Minimum Peanut Weed Control Programs

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Row crop commodity prices have been very low due to COVID-19 and the lack of demand. Peanut prices were at $418 a ton in the second week of April. To survive low commodity prices and global economic uncertainties, farmers will need to cut expenses and use resources more efficiently.

The following are cost-saving options for weed control with the goal to provide sufficient weed control with a budget around $30 per acre (after discount programs from manufacture and by using generics). The strategy is to use cheaper residual herbicides and reduce applications over crops of more expensive postemergence herbicides, such as Select Max or Fusilade II.

For Fields Without Much Weed Pressure in General

PRE (behind planter): Either Warrant 3.2 pints/acre, or Dual Magnum 22 ounces/acre, or Valor 2-3 oz/A. Add Gramoxone if needed to ensure fields start clean.

POST: Either Dual Magnum 22 ounces/Warrant 3 pints/Zidua SC 3.5 ounces, or Outlook 16 ounces/acre. Spray around 25 DAP to clean fields before weed emergence. If some weeds have come up, tank with 8 ounces of 3lb Gramoxone or 12 ounces of 2lb Gramoxone + a non-ionic surfactant when applying these Group 15 herbicides (Warrant, Zidua, Dual or Outlook), or spot spray them with Gramoxone. If activated by timely rain or irrigation, peanuts should not need much attention for weed control beyond this treatment.

For Fields with Mostly Pigweed (Palmer amaranth) and Annual Grasses

PRE: Valor 3 ounces + Prowl H_2O 2 pints/acre (conventional till fields), or Valor 2 ounces + Warrant 2 pints/acre (works in conventional, reduced till or cover crop fields). Add Gramoxone if needed to ensure fields start clean.

POST: Spray either Warrant 3 pints/Dual Magnum 22 ounces/Outlook 16 ounces/Zidua SC 3.5 ounces/acre around 25 days after planting, before pigweed or grass comes up. If these chemicals are sprayed and activated by rain timely before new weed emerges, pigweed will no longer be a threat. These Group 15 herbicides will also give great grass control to reduce the need for another pass of grass herbicide later in the crop. If pigweed has shown up in certain parts of the field because of spray erroror or delayed PRE activation, either spot spray those areas with Gramoxone or tank mix Gramoxone (8 ounce of 3lb Gramoxone or 12 ounce of 2lb Gramoxone + a non-ionic surfactant) with a Group 15 herbicide in POST application before 28 days after cracking. After this date, tank mix a Group 15 herbicide with either Cobra, Ultra Blazer or Storm plus 2,4-DB to spray pigweed. Spot spray Select Max or Fusillade on grass patch is an option to reduce costs compared to broadcast applications. Remove large pigweed (>1 ft) mechanically (row middle cultivation) or by hoeing. Weed wiper or wickbar is also

very effective controlling large pigweed that escaped previous treatments. Use 50% Gramoxone by volume and wipe pigweed twice (back and forth).

For Fields with Mostly Sicklepod, Morningglory, Coffeeweed and Broadleaf Weeds (but not many pigweeds)

PRE: Valor 3 ounces + Strongarm 0.225 ounces/acre (works well for both conventional till, no till and cover crop fields). Add Gramoxone if needed to ensure fields start clean.

POST: Cadre 2 ounces + Strongarm 0.225 ounces + either Warrant 2.5 pints/Dual Magnum 16 ounces/Outlook 13 ounces/Zidua SC 2.5 ounces/acre around 30 DAP before weeds get more than 3 to 4 inches tall. Consider adding 2,4-DB 16 ounce/A if sicklepod, coffeeweed, or morningglory gets bigger than 4 inches at application. Gramoxone alone applied to these broadleaf weeds at cotyledon or small seedling stages is also an effectieve option. Just need to keep in mind Gramoxone can not be sprayed beyond 28 days after ground cracking and producers should only use NIS with it, not crop oil of any kind.

For Fields with Tropical Spiderwort

PRE: Valor 2 to 3 ounces + Strongarm 0.225 ounces/acre, or Dual Magnum 22 ounces + Strongarm 0.225 ounces/acre, or Warrant 3 pints + Strongarm 0.225 ounces/acre. All these treatments will also control pigweed.

POST: Cadre 2 ounces + Dual Magnum 16 ounces + Strongarm 0.225 ounces/acre at 30 to 35 DAP. If pigweeds have shown up, use Cobra or Ultra Blazer plus 2,4-DB instead of Cadre, or spot spray these herbicides on pigweed if they only infest small area.

Other Thoughts:

Gramoxone will burn peanut leaves, but based on Auburn and UGA research at multiple locations over the years, Gramoxone rarely incur yield losses when applied within label rates and label application window (from cracking to 28 days after cracking). Do not mix crop oil or a PPO herbicide like Cobra or Aim with Gramoxone as it can get too hot. Gramoxone is significantly cheaper than other postemergence herbicides that controls ALS-resistant pigweed and grasses, and it is also an effective broadspectrum herbicide on other common weeds such as marestail, sicklepod, morningglory, coffeeweed, tropical spiderwort, FL beggarweed, etc. It will be a good candidate to provide decent weed control at lower cost. If pigweed only infest a portion of the field (say 1-5 acre patches sporadically), use sprayer to spot spray them in order to avoid unnecessary damages to peanut in the clean area of this field. Spot spray Cobra, Blazer or Select Max only to problematic areas can also reduce overall chemical expenses. Tank mixing 2,4-DB with Gramoxone may increase the control of tough broadleaf weeds such as morningglory and sicklepod and is recommended if they have gained some size before application.

The twin-row pattern is preferred for suppressing weeds faster in convetional till fields. Abundant peanut foliage allows quicker canopy closure that prevents weeds from germinating. Pull large pigweed escapes and do not let them produce seedheads that go back to the soil, because one female plant produces too many seeds (up to half a million per plant). Cover crop residue provides additional weed control when used with soil herbicides. Recent Auburn research has shown that a combination of 4000-

5000 lb/A cereal rye residue + Valor 3 ounces/A or Strongarm 3 ounces/A provided sufficient weed control for over 60 DAP, without using over the top herbicide treatments. Hopefully, with plenty soil herbicides to provie residual control of weeds and alternative weed control options, peanut producers can reduce applications of more expensive postemernce material and stay clean longer and cheaper.

Questions? Please contact:

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