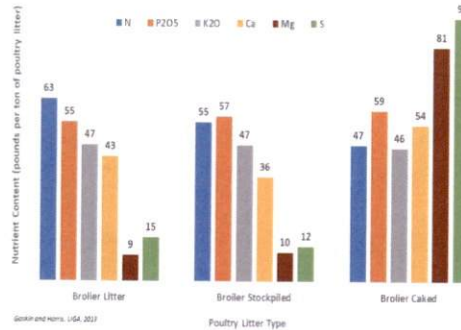




Understanding Poultry Litter Use in Pasture and Hay Production



This is the time of the year when I see producers applying poultry litter. It can have benefits when it is used wisely. Although poultry litter can provide a range of nitrogen, phosphorus (P2O5), and potassium (K2O), the actual nutrient content will vary depending on the type of bird, feed, feed efficiency, number of growouts before the poultry house is cleaned, but most importantly, how it is stored and handled. The best way to know the poultry litter nutrient content (pounds of nutrient per ton) is to get it tested. In general, the poultry litter fertilizer equivalent is a 3-2-2 (N-P2O5-K2O).

Approximately, 80-90% of the phosphorus and potassium is immediately available to the plants after application. However, that is not the case with nitrogen. Most of the N (about 89%) is the organic form, only 9% is ammonium, and 2% is nitrate. The organic nitrogen is not available until it is converted to ammonium or nitrate by soil microbes under good soil moisture and warm temperatures. Due to this process, only 30 to 40% of the nitrogen in a ton of poultry litter might be available for plants to use during the growing season. The rest of the N could be lost to the environment (leaching and volatilization) during the growing season with very little carryover in the second and third year of the application. If a ton of poultry litter

contains 3% N, it means that 60 pounds of N are in the poultry litter but only 30-40% is available, then only 18 to 24 pounds of N are available for plant uptake. In a hay production system, we recommend at least 50 units of N per cut of hay. This means that there might be a need to provide other sources of N to achieve the target forage production of the season.

When making a poultry litter application, it should be based on your phosphorus levels instead of nitrogen. The reason for this is that grasses require three to four times more nitrogen than phosphorus and phosphorus can quickly accumulate when over-applied and can be linked to water quality problems. It is important to use soil testing to develop a nutrient management plan to avoid phosphorus buildup. Unfortunately, there is not a forage species that could be considered hyper P removers.

Some producers are using poultry litter as a way to mitigate soil pH. Although calcium (Ca) and Magnesium (Mg) might be available in the litter, the repeated use of poultry litter might help maintain or slightly increase pH, but there is also the risk of P buildup with repeated application of large quantities of litter. Always weigh the cost and benefits of using poultry litter by taking a soil sample and determining soil nutrient requirements.

Keep up with the Neshoba County Extension, 4H and Master Gardeners on Facebook! Just type in the search bar: "Neshoba County Extension Services" "Neshoba County 4H" or "Neshoba County Master Gardeners"



12000 HWY 15 N. SUITE 2 PHILADELPHIA, MS 39350

Neshoba County Forestry Association Spring Meeting
Neshoba County Coliseum
April 16th at 6:00 PM

Wildlife Management Workshop
April 18th from 9:00-3:00
Coastal Plains Branch Station
Newton, MS

Master Gardener Landscape Tours
April 27th from 9-12
Location to be announced

Sew Much Fun Workshop
Every Wednesday
May 1-June 5 from 10-12
Neshoba County
Multipurpose Room

Vegetable Growers Vendor Meeting
May 8th at 12:00 pm
Neshoba County Farm Bureau
Lunch will be provided

Master Gardeners Plant Sale
May 10th at the Depot

Office will be closed
May 27th
for Memorial Day



Reach us on
Facebook at:

Neshoba County 4-H
Neshoba County Extension Office

Eastern subterranean termites are active 24/7/365, but they only swarm once a year--SPRING!

Finding swarmers in a building is often the first indication many homeowners have that they have a termite problem.

An established termite colony can contain hundreds of thousands of termites. Most are workers, which are wingless, white and sightless.

The black, winged insects you see here are swarmers, or reproductive termites (about 3/8 inches long including the wings). Termites shed their wings after swarming.

Swarmers emerge only once per year, usually in the spring, and they are never alone. Usually there will be several hundred to a few thousand swarmers, all emerging simultaneously.

Their goal is to mate and attempt to begin a new colony. But it is not the swarmers you need to worry about—it is the established termite colony from which they emerged. Termite colonies do not produce swarmers until they have been established for several years.

Finding eastern subterranean termite swarmers inside a building (either dead or alive) is a sure sign the building is infested and needs to be professionally treated.

➡ Termite control is not a do-it-yourself project! You need to hire a licensed commercial pest control company to make sure your house is protected from termites.

The Protect Your House from Termites Extension publication is a great resource and guide for homeowners. It answers many of the questions you might have.

Read it here: <https://extension.msstate.edu/.../protect-your-house...>



What do I do if I see termites swarming? | 🔍



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Wildlife Management FIELD DAY



April 18, 2024
9:00 – 3:00

WHO: Hunters and wildlife managers, foresters and loggers, private landowners, wildlife enthusiasts, and industry representatives

TIME: Pre-register by calling 601-683-2084 by April 11. On site registration begins at 8:30. Program begins at 9:00. Lunch will be provided.

LOCATION: Coastal Plains Branch Experiment Station
51 Coastal Plains Road
Newton, MS



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MISSISSIPPI STATE UNIVERSITY...
MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION

All hunters and wildlife managers, foresters and loggers, private landowners, wildlife enthusiasts, and industry representatives, join us on April 18th, 2024 at the Coastal Plains Branch Experiment Station from 9 a.m.-3 p.m. for a Wildlife Management Field Day.

 Pre-register by calling 601-683-2084 by April 11. On-site registration begins at 8:30. Program begins at 9:00. Lunch will be provided.

Continuing Education Opportunities Below:
Continuing Forestry Education (CFE)

- Category A
4 hours credit
Professional Logging Manager (PLM)
- Category 1
4 hours credit

Agenda

- 8:30 Registration**
- 9:00 Deer Nutrition**
- 9:30 Regenerative Food Plots**
- 10:30 Harvest Management**
- 11:30 Turkey Management**
- 12:00 Upland Management**
- 12:30 Lunch**
- 1:00 Food Plot Field Tour**

Continuing Forestry Education (CFE)

Category A
4 hours credit

Professional Logging Manager (PLM)

Category 1
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A Checklist of Disease Management Recommendations for Vegetable Production

Various diseases threaten vegetable production in Mississippi throughout the growing season. While some diseases may not cause severe damage, others may cause significant yield losses. To minimize the impact of diseases, commercial producers and home gardeners should implement a disease management program.

Various disease management measures (practices) are available, but every practice will not be effective against every disease. The choice of which measures to use depends on the biology of the pathogen causing disease, the options available for effective management of the disease, and the disease management preferences and feasibility of the available measures for the producer or gardener. The best approach to disease management is integrated disease management, which uses a combination of biological, cultural, physical, and chemical disease management measures.

Below are general disease management measures that can be incorporated into a disease management program at different times in the growing season. These measures help by preventing the introduction of pathogens into new areas, reducing the spread of pathogens to new plants or plantings, reducing the buildup of pathogens in a field, reducing the severity or occurrence of disease, and modifying the conditions favorable for disease development. Specific disease management recommendations for a particular vegetable disease can be found in various MSU Extension resources or by contacting your local Extension agent or plant pathologist.

The following steps can also help producers and gardeners improve their ability to manage diseases:

- Know the plant; be able to recognize normal plant growth as well as the symptoms of common nutritional deficiencies.
- Know the common diseases of crops in Mississippi and their signs and symptoms.
- Know what information to collect when you need help with plant problems.
- Know where to look for information and who to contact for help.

Before Planting and/or At Planting

Collect and submit soil samples to the MSU Extension Soil Testing Lab for appropriate fertility recommendations.

- Choose an appropriate planting site that provides good sunlight, airflow, and drainage.
- Prepare a proper garden plan that includes crop rotation.
- Consider the disease history of a planting site and implement additional disease management measures as necessary.
- Select recommended varieties for commercial or home garden production for your area.
- Select varieties that have resistance to common diseases in your area.
- Purchase certified disease-free seeds or healthy-looking transplants from reputable sources.
- Purchase fungicide-treated seeds or treat non-treated seeds with approved fungicides.
- Perform approved seed treatments (for example, hot-water treatment).
- Follow planting recommendations regarding seed depth and plant spacing.
- Plant only healthy-looking transplants; discard transplants with signs or symptoms of disease.
- Plant seeds and seedlings during ideal environmental conditions for germination and growth (warm, dry soil).
- Alter the timing of planting so that harvest is completed before diseases usually appear.
- Use cleaned and disinfested/disinfected potting media and transplant trays or pots.
- Use mulch and/or stakes, cages, or trellises when appropriate for the crop.
- Apply effective fungicides appropriately following resistance management guidelines (rotation); biologicals may be most effective at this time.
- Collect and submit plant tissue and/or soil samples to the MSU Extension Soil Testing Lab for analysis if potential nutrient issues are observed

During the Growing Season

- Follow recommendations for fertilization (soil and plant tissue analysis); do not overfertilize.
- Avoid practices that leave foliage wet for long periods (for example, substitute drip irrigation or adjust the timing of overhead irrigation); do not overwater.
- Regulate temperature and humidity in enclosed structures.
- Clean and disinfect tools and equipment between fields and after each use.
- Clean hands, shoes, etc., between fields and before entering enclosed structures.
- Remove and destroy or bury crop debris.
- Rogue (throw out) diseased plants and plant tissue (possibly soil around the base of stems).
- Avoid using diseased plants or plant tissue in improperly managed compost.
- Avoid working with wet plants.
- Stake, cage, or trellis plants.
- Scout regularly for diseases and insects.
- Monitor local disease epidemics; sign up for newsletters or alerts from Extension agents, specialists, or disease-monitoring programs.
- Apply effective fungicides appropriately following resistance management guidelines (rotation).
- Manage insect vectors known to transmit pathogens.
- Collect and submit plant samples to the [MSU Extension Plant Diagnostic Lab](#) at the first sign of disease, for disease identification and appropriate disease management recommendations.
- Collect and submit soil samples to the [MSU Extension Plant Diagnostic Lab](#) for nematode identification and quantification (planning for the following season).

During and/or After Harvest

- Apply effective fungicides appropriately following resistance management guidelines (rotation).
- Harvest mature crops promptly.
- Practice proper handling and storage of harvested crops.
- Remove and destroy or bury (till) crop debris remaining in fields.
- Till ground to bury plant debris remaining in fields.
- Clean and disinfect plant support structures and surfaces in plant production areas.
- Avoid using diseased plants or plant tissue in improperly managed compost.
- Avoid saving seeds from diseased fruits.

Throughout the Year

- Keep detailed disease and disease management records from year to year.
- Remove weeds or volunteer plants that can harbor plant pathogens between seasons.
- Clean and disinfect tools and equipment between fields and after each use.
- Clean hands, shoes, etc., between fields and before entering enclosed structures.
- Avoid tobacco use (particularly when growing crops susceptible to tobacco mosaic and related viruses)

This work is partially supported by Crop Protection and Pest Management, Extension Implementation Program, award no. 2021-70006-35580 from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author and do not necessarily reflect the view of the U.S. Department of Agriculture.

Publication 3761 (POD-05-22)



Gardeners can make a quick raised bed by using hay or straw square bales! The bales hold water, and the added 1 1/2- to 2-foot height makes gardening easier for those who can't bend easily.

Bale selection is important. Wheat, rice, and barley straw make the best bales because they drain well. Straw bales tend to have fewer weed seeds than hay, but fescue, ryegrass, bermudagrass, and native hay bales also work.

Before you can start planting, you need to fertilize the bales. Use one pound (two cups) of 10-10-10 or 13-13-13 fertilizer per bale. Pour the fertilizer into several holes across the top of the bales. When you finish fertilizing, water the bales thoroughly to make sure the composting process starts properly. You want the bales to stay moist, so be sure to water it daily for three days. After seven days of watering, you can start planting.

If planting seedlings or small vegetables, add potting mix to the hole to help retain moisture. For large vegetables, you can plant them directly into the straw bale without adding additional potting mix. Consider planting tomatoes, broccoli, cabbage, greens, cucumbers, herbs, and flowers when using this method. You can plant using seeds, but it is generally more difficult.

If you want to give it a try, place two inches of potting mix

HOW TO GARDEN IN STRAW BALES



on top of the straw bales and plant according to direction.

BLOG POST: <https://ow.ly/fcc950QUy5c> #GrowWithExtension #MSUext

2024 Forage and Grazing Management Conference

Central Mississippi Research and Education Center
1320 Seven Springs Road, Raymond, MS39154

April 11 & 12, 2024
Deadline to Register :
April 8, 2024

MISSISSIPPI VEGETABLE GARDENER'S GUIDE

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Click the QR Code to take you to the Mississippi Vegetable Gardener's Guide



Free Event!
Register at:
<https://bit.ly/2024ForageConference>
Registration deadline is **April 8, 2024**
by **5:00 PM CST**. No registrations will be accepted after the deadline!

Highlights of Activities

The Neshoba County Cattlemen's Association partnered with SunSouth of Carthage, The Southern Butcher LLC, 2T Cattle Dogs, and Sipseycreek farms to host a spring meeting. Last night Dr. Josh Maples, from Mississippi State, gave a cattle market update. Mr. Jimmy Tillman gave information and announced cattle dogs as they gave a live demonstration in the arena. Thank you all who attended.



🍪 We had a great night at our Sugar Cookie Decorating Workshop taught by Heather Pendergrass with Magnolia Sugar Cookies. Not only are the cookies beautiful, but they are also delicious!!



Thank you all for attending our wild hog damage and control workshop! John Gruchy and Martin Coker from Mississippi Department of Wildlife, Fisheries, and Parks, and Sam Martin from Mississippi Department of Agriculture and Commerce provided education to our landowners on hog control. Special thanks to Harvin Hudson for preparing a delicious catfish lunch and Neshoba County Co-op for sponsorship



Sew Much Fun Sewing Series

6-week Adult Sewing Series every Wednesday beginning May 1st at 10 a.m.. The series will take place in the Multi-Purpose Room located at the Neshoba County Coliseum. We ask that if you have your own sewing machine, please bring it so that you can become most familiar with your machine. There are limited spots available. If you would like to register or need more information, please call the [Neshoba County Extension Office](#) at 601-656-4011.

SEW MUCH Fun

6 Week Sewing Series on Wednesdays
 instructed by Mary Baysinger beginning May 1st.
 In the Multi-Purpose Room at the Neshoba County Coliseum
 10 a.m. - 12 p.m.
 \$75 for the 6 week series
 Limited spots are available!
 Please bring your own sewing machine!
 Please call the Neshoba County Extension Office at 601-656-4011
 to reserve your spot by April 17th.

Mississippi State University does not discriminate based on race, color, religion, national origin, sex, age, disability or veterans status. Mississippi State University Extension will provide reasonable accommodations to persons with disabilities or special needs. Please contact our office at 601-656-4011 or 601-435-6888 for more information.

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