AG INSIGHT

University of Maryland Extension

Baltimore County
1114 Shawan Rd.
Cockeysville, MD 21030
(410) 887-8090
M—F 8:00 a.m.—4:30 p.m.

IN THIS ISSUE

May 2021

The Extension office is open by appointment only .

Head Scab Fungicide Recommendations

Andy Kness, University of Maryland Extension

Wheat will soon be heading and flowering, which means we need to be ready for fungicide applications to help manage head scab/Fusarium head blight (FHB). The fungus that causes FHB can only infect wheat through an open and viable flower; therefore, the flowers are what we need to protect with a fungicide. Fungicides are protectant products and are only locally systemic, so applications need to be made to the parts we want to protect (i.e. the flowers). In order to do this, apply a labeled fungicide to flowering wheat, which is Feekes growth stage 10.5.1. This growth stage is easy to determine because you will see the yellow anthers emerging from the middle of the spike (Fig 1). Once the anthers emerge you have approximately **5 days** to apply a fungicide. Some products on the market claim efficacy at earlier applications prior to flowering; however, **these applications are not as effective as an application made at flowering or up to 5 days after flowering**. All products labeled for FHB are rainfast in about 20 minutes.

Ground applications should be made with at least 10 gallons/acre volume and spray nozzles should be **angled** forward 30-45° down from horizontal (30 degrees is best) or dual nozzles angled both forward and backward give better contact with the head and increase fungicide efficacy; flat-fan nozzles angled down at 90° do not do a good job of covering the wheat heads, which is where the fungicide needs to be applied.

Proline (Prothioconazole), Prosaro (Prothioconazole + Tebuconazole), and Miravis Ace (Pydiflumetofen + Propiconazole) work very well for managing FHB and reducing DON vomitoxin levels in the grain. Folicur (Tebuconazole) performs fair but not as well as the above listed. Tilt and multiple generics of propiconazole are labeled for FHB but do not provide effective control.

Figure 1. *Wheat at the start of flowering*

Getting Ready for Pick-Your-Own

May 4, 2021 · 4pm-5pm

Join growers and ag service providers from the Northeast for an interactive discussion about what is working and what is not as we prepare to open our farms to visitors for the upcoming pick-your-own (PYO) season. The berries are ripening and the COVID -19 pandemic is evolving – what does that mean for PYO visitor management this season? What did you do last year that you'll continue and what will be different this season?

Featuring:

- Deb Colitas from Valley Fruits & Veggies in the Lehigh Valley of PA
- Claudia Schmidt from Penn State Extension
- Lisa Chase from University of Vermont Extension
- And YOU! Come ready to share your PYO questions and experiences managing visitors.

This is the first agritourism zoom café in a series that will cover several topics for farms open to visitors through the evolving COVID-19 pandemic. To request a disability-related accommodation to participate in this program, please contact Christi Sherlock at (802) 476-2003 or Christi.Sherlock@uvm.edu so we may assist you.

Register for the webinar here.

Interested in having a safety expert visit your farm? A team of ag service providers in the Northeast is providing personalized safety assessments that will take place either virtually or on your farm. Sign up HERE.

This material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28588.

For more information please contact Lisa Chase, Ph.D., the University of Vermont Extension at (802) 257-7967 x311 or by email Lisa.Chase@uvm.edu

Updated Cottage Food Laws

If you operate a cottage food business, you will want to take time to review the updated Cottage Food Documents released by the Maryland Health Department regarding non-permitted cottage foods. There are also several other documents worth reviewing:

Maryland Department of Health

- Maryland Cottage Food Businesses
- Guidelines for Cottage Food Businesses-02/2021 (pdf)
- Allowable Foods-2/23/2021 (pdf)
- Foods NOT Allowed-2/23/2021 (pdf)
- Cottage Food Business Checklist for Retail Food Sales-2/2021 (pdf)

Click the links to read more, or contact the Extension office for hard copies. If ypu have specific questions regarding cottage foods, contact Ginger Myers, Extension Marketing Specialist: (410) 432-2767 x338.

Livestock Producer Tick Survey

The University of Maryland is conducting a statewide survey of ticks in livestock in Maryland in order to gauge the spread of the invasive Longhorned tick, as this tick can be a real issue for livestock producers.

If you are interested in having your livestock checked, please complete this very short 3 question survey to: https://go.umd.edu/tick-survey.

For more information about this program, please feel free to contact Racheal Slattery (rslatt@umd.edu, 301-405-1392) or Dr. Megan Fritz (mfritz13@umd.edu, 301-405-3911).

Soil Health to Go: Lunch and Learn

May 12, 2021 · 12 pm

Join the Million Acre Challenge group for this half hour Lunch & Learn about soil health and data collection. In this session, they will chat with Mitchell Hora, a farmer from Washington, Iowa. Mitchell is a 7th generation farmer and the Founder/CEO of Continuum Ag, a soil health data company.

On their 700-acre farm, the Horas are more than 40 years into no-till and six years into cover crops, and they have experimented with relay-cropping, interseeding, 60" corn, diverse crops, and more. Mark your calendars and register here for the event!

New Web-Based Soybean Budget Tool

With grant funding from the Maryland Soybean Board, we have been working to develop a new web-based app for calculating crop budgets for growing soybeans. The goal for this new tool is to allow farmers more freedom to customize inputs to better reflect their farming practices with a simple user interface. The web app allows you to download a summary of all inputs and expected profits as a PDF document for your records. The new crop budget tool can be found at: https://awleslie.shinyapps.io/budget_4/.

We are interested in gathering feedback and input about this new format and ways to improve it in the future. After testing the new crop budget tool, we would appreciate if you could take a few minutes to provide feedback through our online survey: https://ume.qualtrics.com/jfe/form/SV_07bOf0994wyKzGd. Survey feedback will be used to develop better crop budget tools in the future.

MSB
MARYLAND SOYBEAN BOARD

Department Seeks Applicants for Farming Healthy Soils Program

Maryland Department of Agriculture, press release here

The Maryland Department of Agriculture (MDA) is now accepting applications for farmers interested in enrolling their fields in the Farming for Healthy Soils program. Participating farmers will receive free technical assistance and financial incentives to help install the following soil health practices:

- Conservation tillage;
- Multi-species cover crops;
- Extended season cover crops;
- Prescribed grazing; and
- Precision nutrient management.

Cost-share funding of $10 to $55 per acre is available to help farmers adopt these key practices. Free technical assistance will be provided by local soil conservation districts or University of Maryland Extension, and will include field evaluations to measure changes in soil health. Financial assistance will also be offered for soils data sampling.

Maryland's Farming for Healthy Soils program is funded by a three-year, $1 million grant awarded by the Chesapeake Bay Stewardship Fund. In its second year, the grant promotes the use of on-farm soil health practices that increase carbon sequestration, improve soil productivity, and protect water quality in the Chesapeake Bay watershed.

The Chesapeake Bay Stewardship Fund is a partnership between the National Fish and Wildlife Foundation and the U.S. Environmental Protection Agency's Innovative Nutrient and Sediment Reduction Grants Program and the Small Watershed Grants Program. Additional support is provided by the U.S. Department of Agriculture's Natural Resources Conservation Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Altria Group Restoring America's Resources partnership.

Farmers who want to enroll study fields in this program should contact MDA's Healthy Soils Program Coordinator Kevin Antoszewski at kevin.antoszewski@maryland.gov. For more information about Maryland's Farming for Healthy Soils program, please visit MDA's website.

MDA Increases Cost– Share Assistance for Manure Transport

Maryland Department of Agriculture, press release here

The Maryland Department of Agriculture (MDA) announced the Manure Transport Program will increase the cost-share rate for farmers and manure brokers hauling poultry manure to qualifying farms to **$28 per ton**. This new assistance will further support Maryland farmers with making the switch to using poultry manure as a crop fertilizer and help reduce excess phosphorus from entering local waterways.

"The department is excited to offer additional support to farmers who want to make the switch to using poultry litter as an all-natural fertilizer and soil amendment," said Secretary Joe Bartenfelder. "By moving poultry litter away from farms with high phosphorus levels and applying it to fields in other parts of the state that need it, we can recycle manure, improve our soil health, and help reduce nutrient runoff into the Chesapeake Bay."

Maryland's Manure Transport Program plays an integral role in helping the state meet its Watershed Implementation Plan (WIP) Phase III goals to restore the health of local waterways and the Chesapeake Bay. Reducing phosphorus levels is a major component of the state's WIP goals. The department's Phosphorus Management Tool (PMT) was adopted in 2015 to help identify areas where there is a high risk for phosphorus runoff and guide the use of effective management practices in soils that are already saturated. The PMT will be fully implemented on July 1, 2021.

To help farmers meet this deadline, the department's Manure Transport Program continues to connect poultry farms operating under the PMT with nearby farms with low soil phosphorus levels that can safely use the manure as a nutrient source for their crops.

Farmers that would like to expedite manure transportation this spring, should consider the program's FastTrack grant option, which allows them to haul manure now and apply for cost-share reimbursement later. More details about FastTrack grants can be found on MDA's website.

To participate in the Manure Transport Program, farmers must be in good standing with the Maryland Agricultural Water Quality Cost-Share (MACS) Program and in compliance with Maryland's nutrient management regulations. Other restrictions may apply. Interested farmers with qualifying fields should visit the department's website to learn how to apply.

For additional details, please contact the department's Manure Transport Program at 410-841-5864 or visit the program's website.

Meat Marketing Planner: Strategic Marketing for Farm-to– Table Meat Enterprises

Ginger Myers, University of Maryland Extension

This guide addresses marketing beef, pork, lamb, and goat, but not poultry since poultry processing falls under differing USDA, FSIS, and state regulations. While many of the key strategies discussed in the guide can be applied to the sale of any farm products direct to consumers, this publication focuses on marketing farm-raised meats.

Marketing should serve as the keystone in your business plan for designing a sustainable business. Your marketing decisions will impact a wide variety of production decisions – what breed(s) to raise, pasture establishment and maintenance, grazing rotations, breeding and meat harvesting schedules, and the labor needed for both production and marketing tasks. The most successful producers consider their marketing strategies long before they sell either live animals or processed products.

In today's competitive markets, just being able to produce a good product doesn't assure you a good price. You not only have to be able to produce a consistently, high quality meat product and sell it, but sell it at a price high enough to generate a sustainable profit. Production and marketing decisions must work in tandem.

This publication is designed as a "marketing planner" because the old adage, "failing to plan is planning to fail," still applies for any business enterprise. We are more likely to reach our goals and marketing targets when we have taken the time to strategically evaluate our options and develop an intentional marketing plan. Wherever possible, visual tools and graphics have been used to help the reader evaluate their marketing options and make the evaluating process easier. The topics covered here include:

1. Marketing Channel Options
2. Pricing Strategies
3. Managing Logistics
4. Promotion and Marketing Claims
5. Customer Service
6. Feedback and Refinement

To read the full publication, visit https://go.umd.edu/meatmarketingplanner

The Clover Dilemma

Jimmy C. Henning, University of Kentucky

Legumes make immeasurable contributions to forage agriculture. Producers depend on them to add yield, nutritional quality to pastures and hay, and to improve animal gains. Arguably, the ability of legumes to convert or "fix" nitrogen (N) from the air into organic plant nitrogen is their most significant benefit. We even recommend withholding N-fertilizer to mixed stands when legumes make up at least 25 percent of the stand. Many producers will also forego broadleaf herbicides and tolerate weeds to preserve legumes.

Practicing agronomists quote research-based estimates of annual N fixation of 150 to 250 pounds of N per acre and triple these rates have been reported. But we seldom discuss how much direct benefit this N contributes to the companion grass.

If we withhold additional N and broadleaf herbicides due to the presence of clover, is that the right decision? And further, is the 25 percent threshold for withholding additional N accurate, and is it based on visual or dry matter? A stand that has 25 percent clover on a visual basis has much less than that level on a dry matter basis.

No simple answers

The definition of a dilemma is a situation where a difficult decision must be made between two or more alternatives. Managing a grass-legume stand makes the producer come face-to-face with the clover dilemma — Do I have enough legumes to produce economic yields or should I add fertilizer N? Do I have too much clover to apply broadleaf weed killer when it means I lose most of the legume? This management confusion is the clover dilemma.

Not surprisingly, these questions do not have simple answers. Here is a summarized list of what the research shows about the contribution of legume-fixed N to the nitrogen economy of mixed stands:

1. Legumes fix large amounts of N, but the highest numbers are from grass-white clover stands in temperate regions with long growing seasons and near ideal growing conditions.

2. The amount of N fixed per season that is shared directly with companion grasses is between 20 to 50 pounds of N per acre per year, a fraction of total N fixed.

3. White clover turns over more N during the growing season because it sloughs root nodules every time it is defoliated. Nodule sloughing is how fixed legume-N is released to the organic soil N pool. This pool is mineralized and later used by the companion grass. In contrast, alfalfa does not slough nodules after harvest. In fact, alfalfa only sloughs its nodules at the end of the growing season.

4. The N benefit to the companion grass is more closely related to legume growth and yield in the previous rather than current year.

5. In newly seeded binary mixtures, white clover transfers more N to the companion grass during the growing season than red clover or birdsfoot trefoil in the first and second year of the stand. Direct transfer to the companion grass is greater in the second year than the first.

6. Adding N to mixed stands boosts yield by elevating the yield of the grass (in other words, the grass is N-limited in mixed stands). Adding N to pure legume stands generally does not result in more total yield.

Target 30 to 50 percent

The N benefit to the grass in mixed stands is enhanced as legume yield per acre improves and as stands get older. This grass benefit is presumably because of a buildup of the soil N pool from the sloughing of N-fixing nodules and decaying plants over multiple years; however, grasses are less competitive early in the life of mixtures because they are N limited. It's during the establishment year when applying some N fertilizer may be beneficial for early grass growth.

The downside of clover loss when broadleaf herbicides are used on mixed stands will be mitigated by the release of N from the killed legume. The companion grass gets the double benefit of weed removal and a burst of N, although new legume species will need to be seeded into the stand.

The addition of grasses to thinning stands of alfalfa improves the recovery of the N fixed by alfalfa and boosts forage yield per acre. An Iowa study on a mature, mixed alfalfa-grass stand with 30 to 45 percent alfalfa found that the greater the alfalfa in the mix, the better the yield of the grass.

Drilling small grains into alfalfa stands in the fall can take advantage of the end-of-season N released from the sloughed alfalfa nodules, adding yield per acre. The small grain cover can suppress weeds and contribute significantly to first cutting yields the following year.

In the end, the modest in-season contribution of fixed N from legumes to companion grasses is possibly disappointing, especially compared to the high amounts of N fixed by the legume. Producing economic yields in mixed stands means keeping legumes present in high quantities (even 30 to 50 percent) by weight, year after year.

UNIVERSITY OF MARYLAND EXTENSION

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DATES TO REMEMBER

May 4	Getting Ready for Pick– Your– Own. 4-5PM. Free. Register online
May 12	Women in Ag Webinar: Estate Planning. 12 noon. Free. Register online
May 12	Soil Health to Go: Lunch and Learn. 12 noon. Register online
May 26	Women in Ag Webinar: Health Insurance Options for Farmers. 12 noon . Free. Register online

Check out these additional online resources

Agronomy News	Ag Marketing
Ag Law Initiative	Extension Website
Fruit & Vegetable News	Nutrient Management
Sheep & Goat Newsletter	Women in Ag

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