 2014. Federal RePORTER is part of a collaborative effort between federal entities and other research institutions to create a repository that will be useful to assess the impact of federal research and development investments.



► The scientist who led the team that launched Lasso® and Roundup® breaks his silence on modern society's perceived entitlement to safe and healthy food.