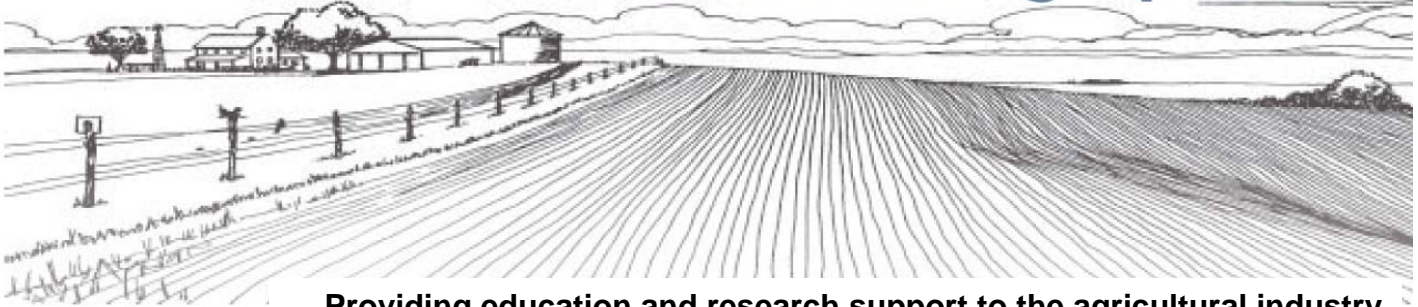


Extension Ag Update



Providing education and research support to the agricultural industry
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On-farm Cooperators needed for Sulfur Soil Fertility Study

Fabian Fernandez, Extension Specialist, 217-333-4426, fernande@illinois.edu

Volunteers are needed throughout Illinois to participate in on-farm research measuring corn response to sulfur applications. While sulfur deficiency is not widespread, its frequency in corn has increased since it was first seen in Illinois three decades ago. This increase is likely the result of several factors, including less use of sulfur-containing fertilizers, insecticides, and fungicides; less atmospheric sulfur deposition; higher removal rates by increasing grain yields; increased use of conservation tillage, which may reduce sulfur availability; and fewer livestock operations, causing less application of manure.

Required soil conditions. In an effort to characterize sulfur response across the state, the study will be conducted in as many locations as possible under high-yielding environments. While soils with fine texture and high organic matter will be included, priority will be given to sites with low organic matter (less than 2%), coarse (sandy) texture, or both. These criteria were selected because they influence the natural sulfur-supplying power of the soil and the ability to retain sulfur in the rooting zone. Sites with suspect sulfur deficiency are particularly desirable. Fields that have received manure or sulfur applications in the last 5 years will not be considered.

Required equipment and sulfur sources. Volunteers will broadcast sulfur in strips using GPS to georeference the strip locations. Grain yields will be calculated using a yield monitor or weigh wagon.

Sulfur sources will be limited to ammonium sulfate ($(\text{NH}_4)_2\text{SO}_4$ (21-0-0-24); MicroEssentials sulfur (ME S), ME S15 (13-33-0-15) or ME S10 (12-40-0-10); and elemental sulfur (0-0-0-90). One or two sulfur rates will be applied in strips; each will be replicated at least three times. If the sulfur source contains other accompanying nutrients, the corresponding rates will need to be applied to other treatment strips to avoid a differential response to nutrients other than sulfur.

Volunteers will not be required to take plant or soil samples, but they need to allow the researcher to visit the strips approximately three times during the growing season.

RESEARCH RESULTS

“U.S. Food Market Size Estimator” at new tool to estimate markets

Rich Pirog, Leopold Center, Iowa State University, (515) 294-1854, rspirog@iastate.edu

While large food companies turn to focus groups, regional product testing and consumer surveys to explore future markets, the Leopold Center for Sustainable Agriculture has developed a simple on-line tool to help farmers, agricultural organizations, public agencies and local food and economic development groups get a "first look" at potential markets.

The new tool, called the **U.S. Food Market Size Estimator**, is available at: www.ctre.iastate.edu/marketsize. Users can find the approximate demand for 204 food products in every county of the United States. Products include milk, cheese and dairy foods; fresh, frozen or canned fruits and vegetables; grains; and meat, fish and nuts.

"This is a simple tool with many uses," said Rich Pirog, associate director of the Leopold Center who worked with the Center for Transportation Research and Education at Iowa State University to develop the tool. "We think it will be used by producer networks to understand potential markets, by economic development groups to make a compelling case for local food systems, and to inform policy as it relates to increasing the capacity of local and regional food efforts."

The tool does not show actual consumption, nor does it account for seasonal or geographic differences in market demand for various foods. Instead, the tool uses information from the USDA Economic Research Service's Food Availability Data System, an annual estimate of the amounts of 204 food products available at a per capita rate in the United States. This per capita rate is combined with the 2007 county population estimates (from the U.S. Census) to determine a potential market for each food product at the county level.

Pirog said the tool might be used by farmers and other direct-market food producers to identify approximate market size in nearby counties or states when they make decisions about marketing, capacity and potential expansion. Government agencies and researchers might find the tool helpful in determining approximate food market size and impact of food production/processing on roads and other infrastructure, or for assessing economic impacts related to changes in food availability, diet and marketing. Possible scenarios might include selecting local purchasing targets for schools, retail, foodservice or other food markets at the county, state or national levels.

Pirog advised users to read the instructions and view a demonstration before using the tool. The project is part of the Leopold Center's Marketing and Food System Initiative, one of three program areas of the Center.

RESOURCES TO CONSIDER

Publications Plus –*University of Illinois Agricultural and Horticultural Publications*

Call 1-800-345-6087 or order on the web www.PublicationsPlus.uiuc.edu

It's a one-stop shop for a current catalog of research-based information (Mastercard and VISA accepted)

“Do You Have a Burning Question? The Facts about Open Burning in Illinois,”
<http://www.epa.state.il.us/air/permits/openburn/index.html>.

The Illinois Environmental Protection Agency (Illinois EPA) and the Illinois Department of Commerce and Economic Opportunity (DCEO) have developed a brochure, to educate citizens about the topic of open burning and its regulations.

The Illinois EPA receives numerous inquiries about open burning each year. This brochure is an informational resource for citizens and should help to ensure that any open burning done in Illinois is conducted in accordance with applicable laws and regulations.

Open burning is defined as the combustion of any matter in the open or in an open dump. The Illinois EPA issues open burn permits for regulated activities, such as prairie burns, firefighter training, and disaster debris burning. While the Illinois EPA and the Illinois Pollution Control Board regulate open burning, local authorities may also have regulations within their own jurisdictions.

The brochure contains information on many types of open burning and associated permit requirements. For example, the burning of agricultural waste can include structures, crop residue and landscape waste that is generated on-site at a farm or ranch from crop and livestock production practices. This type of burning is not allowed in restricted areas, which include any city, village or incorporated township, plus a zone extending one mile beyond the boundaries where there is a population of 1,000 or more. Open burning of agricultural waste is restricted to the site where the waste is generated. The owner/operator must also show that no reasonable alternative and economic method of disposal is available. You may contact the Illinois EPA Agriculture Advisor at 217/558-6818 or the Bureau of Air for further guidance.

Copies of the brochure may be downloaded from the web or may be requested by calling the Illinois Small Business Environmental Assistance Helpline at 800-252-3998 or through the on-line order form at: www.ienconnect.com/enviro

Carrying Farm Products & Supplies on Public Roads, PPP-68
<http://www.btny.purdue.edu/Pubs/PPP/PPP-68.pdf>

Determining what transportation rules you must follow can be confusing. Farmers are exempt from certain regulations, but you must conduct your farming operations within a specific set of guidelines entitling you to claim those exemptions. This publication will help make them easier to understand.

The book can also be purchased for \$1.00 from Ag Communication, Media Distribution Center, Purdue University, 231 S. University Street, West Lafayette, IN 47907-2094, 1-888-398-4636

Aboveground Petroleum Tanks PPP-73
<http://www.btny.purdue.edu/Pubs/PPP/PPP-73.pdf>

Anhydrous ammonia tanks have become favorite targets of methamphetamine makers, costing farmers thousands of dollars in stolen nitrogen fertilizer. Thieves are now turning their attention to another chemical container: The above ground petroleum tank, said a Purdue University Extension specialist.

“With the price of gas and diesel fuel going up, some people are now a little bit more apt to help themselves to your fuel tanks,” said Fred Whitford, coordinator of Purdue

Pesticide Programs. “When that happens, you’re lucky if all you lose is the gas or diesel, because all you’ve lost is the money for that fuel. “The real problem is when these thieves and vandals have the power to the tank on, put what they need into their truck and then let the rest run onto the ground. Now you’ve not only lost a product but you’ve also got soil contamination. And you know what? You can prevent a lot of this and it isn’t that hard.”

Aboveground Petroleum Tanks outlines security measures farmers can take to discourage fuel thieves. The 110-page publication is loaded with illustrations. More than 230 photos show examples of both proper and improper fuel tank practices. The photos come from 15 years of Whitford’s travels to commercial businesses and farms across Indiana.

Four primary themes run throughout the publication, Whitford said. “One important thing you need to do is have a tank in the right place, so that if a spill takes place fuel does not get into surface water,” he said. “Secondly, do everything you can, within reason, to keep the area clean. Third, do a little security to at least make it more difficult for a person to cause you harm. Then lastly, you want to prepare for an emergency. Most of our insurance policies will not cover cleaning up contamination. So if you had a fuel spill, the cleanup would come out of your pocket.”

To order this book for \$1.00 contact Purdue Extension 1-888 -398-4636 or by e-mail at media.order@purdue.edu . The publication also can be downloaded free online at . For more information about the publication or aboveground fuel tanks, contact Whitford at (765) 494-1284 or by e-mail at fwhitford@purdue.edu .

Starting a Dairy Goat Business

The Wisconsin Department of Agriculture, Trade and Consumer Protection has released a new guide, for anyone looking to get into one of the state’s fastest growing agriculture sectors. The 104-page guide covers everything from an initial personal assessment to marketing, as well as herd health, milk quality, and working with processors. To receive a copy of the guide, contact Jeanne Meier, jeanne.meier@wisconsin.gov or 608-224-5121.

A Transition Guide to Certified Organic Crop Management

Margaret Frericks Huelsman

Transitioning to organic farming? Already switched, but needing to update your farm plan? Get step-by-step help in the Organic Whole Farm Planning Workbook (8.5 by 11 in., 108 pp., coil-bound), just released by Ohio State University’s Organic Food and Farming Education and Research (OFFER) Program.

Some of the topics include: “Evaluating Your Current Farm Operation” (history, mapping, climate, and soil), “Defining Your Goal” (based on Alan Savory’s “Holistic Management” approach), “Writing Your Transition Plan” and “Pulling It All Together” (the importance of integration, monitoring and record-keeping). There are questions to answer, conditions to describe, factors to rate and records - all with plenty of space provided to do it, plus sample certification forms, neighbor notification letters and more.

Order Organic Whole Farm Planning Workbook, \$20, and Transition Guide to Certified Organic Crop Management, \$15, from OFFER, 201 Thorne Hall, OSU/OARDC, 1680 Madison Ave., Wooster, OH 44691. Make checks payable to OSU/OFFER. For more information, call (330) 202-3528.

INTERNET RESOURCES

Agriculture & Public Health Gateway

<http://aphg.jhsph.edu/>

The Agriculture & Public Health Gateway is a project of the Johns Hopkins Center for a Livable Future. The Gateway provides a central place to access information about public health, agriculture, and the links between these two fields. It can be a useful resource for public health and agricultural professionals, advocacy and community organizations, policy makers, journalists, and educators.

Clean Energy Farming: Cutting Costs, Improving Efficiencies, Harnessing Renewables

www.sare.org/publications/energy.thm

This publication provides farmers with examples of ways to improve energy efficiency while saving money and utilize renewable fuels.

Energy Estimator for Tillage

ecat.sc.egov.usda.gov

Energy Estimator for Tillage is the first of several tools from Natural Resources Conservation Service (NRCS) developed to increase energy awareness in agriculture. The tool estimates diesel fuel use and costs in the production of key crops in your area and compares potential energy savings between conventional tillage and alternative tillage systems. The crops covered are limited to the most predominant crops in 74 Crop Management Zones (CMZ's). NRCS agronomists have identified these crops and estimated the fuel use associated with common tillage systems. Without including every crop and tillage system, the Energy Estimator gives you an idea of the magnitude of diesel fuel savings under different levels of tillage.

Farm Risk Planning

Farm-Risk-Plans.USDA.gov

USDA's Risk Management Agency (RMA) has launched an online resource to aid farmers and ranchers in focusing on how to protect against down-side risks, as well as how best to take advantage of up-side opportunities in the market. The new resource allows producers to complete a risk management checklist, identify their enterprise's strengths, weaknesses, opportunities, and threats, and explore a wealth of risk management information. The new resource features four modules: Risk Management Planning, Better Marketing Planning, New Enterprise Planning, and the Farm Planning Library. Each contains the best available information, consolidating resources from leading Land Grant Universities and government agencies.

Producers are able to complete two exercises online which give them a novel look at their risk management situation. First is the Risk Management Checklist, a three-page list of questions to stimulate conversation among the family or leadership team of any farm or ranch operation.

The second is a Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis, a commonly used planning exercise in the business world, recognizing that small- to medium-sized farms are serious businesses which must use the same tools as any other modern business.

DiagnosticSpeak, The Ohio State University

<http://www.diagnosticspeak.com>

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Source: Daral Jackwood, Center for Diagnostic Assays, OARDC, (330) 263-3964 jackwood.2@osu.edu,

This is a valuable resource for any professional who works with diagnostics, including university researchers studying infectious diseases and food safety; large- and small-animal veterinarians and technicians; industry personnel monitoring herd or plant health; professionals in trade and industry associations; federal and state government scientists, including veterinarians and diagnostic laboratory personnel; private diagnostic laboratory professionals; and manufacturers of assays and reagents.

“Although there are multiple platforms for researchers to uncover information about infectious disease diagnostics, there is no single site known for quick collaboration between academicians, industry, manufacturers, government and other professionals working to diagnose diseases in animals and plants,” said CDA Director Daral Jackwood, a molecular biologist with the university’s Ohio Agricultural Research and Development Center (OARDC). Worldwide in scope, DiagnosticSpeak seeks to connect the scientific community of infectious disease investigators with each other and with the end users of diagnostic tools. “If someone has a question about a disease, test or technology, they can come to the site and find the right person with the right answer,” Jackwood explained.

Users of this Web site will find forums that address their particular interests and needs on a wide variety of areas, including bacteriology, parasitology, entomology and vectors, food safety, assay technology, and many others. The forum also provides technical information on various diagnostic tools and specific diseases. To guarantee the integrity of information posted to the site, each forum at DiagnosticSpeak has assigned moderators — experts in the field — who will contribute to and monitor thread content.

For more information about DiagnosticSpeak.com, and to inquire about corporate sponsorships, contact Jackwood at (330) 263-3964 or jackwood.2@osu.edu.

New Farm Foundation Report: The 30-Year Challenge

www.farmfoundation.org/news/articlefiles/1694-Final%2030%20Year%20Challenge.pdf

Farm Foundation released a new report outlining major challenges and issues agriculture will confront in providing food, fiber and energy to a growing world over the next 30 years. The new report examines issues agriculture and policy makers may face in addressing the challenge of providing food, fiber and energy to a growing world.

Oilseed Processing for Small-Scale Producers

<http://attra.ncat.org/attra-pub/PDF/oilseed.pdf>

There are many varieties of seeds and nuts that can produce oils for food, nutraceuticals, skincare products, aromatherapies, fuels and industrial lubricants. This publication updated in 2008 describes the basic processes involved in oil processing including seed cleaning, extraction, clarification, packaging and storage. Sources for more information and equipment are included in the References and Resources sections at the end of the publication.

EDUCATIONAL OPPORTUNITIES

University of Illinois Agriculture Events

New programs are being confirmed every day. Keep in touch with your Extension Office for programs addressing the topics that interest you and are offered in your County. To find your counties website go to: <http://web.extension.uiuc.edu/state/findoffice.html>

Statewide University of Illinois Extension Calendar Website

<http://web.extension.uiuc.edu/state/calendar.cfm>

To search for programs throughout the state, check out Extension's searchable calendar. Search by location, topic or date to find a program of you interest.

AG FACTS

Who owns the forest resources of Illinois?

85% Private individuals

7% Corporate

6% National Forest

2% State

2% Other federal programs

1% County and municipal

Source: Illinois Forests by Scott Bretthauer and John Edgington

About the Ag Update Newsletter

The Ag Update Newsletter is a bi-monthly newsletter providing education and research support to the agricultural industry. Current and past issues may be found at the following website <http://www.urbanext.uiuc.edu/agupdate/index.html>

Contact your county Extension office and request to be put on their agricultural mailing list to receive the local agricultural newsletter and notices about upcoming agricultural events near you. To find your counties location, phone and website go to: <http://web.aces.uiuc.edu/ve/>

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