



Newsletter

DORCHESTER COUNTY • P.O. BOX 299 • CAMBRIDGE, MARYLAND 21613 • (410) 228-8800

AG PROFIT

January—February 2009

Dear Friends,

Happy New Year! Let me take this opportunity to introduce myself. I am the new Extension Educator for Agriculture and Natural Resources in Dorchester County. I come from Michigan State University Extension where I was an Extension Educator for Commercial Vegetable Production serving four southeast Michigan counties.

I am excited about this opportunity to work with you. It is a privilege to serve you as your Extension Educator (Ag Agent). I would like to extend my gratitude to our retired Extension Educator, Ms. Betsy Gallagher for her meritorious service that spans over three decades. Let us take some time to thank for her valuable service to our community that has helped many succeed and touched our life in many ways.

Our farmers are eager for information about the state of economy, crop prices, production challenges, rising input costs, global warming and host of other issues. Maryland Cooperative Extension will provide timely and in depth programs to keep everyone up to date and educated. Extension is in a unique position to bring knowledge to life to solve problems and create new awareness. In this present time of economic uncertainty, this novel idea is of utmost importance.

Although many budgetary concerns exist; At Maryland Cooperative Extension, we are always committed to our mission, to help you succeed. We are in the process of adapting new resources and technologies to meet the challenges and help prepare Marylanders for the future.

I am a firm believer of teamwork and I can assure you that there is nothing we can't accomplish when people come together for a common cause. Together as citizens of this great country, we the growers will feed, power and sustain the nation to be prospered for many more years. I will be always on your side for this great cause.

I would like to hear from you. In order to understand your needs, I have included a brief survey with this news letter. I would appreciate if you take some time to review and reply with your comments that will help us to serve you better. I will work in progress to develop new programs and contents that will benefit you, our state and the nation. Thank you in advance for your feedback and support.

Sincerely,

Sudeep Mathew
Extension Educator, Agricultural Science
Educating People To Help Themselves

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Local Governments • U.S. Department of Agriculture Cooperating

USDA RELEASES 2008 CROP PRODUCTION SUMMARY

Corn for grain production in 2008 is estimated at 12.1 billion bushels, up 1 percent from the November forecast but 7 percent below last year's record high. The average U.S. grain yield is estimated at 153.9 bushels per acre, up 0.1 bushel from the November forecast and 3.2 bushels above 2007. The 2008 yield is the second highest on record, behind 2004, and production is second largest, behind last year.



Sorghum grain production in 2008 is estimated at 472 million bushels, up 2 percent from the November forecast but 5 percent below 2007. Planted area is estimated at 8.28 million acres, up 7

percent from last year, and area harvested for grain, at 7.27 million acres, is up 7 percent from 2007. Average grain yield, at 65.0 bushels per acre, is up 2.0 bushels from the previous forecast but down 8.2 bushels from last year.

Soybean production in 2008 totaled 2.96 billion bushels, up 1 percent from the November forecast and up 11 percent from 2007. U.S. production is the fourth largest on record. The average yield per acre is estimated at 39.6 bushels, 0.3 bushel above the November forecast but 2.1 bushels below last year's yield. Harvested area is up 16 percent from 2007, to a record 74.6 million acres.

CAN EARLY PLANTING INCREASE YIELD IN SOYBEANS?

New research shows that early planting does increase soybean yield, but can vary by year and cultivar choice.

Over the past decade, two-thirds of Indiana growers have shifted to planting their soybean crop earlier because they believe that earlier planting increases yield. Planting date is probably one of the most important yet least expensive management decisions that significantly affects soybean yield. Few scientists, however, have studied the effect of early-planting dates on soybean yield components and the impact of early planting on seed composition.

To answer this question, Andrew P. Robinson and colleagues at Purdue University conducted a 2-year (2006-2007) study at West Lafayette, IN. The research was supported by the Indiana Soybean Alliance and the Indiana Crop Improvement Association.

Three soybean cultivars were planted approximately every 2 weeks starting in late March and ending in early June. Detailed measurements of soybean yield components (pod number, seeds per pod, and seed mass), nodes, and reproductive nodes were counted by hand just before harvest. Oil and protein concentrations were determined by near-infrared reflectance spectroscopy.

A recent article in the January-February 2009 issue of *Agronomy Journal* gives detailed results from this study. This research was presented at the American Society of Agronomy annual meetings in October 2008 at Houston, TX, and at the American Seed Trade Association, Corn, Sorghum, and Soybean annual meetings in

December 2007 at Chicago, IL.

"The research found that yield was consistently the highest when planting from April to early May," comments Robinson.



Pods-per-square-meter were a good indicator of yield potential of early planted soybean, whereas seed mass was a good indicator of late-planted (late-May and early-June) soybean. Oil concentration was higher at early plantings and protein concentration was higher at late planting dates. As the temperature increased during R6 soybean growth stage (full seed) oil concentration increased and protein concentration decreased.

"Our research shows that early planting does increase yield, but can vary by year and cultivar choice. Our research also suggests that early planting may lead to increased oil concentration of Midwest soybean. However, early planting may not be for everyone," warns Robinson. "Further research is needed to quantify the impact early planting has on seed quality." The full article is available for no charge for a limited period electronically at this link, <http://agron.scijournals.org/cgi/content/full/101/1/131>

USDA ISSUES FINAL RULE ON MANDATORY COUNTRY OF ORIGIN LABELING

The United States Department of Agriculture has announced on Jan 12, 2009 about details of the final regulation for the mandatory country of origin labeling (COOL) program required by the 2002 and 2008 farm bills. The full text of the final rule has published in

the Jan. 15, 2009 Federal Register. The rule becomes effective on March 16, 2009, 60 days after the date of publication. Copies of the final rule and additional information are on display on line at <http://www.ams.usda.gov/COOL>.

USDA ISSUES FINAL RULE ON MANDATORY COUNTRY OF ORIGIN LABELING (cont.)

The rule covers muscle cuts and ground beef, lamb, chicken, goat and pork; wild and farm-raised fish and shellfish; perishable agricultural commodities (specifically fresh and frozen fruits and vegetables); macadamia nuts; pecans; ginseng and peanuts.

Commodities covered under COOL must be labeled at retail to indicate its country of origin. For fish and shellfish, the method of production -- wild or farm-raised, -- must be specified. Commodities are excluded from mandatory COOL if the commodity is an ingredient in a processed food item.

This rule is great news for our county and regional growers since

we are one of the largest produce/poultry growing regions in the state. There will be an increased interest and opportunity to source fresh market produces for the growing area metropolitan sections.

The final rule outlines the requirements for labeling covered commodities and the recordkeeping requirements for retailers and suppliers. The law provides for penalties of up to \$1,000 per violation for both retailers and suppliers not complying with the law.

TRACKING POULTRY LITTER PHOSPHORUS: POTENTIAL SCIENTIFIC EVIDENCE TO SUPPORT FARMS

Two scientists examine the fate of phosphorus compounds in Delmarva Peninsula soils in the January-February issue of Journal of Environmental Quality.

The Delmarva Peninsula, flanking the eastern shore of the Chesapeake Bay, is home to some 600 million chickens. The resulting poultry manure and some of the chicken house bedding material is usually composted and then spread onto croplands as a fertilizer.

Phosphorus-31 nuclear magnetic resonance (^{31}P NMR) and other methods of soil analysis have previously shown that two forms of phosphorus – orthophosphate and phytate (aka *myoinositol hexakis phosphate*) – dominate composted poultry litter. Although much is known about the transport of orthophosphate in soils, very little is known about the fate of phytate, a compound that is indigestible by poultry and abundant in poultry litter. With six phosphate groups per molecule phytate has the potential to be a significant player in non-point phosphorus pollution.

As part of her doctoral dissertation research at Yale University, scientist Jane Hill worked with scientist Barbara Cade-Menun at Stanford University to investigate the fate of phytate in crop soils on the Delmarva Peninsula. Specifically, Hill and Cade-Menun measured changes in phosphorus forms along a spatial transect



on two active poultry farms. Using ^{31}P NMR and supporting analytical methods, they found that phytate concentration was high in manures (about 50% of total P) but was not retained in crop soils and ditch sediments, where concentrations dropped to 2 to 15% of the total P. A corresponding increase in soil and sediment orthophosphate was also measured. The study concluded that phytate does not accumulate in soils, but rather, is most likely to be hydrolyzed *in situ* by microorganisms. Results of the study were published in the January-February issue of the *Journal of Environmental Quality*.

Research in the respective groups of Drs. Hill and Cade-Menun is ongoing. Dr. Hill is focused on assessing the timing and controls on phytate hydrolysis in soils. Dr. Cade-Menun is currently a nutrient cycling scientist with Agriculture and Agri-Food Canada at the Semiarid Prairie Agricultural Research Station, focusing on the impacts of agricultural nutrients on the environment.

The full article is available for no charge for a limited period electronically at this link, <http://jeq.scijournals.org/cgi/content/abstract/38/1/130>

JOHNS HOPKINS GIS FOOD SYSTEM MAP PROJECT

The Johns Hopkins Center for a Livable Future (CLF) is developing a GIS food system map of Maryland. The CLF food system map will include information on agriculture in the form of aggregated Census of Agriculture data as well as specific information on farms that currently produce, market and distribute food locally. In addition to this production information, the map will include data on processing facilities, distributors, farmers markets,

grocery stores, restaurants, schools, hospitals, zoning and easements, economic census data and nutritional health data.

This new tool can be used to help guide the design of research and program activities of local non-governmental organizations; local, regional and state policy makers; and economic development agencies that are working to improve the local food

JOHNS HOPKINS GIS FOOD SYSTEM MAP PROJECT (CONT.)

system. For example, the map could identify ideal locations for new processing facilities along existing distribution routes and within a reasonable distance from area farmers raising similar products.

The specific information on the select farms mentioned above was collected using public online resources. CLF would like to include information on any farm that wishes to



participate, which includes farm name, address, crops and animals raised, and marketing methods. To learn more and participate, check out http://www.jhsph.edu/clf/programs/eating/proj_foodsystem.html or contact Amanda Behrens at 410-502-5069, abehrens@jhsph.edu.

EPA RECEIVED PETITION TO RESTRAIN THE USE OF 2, 4 D

EPA is seeking comments on a petition Natural Resources Defense Council (NRDC), requesting that EPA revoke all tolerances and cancel all registrations for 2,4-D. The petitioner, NRDC, claims that EPA cannot make a finding that there is a reasonable certainty of no harm from dietary residues of 2,4-D and, therefore, that the Agency must revoke all tolerances established under section 408 of FFDCFA, as amended by FQPA. As a part of the petition, NRDC claims that the Agency did not consider the full spectrum of potential human health effects associated with 2,4-D in connection with EPA's reassessment of the existing 2,4-D tolerances, and EPA's environmental risk assessments.

Comments must be received on or before February 23, 2009. Submit your comments, identified by docket identification (ID) number EPA-HQ-OPP-2008-0877, by one of the following

methods: Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the on-line instructions for submitting comments.

Mail: Office of Pesticide Programs (OPP)
Regulatory Public Docket (7502P),
Environmental Protection Agency, 1200
Pennsylvania Ave., NW., Washington, DC 20460-0001.



Also sent comments to; Teung F. Chin, Ph.D. Acting Director, Office of Pest Management Policy Agricultural Research Service, United States Department of Agriculture, 1400 Independence Avenue, S.W. Room 3871 - South Bldg. Mail Stop 0315, Washington DC, 20250. Phone (202) 720-5375 Fax (202) 720-3191 Email: Teung.F.Chin@usda.gov

INDUSTRY NEWS

NEW FERTILIZER TECHNOLOGY WITH LOWER EXPLOSIVE POTENTIAL

Honeywell has developed a patented new technology to produce a highly effective, safer ammonium nitrate-based fertilizer with significantly lower explosive potential. The new technology has received SAFETY Act designation from the U.S. Department of Homeland Security (DHS) under the Support Anti-terrorism by Fostering Effective Technologies Act.

"The unique composition of this new fertilizer makes it extremely difficult to turn into a weapon," says Qamar Bhatia, vice president and general manager of Honeywell Resins & Chemicals, one of the world's largest producers of ammonium nitrate fertilizer. "Ammonium nitrate has long been an excellent fertilizer, but this technology makes it safer."

The new technology fuses ammonium sulfate with ammonium nitrate, providing both nitrogen and sulfur needed for efficient

plant nutrition as well as enhanced safety, quality, and storage characteristics. Independent tests using guidelines developed with the U.S. government demonstrated that Honeywell's new fertilizer is significantly more difficult to use as an explosive. When mixed with fuel oil -- a common method of using ammonium nitrate as an explosive -- the new ammonium sulfate nitrate fertilizer did not detonate.

Honeywell is conducting pilot plant test production of the new fertilizer to finalize scale-up and engineering for manufacturing, and is also in talks with potential manufacturing partners. The company hopes to have limited quantities for sale in certain regions in 2009 and plans to market it as Sulf-N 26 fertilizer.



NUTRIENT MANAGEMENT VOUCHER TRAINING SET FOR FEBRUARY 19TH

Maryland Cooperative Extension will offer a two hour course on Nutrient management voucher, Thursday, February 19, 2009 from 6.30 pm to 8.30 pm at the Thendara 4-H Center, Hurlock. This course is for persons who already have nutrient management certification. This event will help continue certify with the program and also provide new updates. To register call 410-228-8800

PESTICIDE RE-CERTIFICATION TRAINING TO BE HELD FEBRUARY 26TH

Maryland Cooperative Extension will conduct an approved two hour private applicator pesticide recertification class on February 26th 6.30 pm to 8.30 pm at the Thendara 4-H Center, Hurlock. Failure to obtain approved recertification of private applicators license will result in having to retake the exam, so it is important to pay attention to renewal requirements. Call 410-228-8800 to register.

33RD ANNUAL CAROLINE/DORCHESTER VEGETABLE MEETING AND GOOD AGRICULTURAL PRACTICES (GAP) TRAINING—FEBRUARY 24, 2009 UNITY WASHINGTON METHODIST CHURCH

Who should attend: If you are a vegetable, specialty or high-value crop grower, industry personnel, consultant, farm marketer, produce processor or associated with agriculture.

~ Program Agenda ~

8:30—9:00 A.M.	Registration—Coffee and Donuts	11:20—11:50 A.M.	Vegetable Fungicide Update and Options Dr. Kate Everts Vegetable Plant Pathologist University of Maryland
9:00—9:30 A.M.	What you need to know about Crop Insurance Dr. Wes Musser Farm Management Specialist Dept. Agricultural and Resource Economics University of Maryland	11:50—12:00 P.M.	Good Agricultural Practices (GAP) Training outline Dr. Christopher Walsh Professor Dept. of Plant Science and Landscape Architecture University of Maryland
9:30—10:00 A.M.	Weed Control Strategies for Vegetables Sudeep Mathew Extension Educator Maryland Cooperative Extension Dorchester County	12:00—1:00 P.M.	****LUNCH****
10:00—10:30 A.M.	Factors to Consider when Transitioning to Organic Vegetable Production Laura Hunsberger Extension Educator Maryland Cooperative Extension Worchester County	1:00—1:30 P.M.	Introduction and General Overview of GAPs — Water, waste, wildlife and workers Dr. Christopher Walsh University of Maryland
10:30—10:40 A.M.	*****BREAK*****	1:30—2:00 P.M.	Tomato GAPs guidance for growers—2008 research and industry suggestions Dr. Christopher Walsh University of Maryland
10:40—10:50 A.M.	Loans for small and medium sized farms Frank Spray Farm Loan Manager USDA Farm Service Agency	2:00—2:30 P.M.	Introduction to the MDA-USDA GAP auditing process Deanna Baldwin Program Manager Food Quality Assurance Maryland Department of Agriculture
10:50—11:20 A.M.	Efficacy trials for the new chemical controls of insects Dr. Jerry Brust IPM Vegetable Specialist University of Maryland	2:30—3:15 P.M.	Case study in farm auditing Group activity
		3:15—3:30 P.M.	Wrap up



33RD ANNUAL DORCHESTER/CAROLINE VEGETABLE MEETING AND GOOD AGRICULTURAL PRACTICES (GAP) TRAINING

TUESDAY FEBRUARY 24, 2009

9:00 AM – 3:30 PM

Unity Washington Methodist Church

Main St & Oak St

Hurlock, MD 21643



Come, attend and be part of the 2009 Vegetable Workshop. This meeting provides scientific updates about new tools and techniques for efficient vegetable production in the mid-shore counties. Get insights, answers and expert advice for a successful vegetable season.

TOPICS INCLUDE....

Crop insurance

Farm loans

Insect, disease and weed management

Maximize higher yields

Organic vegetable production

Good Agricultural Practice Training (GAP)

It's free to attend. Register by February 20, 2009.
Call Rhonda Barnhart at 410-228-8800 to register.



Sponsored by: Maryland Cooperative Extension and USDA Farm Service Agency

Dorchester AGNR Survey – 2009

What sort of offerings would you find valuable from Maryland Cooperative Extension (MCE). Do you have an idea or suggestion? Please take some time to review this brief survey. Complete and return to us with your thoughts and comments. This will help us to understand your needs to serve you better. Thank You!

1. What is your primary operation? Circle all that apply
(a) Field crops (b) Vegetables (c) Fruits (d) Poultry (e) Cattle/diary (f) Consultant/industry
2. Are your crops grown for?
(a) Fresh market (b) Processing (c) Both
3. Do you have any of your operation organic?
(a) Yes (b) No
4. Have you ever contacted Maryland Cooperative Extension?
(a) Yes (b) No

*If 'Yes'; how frequent you communicate with local extension?
(a) Weekly (b) Monthly (c) Annually (d) As needed

*If 'No'; what was the reason?
(a) Never heard about extension (b) I don't think it will be of help
(c) Not sure about the programs/ services (d) Other, please specify
5. Why do you use Maryland Cooperative Extension?
(a) Unbiased solutions (b) Resourceful organization (c) Local reach (d) Friendly staff
6. What type of programs made the highest impact in your operation? Please rate—highest (1) to lowest (4)
 On-farm individual interaction Meetings Research/field days Newsletters/print materials
7. How important it is to receive unbiased, science based, free information to your success?
(a) Very much (b) Relevant (c) Little (d) Don't know
8. How would you prefer extension's operational reach?
(a) County level (b) Regional (C) State
9. If you have knowledge about other state's extension programs how you would compare/rate Maryland Cooperative Extension
(a) Excellent (b) Good (c) Fair (d) Poor
10. You can make a difference! Are you willing to be a partner in your extension's progress?
(a) I will advocate extension to elected officials (b) I will gather support (c) I will participate in programs
(d) I will educate others
11. Do you have any comments/ideas/suggestions for Maryland Cooperative Extension?

NB: Use additional sheets if needed. If you need any assistance in completing this survey please give us a call at 410-228-8800.

Please return the completed survey to: **Maryland Cooperative Extension, P.O. Box 299, Cambridge, MD 21613**