Preplant Burndown Options for Peanut (Prostko)

1) Primary burndown herbicides will either be **glyphosate** or **paraquat**. As we get closer to planting, paraquat might be preferred if a quicker burndown is needed.

2) Potential tank-mix partners with either of the above herbicides include the following:

a. **2,4-D** (16 oz/A) - will help improve the control of wild radish and primrose. Plant-back restriction for peanut based upon UGA research is **7 days**.
b. **FirstShot** (0.5-0.8 oz/A) - will also help improve the control of radish and primrose. May also be useful in fields were off-target movement of 2,4-D is a concern. Peanut plant-back restriction for FirstShot is **30 days**.
c. **Aim or ET** (1-2 oz/A) – either one of these herbicides can be useful in preplant burndown situations where annual morningglory plants (except smallflower) have already emerged. Aim can be applied **anytime preplant up until 24 hours after planting**. ET can be applied **anytime preplant but before peanut emergence**.

3) Growers who want to get early residual control of pigweed, especially when there is a potential long delay between application and planting, may want to include **Dual Magnum** (16 oz/A), **Warrant** (48 oz/A) or **Valor** (2 oz/A) in the burndown. If Valor is used in the preplant burndown at least 30 DBP, an additional 2 oz/A can be used PRE after planting. Valor will also help improve the POST control of radish and primrose (+10-15%). I must admit that I would prefer either Dual or Warrant for residual control in this situation to help protect Valor from potential resistance issues. There are no peanut plant-back restrictions for Dual or Warrant.

Posted by UGA Weed Science at Monday, April 07, 2014

Avoiding Mixing Issues with Paraquat! (Culpepper, York, Mclean, Faircloth)

Methods to conduct compatibility tests when applying paraquat mixtures at 15 GPA:

1. Place 1 quart of water in an approved clear container for pesticides.

2. Add adjuvants: 4.7 mls or 1 teaspoon equals 0.5% v/v as recommended. Invert 10 times and evaluate. Invert EACH time you add an adjuvant or pesticide to the container.

3. Add 7.9 mls of Reflex, or 1.5 teaspoons (this equals 1 pt/A).

4. Now each grower would have to decide which Reflex tank mix partner will be used such as Warrant, Direx, or Prowl. For Warrant add 24 mls or 5 teaspoons (equal to 3 pt/A), Direx add 12 ml or 2.5 teaspoons (equal to 1.5 pt/A) or Prowl add 16 mls or 3 teaspoons (equal to 1 qt/A).

5. Add 16 mls or 3 teaspoons of paraquat (this equals 1 qt/A).

6. After placing products in container, place lid on container and tighten. Invert at least 10 times and evaluate.

7. If incompatibility is apparent, repeat the test with the addition of a compatibility agent at the appropriate rate BEFORE adding a non-ionic surfactant. AMS-containing adjuvants have been effective in some cases.

8. After compatibility testing is complete, dispose of any pesticides and containers in accordance with the
Storage and Disposal section of the labels for the herbicides used.

Spray Tank Mixing Order When Applying Paraquat:

1 . Fill spray tank ½ full with clean water.

2. Begin tank agitation and continue agitation until the tank is empty after application.

3. High quality adjuvant(s).

4. Dry Formulations (WP, DF, etc.)

5. Liquid Formulations (SC, EC, L, etc.)

6. Paraquat

7. Fill remainder of spray tank

Additional Thoughts:

1. Using at least 15 GPA carrier volume will lesson compatibility issues; thus, the example above used 15 GPA, but if applying other volumes make appropriate changes above.

2. Each water source should be tested as it can greatly impact compatibility.

3. Test each adjuvant.

4. Warm water will lessen compatibility issues.

5. If compatibility problems do occur in the tank, a commercial degreaser has been shown to be an effective cleaning agent. Avoid exposure to pesticides while cleaning tanks.

6. The example above uses general herbicide rates; adjust rates according to those being applied.