



From Peyton Sapp:

Be smart now or figure out how to kill Palmer amaranth without herbicides soon (Stanley Culpepper and Larry Steckel):

For essentially two decades, Georgia farmers have battled glyphosate-resistant Palmer amaranth. Its impact on Georgia agriculture is so high it is simply immeasurable. As many lessons have been learned from our past, weed management decision making has vastly improved at all levels across Georgia. However there are great concerns with overuse of many herbicide chemistries especially dicamba and the PPO herbicides (examples such as Reflex, Cobra, Ultra Blazer, Valor, etc).

With Georgia research, observations of pigweeds responding to dicamba applied by researchers has noted some plants dying while others show few symptoms (all plants of the same size and coverage). There is no question that this is a sign of trouble. Dr. Larry Steckel recently published an article addressing a similar concern with dicamba. The picture to the side shows “Response of Palmer amaranth to 0.5 lbs/A of Dicamba: 2001 collected seed Left and 2019 collected seed Right. 11 days after application”.



Thrips Management Thoughts for 2020 (Phillip Roberts): Thrips are consistent pests of cotton, infesting near 100 percent of Georgia cotton each year. Thrips are the only insect pest of cotton that a preventive insecticide is recommended. A preventive insecticide should be used at planting for thrips control. UGA recommends a reactive approach based on scouting and the use of thresholds for other insect pests in cotton. Pests such as stink bugs, corn earworms, whiteflies, and others are less consistent and demand this reactive approach to maximize profitability. With most insect pests there are agronomic and management practices which influence the risk and severity of infestations. Below are a few thoughts to consider as you make decisions for your at-plant thrips management program.

1. At-plant insecticide options include in-furrow granule applications of aldicarb, in-furrow liquid applications of imidacloprid or acephate, and commercial seed treatments of imidacloprid, thiamethoxam, and acephate. Imidacloprid seed treatment is the most common at-plant insecticide used. In-furrow applications of



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- aldicarb, imidacloprid, and acephate tend to provide greater residual control of thrips compared with the commercial seed treatments.
2. Historically thrips infestations and plant injury is greatest on early planted cotton (ie planted prior to May 10th). However, this high thrips risk window is a moving target from year to year. Temperature and rainfall during winter and early spring have a significant impact on thrips population development and the severity and timing of infestations moving to cotton. As we near planting you are encouraged to take advantage of the **Thrips Infestation Predictor for Cotton**. This web-based tool will predict thrips risk by planting date by geographic location and can be found at: <http://climate.ncsu.edu/CottonTIP>.
 3. Thrips infestations are significantly lower in reduced tillage systems compared with conventional tillage. In general, the more cover on the soil surface the greater the reduction in thrips.
 4. Seedlings are most sensitive to yield loss during early developmental stages. 1-2 leaf cotton is at greater risk to yield loss from excessive thrips injury compared with 3-4 leaf cotton. Once cotton reaches the 4-leaf stage and is growing rapidly, thrips are rarely an economic pest.
 5. A rapidly growing seedling can better tolerate thrips feeding. Conversely, seedlings which are growing slowly from cool temperatures or some other stress are more susceptible to thrips.
 6. Scout for thrips and thrips injury early. Use thresholds and only make foliar applications when necessary. Optimal timing for supplemental insecticide applications (when needed) is the 1-leaf stage.

Planter Considerations for Peak Performance (Simerjeet Virk and Wesley Porter):

For growers who are planning to plant soon or in next few weeks, if they have not already done so for corn planting, this is the perfect time to check your planter and perform maintenance on different components to ensure peak performance during planting. Planting mistakes due to improper setup and maintenance can lead to costly emergence penalties that impact yield potential. While doing planter checks, growers should pay special attention to the following three major systems on their equipment:

A **Furrow opening system** consists of double-disc openers, gauge-wheels, seed depth and downforce control. Remember that the main objective of these components is to create a well-defined seed trench at the desired seeding depth with no side-wall compaction or caving side walls during planting. Opening-discs should be checked for any wear, and if the discs form a true V-shape furrow during planting. Gauge-wheels should be checked for any wobble and adjusted so they run tight against the opening-discs. Seed depth and downforce should be





adjusted carefully to achieve the desired planting depth. Direct measurements on the planter as well as field checks should be done to verify seeding depth. It is highly suggested that you check every row, not just a few.

The function of a **seed metering and delivery system** is to meter the seeds at the desired seeding rate and deliver metered seeds to the furrow. Poor seed metering can lead to lower or higher populations and uneven seed spacing both of which can impact yield. Seed meters should be tested for singulation and any skips or multiples on a test stand to check meter performance. A well-tuned seed meter should provide 99-100% singulation with no skips or multiples. Seed meters should be examined for any worn parts, rubber seals, and other components such as extractor, brushes and doubles eliminator. Seed tubes should be replaced if they have worn or cracked edges. Check and clean any obstructions from the seed tubes before planting.



A **furrow closing system** consists of a solid single press wheel or a pair of wheels to close the opened furrow in a manner that promotes adequate soil-to-seed contact for rapid germination and timely emergence. Closing wheel(s) should be perfectly aligned behind the double-disc openers and adjusted to apply adequate pressure on the furrow. Selection of closing wheel(s) can vary depending on soil type, texture and field tillage conditions.

When doing planter checks listed above, growers should follow the recommended settings for different planter components (such as vacuum based crop and seed size) as outlined in the operator's manual. For growers using any technology (GPS, seed monitor, etc.) during planting, check all connectors and wiring harnesses for any damage or loose connections. Make sure that GPS and seed monitoring display have the latest firmware installed before heading out to the field. It is highly suggested that you monitor soil temperature and moisture conditions prior to planting. These conditions can have a drastic effect on planter performance. If a soil is drier or of a heavier texture typically more downforce is required, and planter depth may need to be adjusted. Conversely, a soil that is of lighter texture or has a higher soil moisture will require a lower downforce and potentially a depth adjustment on the planter. As you transition from field to field, and planting condition it is highly recommended that you check seed depth and spacing when first beginning in a field. This will help to ensure that planter is at the correct setting for those particular conditions. As a single planter setting is not a one size fits all. If you need assistance with planter settings and maintenance consult your owner's manual, contact your local UGA County Extension Agent or Equipment Dealer.



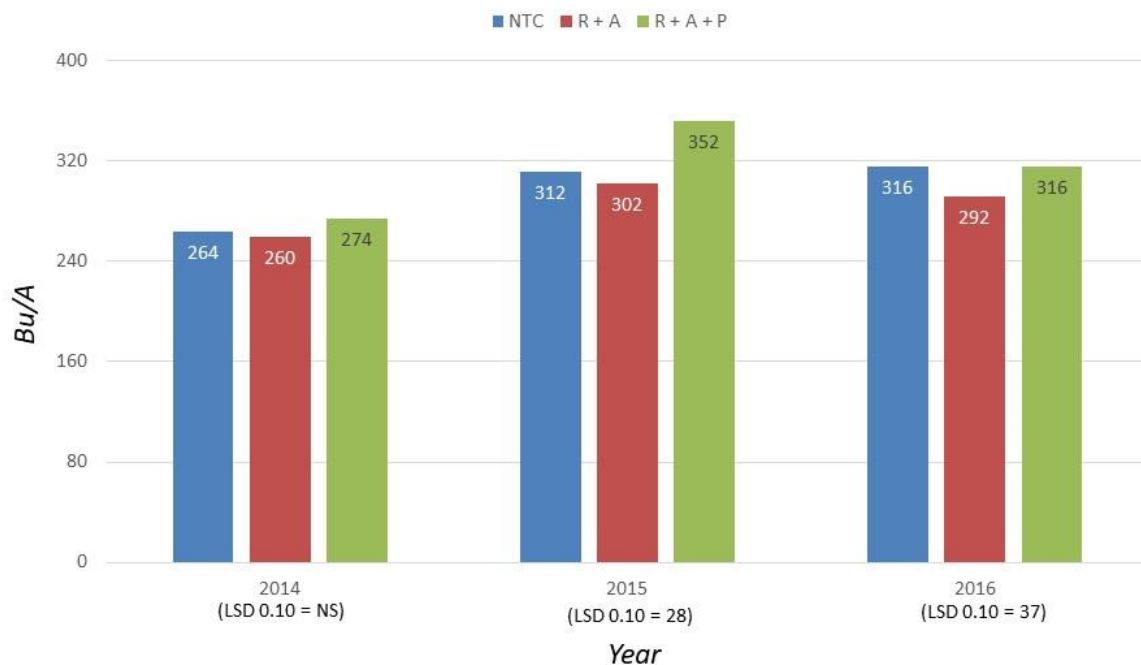


Prowl/Field Corn, Valor/Grain Sorghum, and Balance Bean Herbicide (Prostko)

Got a few reoccurring questions over the last week, so I thought I would share a few thoughts with you:

1) I have heard that a few field corn growers have been reluctant to apply Prowl POST in field corn due to potential injury concerns, especially root pruning. POST applications of Prowl can cause root injury but this usually only occurs when the corn seed has been planted < 1.5" deep and seed-furrow closure is not adequate. With 21 years of data under my belt in Georgia, I am not overly worried about POST applications of Prowl causing unacceptable field corn injury (*assuming correct application rate, timing, seed depth, etc.*). Figure 1 presents some recent research data from UGA which indicated that the addition of Prowl to Roundup + Atrazine did not reduce corn yields (*note the very high yields*). In fact, the combination of Roundup + Atrazine + Prowl has been the standard POST program that I have compared all other newer herbicide programs to for many years (Figure 2).

Figure 1. Field Corn Yield As Influenced by POST Applications of Roundup (R) + Atrazine (A) or R + A + Prowl (P)





2) What about using Valor (2 oz/A) in a pre-plant burndown before planting grain sorghum??? That's perfectly legal as long as the labeled 30 day replant interval is followed. BUT, BUT, BUT, do we really want to risk any potential increases in PPO-resistance by using Valor on a relatively minor crop in Georgia????? I have been preaching over the last few years that we need to save Valor for cotton and peanut. Field corn and grain sorghum are the only 2 row crops where the use of a PPO herbicide is not 100% necessary. Thus, grain sorghum growers who want to add a residual herbicide in their burndown program, especially when planting will be delayed for a few weeks, should consider adding either Dual Magnum or Warrant. Please remember that when Dual Magnum or Warrant are used in grain sorghum prior to planting or PRE, the seed must be treated with Concep.

3) Balance Bean Herbicide (isoxaflutole), from Bayer CropScience, was recently registered for use on GT27 or isoxaflutole-resistant soybeans. Because of our herbicide-resistant weed issues, there might be some grower interest in this herbicide. But, UGA Extension (*i.e. me and you*) will not be officially recommending its use for now due to the fact that no efficacy/tolerance data has been collected in Georgia, adapted soybean variety data is not readily available, and the label that I have recently seen only permits Balance Bean applications in 7 Georgia counties (Atkinson, Berrien, Clinch, Echols, Evans, Lanier, and Lowndes). I need to find out more information about these county restrictions and collect a bunch of local data before I would ever want a Georgia soybean grower to consider its use.