

IRWIN COUNTY EXTENSION AGRICULTURE NEWS - Vol. 24 Thu. July 28, 2022

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In this issue: Recent, Update, Peanut Insect Pest, Peanut Disease, Micronized Sulfur in Peanut, Stink Bug Management in Cotton, Mobile App for Spray Tips, GA Peanut Tour, PGR Decisions in Cotton, Important Links and Information, Peanut Fungicide Options

Recent

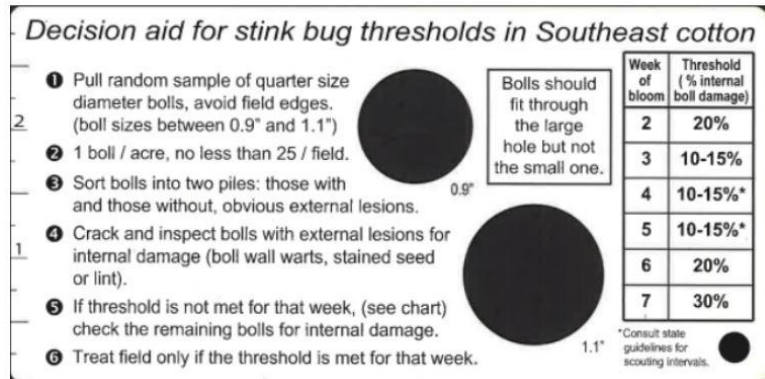
Thank you to those who responded to my text concerning diuron herbicide review by the EPA. If you do not get my text messages and would like to please call, email or text. ●Sunbelt Expo date has been moved to Tue. Aug 2nd click here for more information <https://www.sunbeltexpo.com> ● UGA Cotton and Peanut Research Field Day will be on Wednesday September 7th. As always for more information contact your Irwin County Extension Office.



Pioneer Field Day at CASE Farm



Wayne Hobbs SE Farm Press Peanut Efficiency Award photo by Shelley E Huguley



Stink bug thresholds – if abnormal fruiting pattern use 20%



Spotted wilt showing up – we will be doing field surveys soon

Update

Cotton in the county ranges early squaring to multiple weeks of blooming. It's hard to believe next week is August and soon the start of the school year. Stink bugs are showing up and some fields have or will be sprayed. Dr. Phillip Roberts shared that whiteflies were noted on the west side of Tift County and crop consultant Brandon Phillips shared he is seeing a few as well. Though a dry spell is upon us the conditions are right for target spot so be scouting for this as well. In peanut conditions are optimum for white mold. Also seeing some foliage feeders in peanuts. Be aware of pyrethroid sprays on dryland fields for foliage feeders for triggering spider mites. Also, we will be doing a Tomato Spotted Wilt Survey in ten fields across the county. I will be contacting you about visiting your peanut fields for this purpose.

Peanut Pest Abney

The July rain in South Georgia will reduce the severity of lesser cornstalk borer infestations in many fields and will at least buy us some time before spider mites become a serious concern. If the rain continues through the remainder of the season, we will likely not have to battle either of these pests over a large area. A return to dry conditions, however, will mean we need to keep a close eye on our non-irrigated peanuts to ensure pests are discovered and managed in a timely manner.

Foliage feeding caterpillars are making an appearance in peanuts across the state, but there have not been any widespread “outbreaks”. Folks are reporting a mix of several caterpillar species, and while populations in most fields have not reached threshold, some have. Peanut can tolerate a lot of defoliation without suffering significant yield loss, but defoliation during pod fill is more likely to result in economic loss than at any other time.



Thresholds are 4 to 8 caterpillars per row foot...that is per ONE foot. Use the lower end of the range if vines are small or growing poorly and the higher threshold value when plants are vigorous and rank. Finding caterpillars by the fence row, field path, pivot point, etc. does not necessarily mean a field needs to be treated. If the average number of caterpillars per foot of row from at least 10 random samples is less than the threshold, it will **not pay** to treat.

Is it OK to use a pyrethroid in peanuts now that it has been raining? I personally don't like to put a pyrethroid in a non-irrigated peanut field unless it is absolutely necessary. We need to weigh the risks. What pest are we trying to manage, and does it really need to be managed? Are there alternatives to pyrethroids? Is the risk of yield loss from the pest we are treating greater than the risk of flaring and battling spider mites? The answers to these questions are not always obvious or even knowable, so we will make our choices based on what we do know and hope for the best.

We can expect to see increasing numbers of velvetbean caterpillar, soybean looper, redneck peanut worm, and threecornered alfalfa hoppers in the coming weeks. There will almost certainly be a surprise or two as well. As always, the best practice is to scout regularly and make management decisions based on good quality, real time information from the field.

Peanut Disease Kemerait

What growers should be doing now.

1. Scout fields for detection of white mold. Growers or scouts should check crown of wilted plants for presence of active white mold.
2. Stay on a timely fungicide program. The choice of “best” product to use is a combination of level of risk to white mold in a field and cost of material.
3. Time fungicide applications to capture irrigation or rainfall within 8 to 24 hours following application.
4. Recognize that no fungicide program will eliminate individual “hits” of white mold but an effective fungicide program must stop white mold from spreading. An effective white mold program includes a) choice and rate of product, b) timing of application, and c) timing of irrigation or rainfall following the fungicide application.
5. Best white mold products include Elatus, Excalia, Umbra, and Convoy then Fontelis and Provost Silver and then followed by Lucento, Priaxor, azoxystrobin and tebuconazole.

Priorities for use of micronized sulfur for management of peanut leaf spot Culbreath

This is the third year of a fungicide trial in the county which includes sulfur. In recent years we have had very encouraging results with micronized sulfur used as a mixing partner with several different fungicides for leaf spot control. In many cases, mixing with sulfur has provided control comparable to (and sometimes better than) as mixing with 1 pint of a 720 formulation of chlorothalonil for leaf spot control and often for less cost. I do not understand what is happening with those mixtures, because sulfur alone does not provide adequate leaf spot control under the pressure we have in our tests. We still have a lot to learn, but sulfur has done especially well when mixed with Umbra, Excalia, or azoxystrobin (Abound and various products). All three of these products are used for management of soilborne diseases, but are not adequate alone under heavy pressure for leaf spot control. Mixing with chlorothalonil is certainly a viable option with any of these, but these products would be my top priorities for mixing with sulfur. Our work with sulfur as a mixing partner was prompted largely by a shortage of chlorothalonil a few years back, and concerns about the future of chlorothalonil. Currently, chlorothalonil is still an effective option as either a stand-alone treatment or mixing partner. Therefore, when a mixing partner is needed, growers might consider using sulfur mixtures with some applications and chlorothalonil mixtures with others. Currently, I would also prefer chlorothalonil as a mixing partner with Topsin. Based on our results, sulfur is not as effective as chlorothalonil as a stand-alone treatment.

Cotton Disease Scouting Target Spot and also be looking for Aerolate Mildew Kemerait

We are now getting reports of target spot (with subsequent defoliation) in Georgia. Conditions now across much of southern Georgia are perfect for target spot. I encourage growers to scout their cotton starting with the first week of bloom, especially with onset of third week, and to weigh the need for use of fungicides to protect yield. Use of fungicides does not always increase yield, but in high risk environments I believe they are an important investment. Multiple fungicide options are available

Stink Bug Management in Cotton Roberts

Southern green and brown stink bugs are the two most common stink bugs infesting Georgia cotton. Both have sucking mouthparts and damage cotton by feeding on the seeds of developing cotton bolls. In addition to mechanical damage, feeding allows for the

introduction of boll rot pathogens. Internal symptoms of feeding on medium sized bolls are the most reliable indicator of stink bug infestations. Internal damage is defined as warts or callous growths on the inner surface of the boll wall and/or stained lint. This wart or callous growth is easily visible less than 48 hours after the stink bug fed on the boll. As bolls mature and open, damage often appears as matted or tight locks with localized discoloration that will not fluff. Severely damaged bolls may not open at all. Research also suggests that in addition to yield loss, excessive stink bug damage can reduce fiber quality. Scouting for stink bugs should be a priority as plants begin to set bolls. In addition to being observant for stink bugs, scouts should assess stink bug damage by quantifying the percentage of bolls with internal damage. Bolls approximately the diameter of a quarter should be examined. Bolls of this age are preferred feeding sites for stink bugs can be easily squashed between your thumb and forefinger. It is important that bolls of this size (soft) are selected. The number of bolls per plant which are susceptible to stink bugs is not constant and varies during the year. The greatest number of susceptible bolls per plant generally occurs during weeks 3-5 of bloom. During early bloom there are relatively few bolls present. During late bloom, many bolls are present but only a limited number may be susceptible to stink bug damage (individual bolls are susceptible to stink bugs in terms of yield loss until approximately 25 days of age). A dynamic threshold which varies by the number of stink bug susceptible bolls present is recommended for determining when insecticide applications should be applied for boll feeding bugs. The boll injury threshold for stink bugs should be adjusted up or down based on the number of susceptible bolls present. Use a 10-15% boll injury threshold during weeks 3-5 of bloom (numerous susceptible bolls present), 20% during weeks 2 and 6, and 30% (+) during weeks 7(+) of bloom (fewer susceptible bolls present). Environmental factors such as drought and/or other plant stresses may cause susceptible boll distribution to vary when normal crop growth and development is impacted; thresholds should be adjusted accordingly. Detection of 1 stink bug per 6 feet of row would also justify treatment.

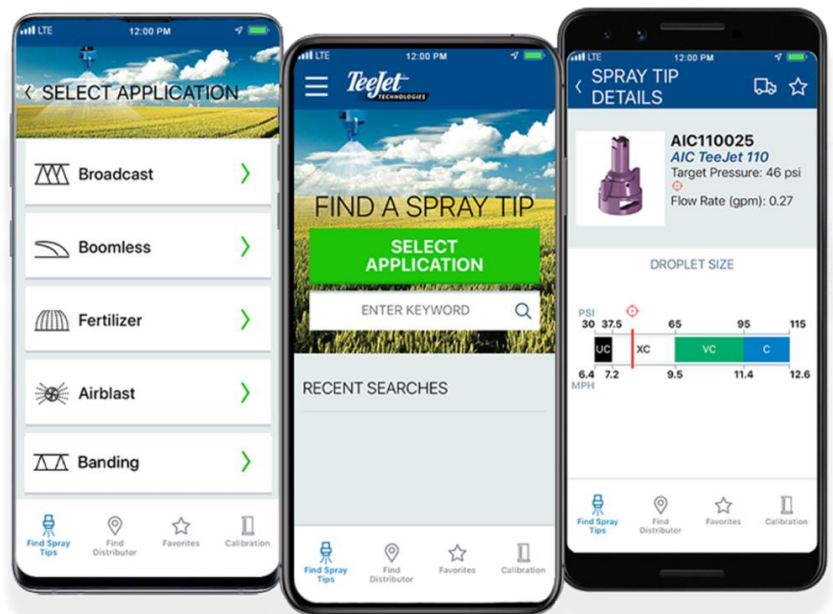
When selecting insecticides for stink bug control it is important to consider other pest such as whiteflies, corn earworm, aphids, or mites which may be present in the field. The objective is to control stink bugs but also to minimize the risk of flaring other pest which are present. A couple of bullet points below to consider when selecting a stink bug insecticide:

- Consider week of bloom and use the dynamic threshold.
- Determine ratio of southern green to brown stink bugs, organophosphates provide better control of brown stink bugs compared with southern green.
- If whiteflies are present, use bifenthrin and avoid dicotophos during weeks 2-5 of bloom.
- If corn earworm is present consider using a pyrethroid if brown stink bugs are low or using a pyrethroid tank mixed with a low rate of an organophosphate if brown stink bugs are most common.
- If aphids are present, include dicotophos and avoid acephate if an organophosphate is needed. If mites are present, avoid acephate if an organophosphate is needed.

Mobile Apps for Spray Nozzle Selection Virk

Several mobile applications are available today that can help in proper nozzle selection for spray applications (Picture Credit: TeeJet Technologies). When it comes to following the best management practices for effective pesticide applications, proper nozzle selection – correct nozzle size and type – is among the top of the list. While almost every nozzle and sprayer manufacturer today have a detailed nozzle selection guide available as both printed and digital (pdf) format, the process in itself can become overwhelming quickly due to the different types and the number of nozzles available today through each supplier. One can easily get lost in all the different colors and codes specific to the nozzle orifice size, spray angle, material, and the droplet size. Fortunately, there are several mobile applications (Apps) available today that can help navigate through some of these challenges and make the nozzle selection process easier.

The following Apps (listed in the table below) are currently available through major nozzle and sprayer manufacturers in the US to assist growers with proper nozzle selection based on their application type, equipment and practices. All the Apps listed below are free to download and does not require a user to create an account/login to use them. Few nozzle manufacturers have also provided an online tool (similar to the App) on their website that can be accessed on any device with internet and web browsing capabilities. These Apps are also identified in the table below.



Regarding functionality and ease of use, most of these Apps utilize the same user-entered information i.e. target application rate, nozzle spacing, ground speed and desired droplet size to provide nozzle options that are best suited for the given application. Few selected Apps also provide specific nozzle recommendations based on the pesticide type and mode of action. To best utilize this information, choose the App specific to your nozzle or sprayer brand and enter all the required information for your desired application. When it comes to selecting the best nozzle from the top options suggested by the App, consider the nozzle that can maintain the target application rate and droplet size (for sprayers equipped with rate control or PWM nozzle technology) across a wide range of application speeds.

App	Company	iOS	Android	Online	More App Details or Link to the Online Tool
SpraySelect	TeeJet Technologies	X	X	X	https://sprayselect.teejet.com/nozzles
Tip Wizard	Wilger Inc.	X	X	X	https://www.wilger.net/tip-wizard/
NozzleCalc	Greenleaf Technologies	X	X	X	https://greenleaftech.com/dynamic.php?pg=Choosing the Right Nozzle/Nozzle Calculator
Spray It	Pentair Flow Technologies	X	X	X	http://sprayit.pentair.com/en/by-application
Spray Tips Guide	Ag PhD	X	X		https://agphd.com/agphdmobileapps/
Nozzle Configurator	Kuhn SA	X	X		https://www.kuhn.com/en/services-parts/online-services/configuration-assistance-apps/nozzle-configurator-assistant
EquipmentPlus/Nozzle Select	John Deere	X	X		https://www.deere.com/en/parts-and-service/parts/ag-parts/sprayer/
MyHardi/Nozzle Selector	HARDI International A/S	X	X		https://www.hardi-us.com/about-hardi/media/myhardi

2022 Georgia Peanut Tour set for Tifton area

Crosby

The thirty-fourth annual Georgia Peanut Tour will be held September 13-15, 2022, in Tifton, Georgia, and the surrounding area. The tour brings the latest information on peanuts while giving a first-hand view of industry infrastructure from production and handling to processing and utilization. Tour stops will be made in several peanut producing counties surrounding Tifton.



Attendees can expect to see first-hand nearly every aspect of peanut production in the state. This year's tour hosts many exciting stops including on-farm harvest demonstrations and clinics, as well as, research at the University of Georgia Tifton Campus. The Georgia Peanut Commission, University of Georgia College of Agricultural and Environmental Sciences and the USDA-ARS National Peanut Laboratory coordinate the tour. For sponsorship information, contact Hannah Jones at hannah@gapeanuts.com or call at 229-386-3470.

Plant Growth Regulator (PGR) Decisions in Cotton Scott Carlson Worth County Agent



PGR applications in cotton are often times difficult. You don't want to over or under apply. Field visits to multiple sites and consideration of the aggressiveness of the particular variety help with the final decision. This year with our earlier lack of rain, then abundant rain (and inability to get into the field) then now a dry spell makes this decision more difficult. There are many growth stages of cotton throughout the county at this time, from emergence to blooming. Good soil moisture from recent rains and milder temperatures have our cotton crop growing. Some growers have already begun managing plant growth. As a management tool, plant growth regulators (PGRs) containing mepiquat are specifically used to reduce vegetative growth. The most consistent effect of mepiquat is the reduction of plant vegetative growth and shorter plants by shortening internode length.

Factors to consider when determining when and how much mepiquat to use include the following: 1) stage of plant growth, 2) rate of plant growth, 3) variety growth characteristics, 4) pest control, and 5) anticipated plant growth based on field conditions. With these factors in mind, most PGR decisions will be made on a field by field basis.

In the picture below are factors to consider when making PGR decisions:

Information to Help Make PGR Decisions

- Crop Information
 - Height
 - 4th / 5th internode length
 - Height to Node Ratio
 - Fruit Retention
 - Variety
 - Nodes above white flower
 - Stress
- Environment
 - Irrigation
 - Weather Forecast
 - Fertility
 - Field History

Below is a chart of Relative PGR Requirements of Cotton Varieties. Contact your seed sales representative for vegetative growth potential on certain varieties.

Relative PGR Requirements of Cotton Varieties*		
	<u>Classification</u>	<u>PGR Recommendations</u>
1	Varieties with the most vegetative growth potential, require intensive PGR management	Applications - MULTIPLE Initiation - PRIOR TO BLOOM Product - MC (all applications, rates vary)
2	Varieties with similar growth potential of 1st class, yet more responsive to PGRs or earlier maturity	Applications - MULTIPLE, Most Cases Initiation - Squaring to 1st Bloom Product - 1st application (Stance or MC); Sequential apps. - MC only
3	Varieties may require PGRs, but pre-bloom initiation not typically necessary, could result in premature cutout, especially in dryland conditions	Applications - ONE to MULTIPLE Initiation - Bloom initiation likely sufficient Product - 1st app (Stance or MC, low rates); Sequential applications - Stance or MC
4	Varieties that may need no PGR applications, or almost always not applied prior to bloom	Application - NONE to ONE Initiation - Bloom initiation almost always Product - Stance or MC (low rates)
*Cotton varieties vary in their vegetative growth potential. Some varieties are very aggressive while others are not. Check with your seed salesman for vegetative growth potential.		

Important Links and Information

- UGA Extension Publications <https://extension.uga.edu/publications.htm>
- Cotton Production Guides, Corn/Peanut/Soybean Weed Control, Peanut Quick Reference Guides available at our office
- UGA Peanut Production Guide, 2022 Peanut Pest Management, 2022 Disease Risk Assessment Worksheet, Peanut Agronomic Quick Reference, Peanut Scout Handbook, 2022 Peanut Budgets <https://peanuts.caes.uga.edu/>
- 2022 UGA Corn Production Guide (NEW) <https://grains.caes.uga.edu/content/dam/caes-subsite/grains/docs/corn/2022-Corn-Production-Guide.pdf>
- See link for 2022 crop budget information - <https://agecon.uga.edu/extension/budgets.html>
- UGA Irwin County Extension Webpage <https://extension.uga.edu/county-offices/irwin.html>
- Irwin County Extension Agriculture Newsletters – you can find all of our past newsletters by clicking on the link below.

<https://extension.uga.edu/county-offices/irwin/agriculture-and-natural-resources/newsletters.html>

- Check your Georgia Private and Commercial Pesticide License credits here <https://agr.georgia.gov/pesticides.aspx>
- Georgia Forages YouTube Channel <https://www.youtube.com/channel/UCL6DgfaB8V2DRnGxzEBxU3w>
- Search find and like us on Facebook UGA Extension – Irwin County and also Irwin County 4-H Club

Peanut Fungicide Applications from 2022 Peanut Guide (Laminated copies still available at our office)

FUNGICIDE APPLICATIONS								
Days After Planting	Planting (0)	30	45	60	75	90	105	120
Basic full season fungicide program		Chlorothalonil 1.5 pt/A	Chlorothalonil 1.5 pt/A	Tebuconazole 7.2 fl oz/A Chlorothalonil 1.0 pt/A	Tebuconazole 7.2 fl oz/A Chlorothalonil 1.0 pt/A	Tebuconazole 7.2 fl oz/A Chlorothalonil 1.0 pt/A	Tebuconazole 7.2 fl oz/A Chlorothalonil 1.0 pt/A	Chlorothalonil 1.5 pt/A
Sipcam		ANDIAMO ADV 32 fl oz	ANDIAMO ADV 32 fl oz	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	chlorothalonil 1.5 pt
SipCam		ANDIAMO ADV 32 fl oz	ANDIAMO ADV 32 fl oz	Elatus 7.3 fl oz Miravis 3.4 fl oz/A	Muscle ADV 2.0 pt/A	Elatus 7.3 fl oz Miravis 3.4 fl oz	Muscle ADV 2.0 pt/A	chlorothalonil 1.5 pt
Bayer Nematode	Velum 6.5 fl oz		Absolute MAX 3.5 fl oz	Propulse 13.7 oz	Provost Silver 13 fl oz	Elatus 7.3 oz	Provost Silver 13 fl oz	chlorothalonil 1.5 pt
Bayer Foliar Only		chlorothalonil 1.5 pt	Absolute MAX 3.5 fl oz	Elatus 7.3 oz	Provost Silver 13 fl oz	Elatus 7.3 oz	Provost Silver 13 fl oz	chlorothalonil 1.5 pt
Nichino			Priaxor 6 fl oz/A	Umbra 36 fl oz Echo 1.0 pt	Muscle ADV 2.0 pt/A	Umbra 36 fl oz Echo 1.0 pt	Muscle ADV 2.0 pt/A	chlorothalonil 1.5 pt
Nichino sulfur			Priaxor 6 fl oz/A	Umbra 36 fl oz Microthiol Dispers Micronized 5 lb	Muscle ADV 2.0 pt/A	Umbra 36 fl oz Microthiol Dispers Micronized 5 lb	Muscle ADV 2.0 pt	chlorothalonil 1.5 pt
FMC			LUCENTO 5.5 fl oz	Convoy 32 fl oz chlorothalonil 1.5 pt	LUCENTO 5.5 fl oz/A	Elatus 9.5 oz	Muscle ADV 2.0 pt	chlorothalonil 1.5 pt
CORTEVA		Approach Prima 6.8 fl oz	Muscle ADV 2.0 pt	Fontelis 16 fl oz	Fontelis 16 fl oz/A	Fontelis 16 fl oz	Muscle ADV 2.0 pt	chlorothalonil 1.5 pt
Syngenta		chlorothalonil 1.5 pt	Chlorothalonil Alto 5.5 oz	Elatus 9.5 fl oz Miravis 3.4 fl oz		Elatus 9.5 fl oz Miravis 3.4 fl oz		chlorothalonil 1.5 pt
Syngenta		chlorothalonil 1.5 pt	Elatus 7.3 fl oz	Elatus 7.3 fl oz Miravis 3.4 fl oz		Elatus 7.3 fl oz Miravis 3.4 fl oz		chlorothalonil 1.5 pt
Syngenta		chlorothalonil 1.5 pt	Elatus 7.3 fl oz	Elatus 7.3 fl oz Miravis 3.4 fl oz	chlorothalonil 1.0 pt tebuconazole 7.2 fl oz	Elatus 7.3 fl oz Miravis 3.4 fl oz	chlorothalonil 1.0 pt Alto 5.5 fl oz	chlorothalonil 1.5 pt
BASF			Priaxor 6 fl oz/A	Convoy 32 fl oz Provysol 5 fl oz	Priaxor 8 fl oz/A	Convoy 32 fl oz Provysol 5 fl oz	Muscle ADV 2 pt/A	chlorothalonil 1.5 pt
BASF			Priaxor 6 fl oz/A	Excalia 3 fl oz Provysol 5 fl oz	Priaxor 8 fl oz/A	Excalia 3 fl oz Provysol 5 fl oz	Muscle ADV 2 pt/A	chlorothalonil 1.5 pt
BASF			Priaxor 6 fl oz/A	Convoy 32 fl oz Echo 1.5 fl oz	Provysol 5 fl oz Teb 7.2 fl oz	Convoy 32 fl oz Echo 1.5 fl oz	Provysol 5 fl oz Teb 7.2 fl oz	chlorothalonil 1.5 pt
Valent		Leaf Spot Fungicide	Leaf Spot Fungicide	Excalia 4 fl oz/A LS Fungicide	Leaf Spot Fungicide	Excalia 4 fl oz/A LS Fungicide	Leaf Spot Fungicide	chlorothalonil 1.5 pt
Valent		Leaf Spot Fungicide	Excalia 2 fl oz/A LS Fungicide	Excalia 2 fl oz/A LS Fungicide	Leaf Spot Fungicide	Excalia 2 fl oz/A LS Fungicide	Leaf Spot Fungicide	chlorothalonil 1.5 pt
Gowan		Domark 2.5 fl oz	Domark 2.5 fl oz	Standard*	Standard*	Standard*	Domark 5.25 fl oz	chlorothalonil 1.5 pt
*white mold product as needed		chlorothalonil 1.0 pt	chlorothalonil 1.0 pt/A	white mold program	white mold program	white mold program		

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As always for more information contact your Irwin County Extension Office

Thank You, God Bless You,
Phillip Edwards - Irwin County Agent



The mention of trade names in this newsletter does not imply endorsement by the Georgia Extension Service, nor criticism of similar ones not mentioned.

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