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## Crop Production Guide Series

### Late Season Weed Control in Cotton and Peanut

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Late-season weed control is important to reduce harvest losses caused by weeds, decrease weed seed and underground reproductive storage production, and help reduce annual and perennial weed populations in the spring. Late season inputs should be based on these factors and not based on the assumption that yield will be reduced by competition from these late season weeds, unless they impair machine harvest. Good early- and mid-season weed control is critical for stand establishment and to eliminate competition with weeds. The use of residual herbicides and properly timed postemergence herbicides will pay off in wet years that support several flushes of weeds. Even under ideal weed management programs, late-season, pre-, and post-harvest weed control in cotton and peanut may be necessary to finish the crop and start weed management for the following growing season. Herbicides used late season in cotton and peanut must be used according to the pre-harvest interval (PHI) listed on the label.

**Cotton.** In Roundup Ready (RUR) cotton, **glyphosate** may be applied by aerial or ground application equipment at rates up to 22 ounces per acre of **Roundup WeatherMax** or 32 ounces of a 4 lb. **glyphosate** material from “ground crack” to the 4-leaf stage (until the fifth true leaf reaches the size of a quarter). Over-the-top applications made after the 4-leaf stage of development may result in boll loss, delayed maturity, and/or yield loss. According to the “Salvage Treatment” section of the **Roundup WeatherMax** label, treatments made over-the-top after the 4-leaf stage should only be used where weeds threaten to cause the loss of the cotton crop. Twenty-two ounces of **Roundup WeatherMax** may be applied either as an over-the-top or post-emergence-directed treatment sprayed higher on the cotton plants and over the weeds. SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT SHOULD BE USED PER GROWING SEASON. **Glyphosate** may be applied for pre-harvest control of annual and perennial weeds as a broadcast treatment to RUR cotton after 20 percent boll crack. Up to 44 ounces of **Roundup WeatherMax** or 64 ounces of a 4 lb **glyphosate** material may be applied using either aerial or ground spray equipment. **Glyphosate** will not enhance the performance of harvest aids when applied to RUR cotton.

For LibertyLink cotton, 32 to 40 ounces of **Ignite** may be used per application and up to 80 ounces may be used per year. Effective weed control will depend on thorough spray coverage made to small

weeds. Avoid drift onto non-LibertyLink cotton. Do not apply **Ignite** within 70 days prior to cotton harvest.

In conventional cotton (and transgenic cotton), **glyphosate** may be applied through hooded sprayers, recirculating sprayers, shielded applicators or wiper applications (rope or sponge wick). It is important to avoid leakage of spray mists or dripping of herbicide solution onto cotton. Wiper applicators take advantage of a height differential between cotton and weeds. This equipment physically wipes the spray solution directly onto the foliage of the weeds and not on the crop. This equipment should be operated no greater than 5 miles per hour. Performance will be improved by slowing down in areas of dense weed infestations. A second application may be necessary and should be made in the opposite direction.

Spray solutions from 33 to 100 percent should be used. Mix only the amount of solution to be used during a 1-day period, since leftover solutions may be less effective over time. Do not use wiper



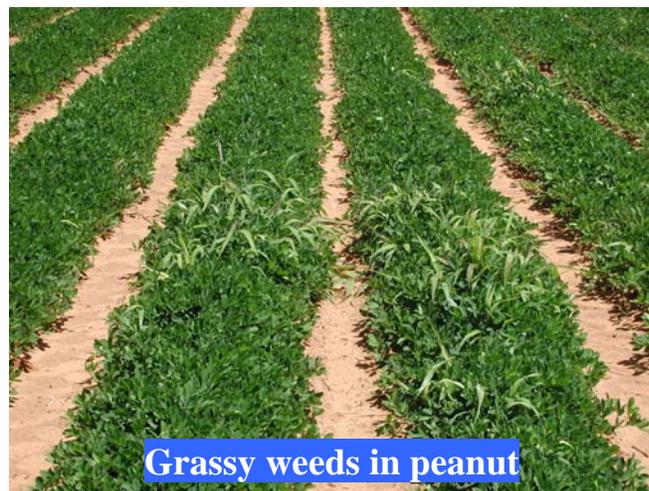
equipment when weeds are wet and do not add a surfactant to the herbicide solution. Clean weed foliage and non-stressed weeds will be controlled more effectively than dirty, stressed weeds. For spot treatments, apply this product prior to boll opening. Do not treat more than 10% of the total field area to be harvested. Non-transgenic cotton receiving spray solution will be killed. Care must be taken to avoid drift or spray outside the target area. The presence of late-season weeds may not always justify a herbicide treatment. This is especially true if the weed presence in the field is low and will not affect harvest efficiency or result in

harvest losses. Weed competition is not near at a premium during this time of the year, and an economic benefit may not be realized from applying herbicide at this time. In addition a pre-harvest herbicide application may be all that is needed to dry weeds down and allow for a minimal amount of loss at harvest.

The postemergent grass products may be applied over-the-top of cotton to control certain grassy weeds. The following pre-harvest interval is in effect for each of these herbicides: **Fusilade DX** and **Fusion** - 90 days prior to harvest, **Select/Arrow** - 60 days prior to harvest, and **Poast/Poast Plus** - 40 days prior to harvest. Apply these herbicides with a crop oil concentrate at 1 qt/A. See label recommendations to determine amount to apply, weed size, and maximum use rate per season.

For late-planted cotton, in which both the cotton and weeds are small, there may be a benefit from a layby application. *For reference on layby applications, see the Focus on Entomology Crop Production Guide Series S9-06/04 entitled "Mid-Season Weed Control in Cotton and peanut" located on the Lubbock website.*

**Peanut.** The options for late season weed control are limited in peanut. Non-selective herbicides are not an option because heavy leaf loss and dead stems will weaken pegs and result in heavy pod loss. A combination of **2,4-DB**, **Blazer/Ultra Blazer**, and Crop Oil Concentrate are often most effective in controlling larger escaped weeds. However, the pre-harvest interval for Blazer is 75 days. This would



result in peanuts being harvested after November 1<sup>st</sup>, which is also not advisable. A **2,4-DB** may be applied at up to 1.6 pints per acre. Do not apply later than 100 days after planting or 30 days before harvest. **Basagran** may be applied at rates up to 2 pints per acre. The maximum weed size on the label is 10 inches for highly susceptible weeds such as cocklebur. This herbicide will be ineffective on weeds such as pigweed (carelessweed). Read the label to determine weed species and maximum size of weeds that will be controlled. Residual herbicides such as **Cadre** and **Pursuit** should not be applied this late in the season since this will result in rotational crop problems the following year. **Select** may be applied to control grassy weeds at rates of 6 to 16 fl oz/A (total of 32 fl oz/A per season). For grasses that exceed the height on the label, **Select** may be applied at rates of 16-to 32 fl oz/A in an effort to suppress grassy weeds and improve harvest efficiency (See supplemental label). **Poast** may be applied at a rate of 1.5 pt/A per application (total of 2.5 pt/A per season) for control of certain grassy weeds. Apply both **Select** and **Poast** with a crop oil concentrate at 1 qt/A. Neither of these products can be applied within 40 days of peanut harvest. See label for specific grasses controlled, grass size, and herbicide rate. **Glyphosate** applied through a wiper application (rope or sponge wick) is also an option in peanut. In fact, it may be easier in peanut since the needed height differential between the crop and weeds is more easily achieved. See comments about this type of application in the cotton section above.

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