Leesburg, Georgia 31763



College of Agricultural and Environmental Sciences Cooperative Extension

Lee County Ag Newsletter

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Peanut Weed Control: Success or Failure?-Dr. Eric Prostko

Check out this picture I took yesterday from one of my weed control studies at the UGA Ponder Farm. I think you would agree that it looks pretty good at 83 DAP.



Figure 1. Peanut weed control plots at UGA Ponder Farm (Ty Ty, GA) on July 24, 2023. 83 days after peanut planting (DAP). No rainfall or irrigation until 8 DAP and 17.92" of total rainfall from May 1 - July 24 (6.86" above long-term average). PRE – Applied 1 DAP; POST – Applied on May 25, 2023 - 22 DAP (Cadre + 2,4-DB + Cobra + Dual Magnum). Weed-free at planting/twin rows.

How did I make this happen?

1) I started clean and planted in twin rows.

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2) Since I did not get to apply any irrigation until 8 DAP due to an irrigation pump problem, I pulled the trigger early on my POST treatment (22 DAP) and also added Cobra to that treatment.

3) Spraying weeds when they are smaller in size, works almost 100% of time! In my opinion, timeliness trumps (or desantiss?) GPA, nozzle type, tractor speed, and boom height. The effects of these other factors on spray coverage are more critical when herbicides are applied to bigger weeds.

4) Take a quick look at the Cadre (imazapic) label (<u>https://s3-us-west-1.amazonaws.com/agrian-cg-fs1-production/pdfs/CadreR_Herbicide_Labelp.pdf</u>). With the exception of cocklebur and rhizome johnsongrass, maximum labeled heights for all weeds listed are 4" or less. A recent growth chamber study conducted on sicklepod control with Cadre indicated 16% less control of sicklepod when Cadre was applied at 6" vs 3" (*remember that herbicides always work better in the greenhouse or growth chamber*).

5) POST treatments in all my peanut tests are applied in 15 GPA, 3.5 MPH, 20" boom height, and with AIXR11002 nozzles (coarse droplets, 402 VMD₅₀).

6) It has been well documented that lower GPA's (10 GPA), faster operating speeds (>10 MPH), higher boom heights (>24"), and extremely coarse/ultra coarse spray droplets (i.e. dicamba tips) provide less spray coverage.

What does this mean for the grower, especially when <u>behind, treating larger weeds, and needing to</u> <u>get better spray coverage</u>?

a) Regardless of any application tweaks, weed control expectations should be lower. I have never been able to consistently control large weeds in my 37 year weed science career. Every once in awhile, there are a few exceptions (i.e. bristly starbur/goathead/Texas sandspur and Strongarm).

b) Apply herbicides in 15 GPA.

c) Avoid using nozzle/pressure combos that produce extremely coarse or ultra coarse droplets (VMD₅₀ > 502).

d) Reduce tractor speeds and boom heights as much as possible/practical.

e) Use full labeled rates.

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