

Tropical Spiderwort Control in Peanut: 2020 recommendation

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Tropical spiderwort is a very problematic weed in south AL, FL panhandle and south GA in cotton production. It has natural tolerance to glyphosate and fairly good tolerance to Liberty and Dicamba. It can produce new shoots constantly from April to September through both seeds and underground stolon, making it very hard to control compared to annual weeds which only establish by seed. The Auburn extension weed science program has been conducting tropical spiderwort control studies at several locations in south AL and the FL panhandle for the last three years.

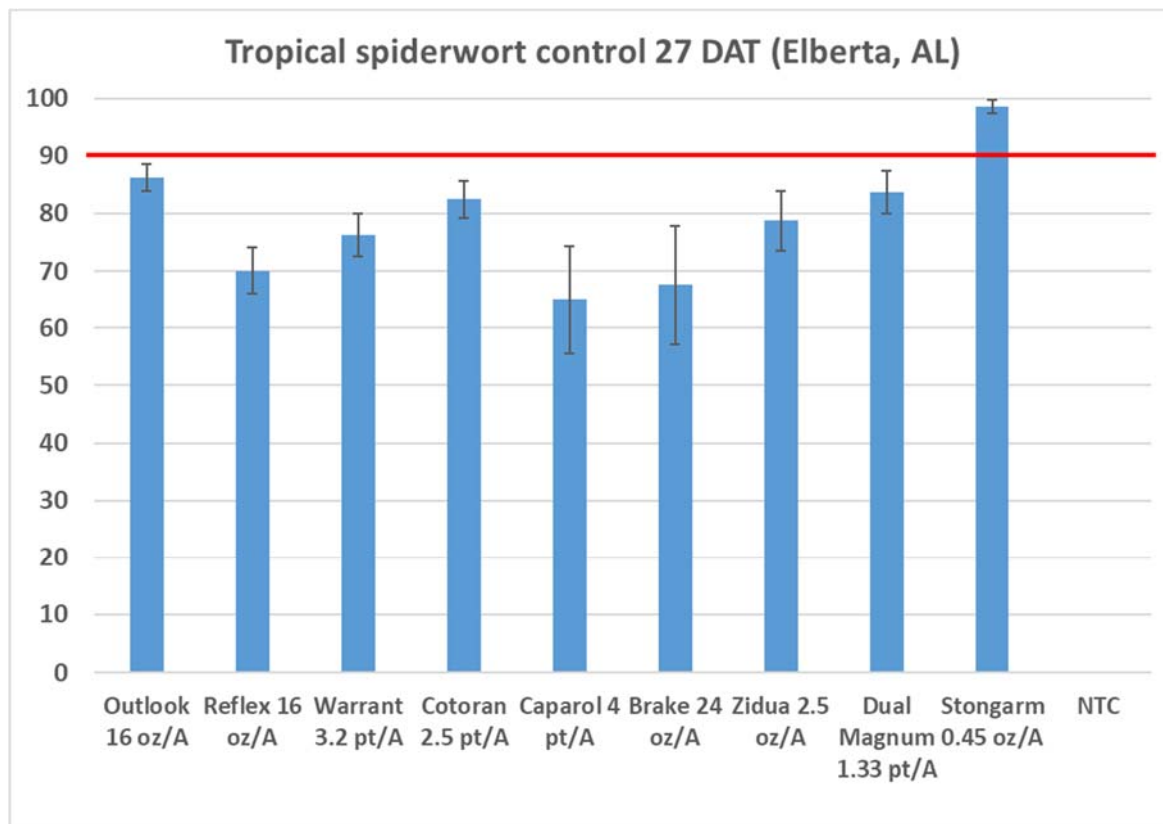


Table 1. DAT (days after treatment) Tropical spiderwort control 27 days after treatment in 2019 non-crop trial (Elberta, AL). This field has a very high pressure of tropical spiderwort that has been present for decades.

Previous trials in AL have confirmed that Strongarm is very effective on tropical spiderwort with near 100% control. Combine Valor 2-3 oz or Warrant 3 pt/A with full rate or half rate of Strongarm PRE is a very good practice to reduce shoot emergence in seedling stage. Outlook and Dual Magnum were the other two PRE herbicide that produced over 80% control. Outlook will be evaluated again in a 2020 trial. If it produces acceptable control as a PRE, it will be included in the recommendation for tropical spiderwort control in AL. Gramoxone has been very effective against this weed. For 3 lb material, 1.5-2 pt/A Gramoxone @ 15-20 GPA can wipe out tropical spiderwort up to 12 inch wide with a MSO or COC surfactant without the need to add additional 2,4-D. This is the best option to clean up tropical spiderwort before planting or after corn harvest. Add Gramoxone to the PRE tank mix to remove any existing tropical spiderwort at planting.

When it comes to control tropical spiderwort over the top, I recommend use either Cadre or Cobra to combine with Dual Magnum 22 oz/A. Add 2,4-DB 16 oz/A to enhance sicklepod, pigweed, coffeeweed and morningglory control but DB does not provide any control to tropical spiderwort (do not get confused, 2,4-D amine or Enlist one is very effective on this weed, but 2,4-D and 2,4-DB are two totally different things!!!). A good practice to consider is adding half rate of Strongarm to the 1st POST treatment over the top around 30-35 days after planting (See table 2 below). Cadre + Strongarm has been used by multiple farmers in south AL and they have reported good control of tropical spiderwort and morning glory. Please also note that Cadre and Strongarm do not control ALS-resistant Palmer pigweed. Cobra, Ultra Blazer and other residual herbicides are needed for Palmer control.

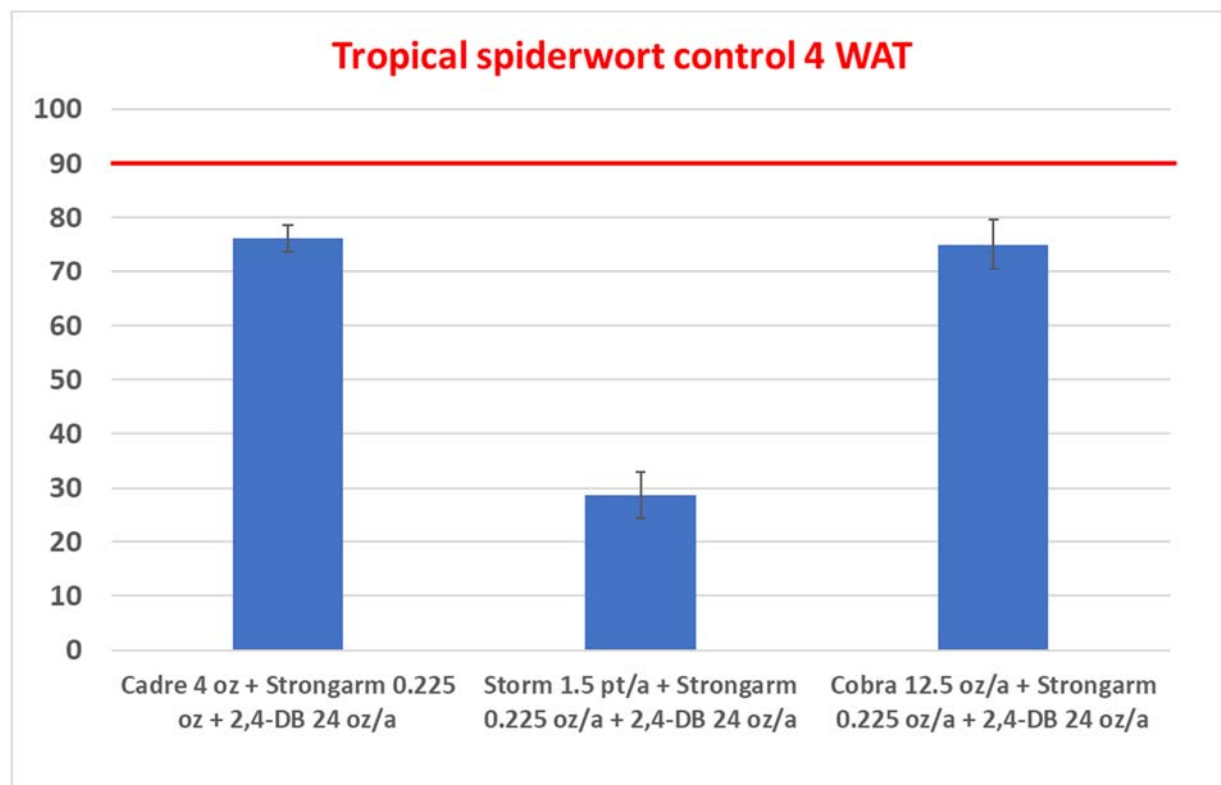


Table 2. WAT (Weeks after treatment) Large tropical spiderwort control in Graceville FL. Sprayed on Sep 4.

The current Auburn recommendation for tropical spiderwort control in peanut is starting clean with Gramoxone sprayed preplant or with PRE. Use Valor 2-3 oz + Strongarm 0.225 oz/A (if Palmer co-exist with tropical spiderwort), or Warrant 3 pt + Strongarm 0.225 oz/A (if grasses and tropical spider are main issues, still control Palmer pigweed) as PRE with Gramoxone. Apply Gramoxone 3 lb at 8-10 oz/A + Dual Magnum 16 oz/A 2-3 weeks after cracking with NIS if PRE did not get activated properly or was not sprayed due to lack of rain. If PRE is working as expected, scout fields regularly and apply either Cobra or Cadre with 2,4-DB 16 oz + Strongarm 0.225 oz + Dual Magnum 16 oz/A + NIS when new tropical spiderwort shoots begin to show up again. Use 12.5 oz/A for Cobra and 3 oz for Cadre. If carryover to cotton is a concern or resistant Palmer pigweeds exist in this field, use Cobra. The sooner peanut close canopy, the sooner it shades out tropical spiderwort. Therefore, twin row planting pattern and choosing variety with faster leaf growth will help reaching that goal faster. Cultivation between crop rows may also help controlling this weed in peanut. Excellent control of tropical spiderwort can be achieved in Enlist cotton due to its high sensitivity to 2,4-D. Therefore, use Enlist cotton as rotational crop with peanut in a heavy tropical spiderwort field is also recommended.



Non-treated check



Valor 3 oz/A PRE



Valor 3 oz + Strongarm 0.225 oz/A PRE



Valor 3 oz + Warrant 3 pt/A



Warrant 3 pt + Strongarm 0.45 oz/A



Valor 3 oz + Strongarm 0.45 oz/A



Valor 3 oz + Strongarm 0.225 oz/A PRE
Cadre 4 oz + DB 16 oz + Strongarm 0.225
oz + Dual Magnum 22 oz/A + NIS POST



Valor 3 oz + Strongarm 0.45 oz/A PRE
Cadre 4 oz + DB 16 oz + Dual Magnum
22 oz/A + NIS



Valor 3 oz + Strongarm 0.45 oz/A PRE
Cobra 12.5 oz + DB 16 oz + Dual
Magnum 22 oz/A + NIS



Warrant 3 pt + Strongarm 0.45 oz/A PRE
Cobra 12.5 oz + DB 16 oz + Dual
Magnum 22 oz/A + NIS



Warrant 3 pt + Strongarm 0.45 oz/A PRE
Cadre 4 oz + DB 16 oz + Dual Magnum 22
oz/A + NIS



Non-treated check

PRE: June 27. POST: Aug 2. Pictures taken on Sep 12, 2019 in Elberta AL.