

Controlling Volunteer Cotton in Soybeans

Angela Thompson and Larry Steckel, Assistant Professors, Plant Sciences

Volunteer Roundup Ready™ (RR) cotton growing in RR soybeans is a common problem in Tennessee. Though not planted on as many acres, volunteer Liberty Link™ (LL) cotton can be an occasional weed problem. In most cases, volunteer cotton occurs when soybeans are replanted behind a failed stand of cotton where 10 to 20 percent of the original cotton stand remains. In a few cases, the cotton emerging in soybeans is from the previous year’s cotton crop. Volunteer cotton will compete with the soybeans, causing yield loss, and could become a haven for boll weevil, adding cost to the grower. The boll weevil eradication program must manage all cotton fields in the state for boll weevils to successfully keep them under control. Growers will be charged a fee to cover the cost of monitoring soybean fields containing volunteer cotton. As a result, it is very much in a soybean grower’s interest to remove all volunteer cotton from a soybean field.

Recent research was conducted at Jackson, Tennessee examining control options for volunteer RR cotton and LL cotton in RR soybeans. The results of the research revealed a few good herbicide options to control volunteer cotton in RR soybeans. However, timing is very important for consistent control. One of the main conclusions from this study is that newly emerged (up to 2- to 3-leaf stage) cotton is much easier to control than more mature cotton. Resource at 12 oz/A applied to 2- to 3-leaf cotton controlled RR and LL cotton 99 and 98 percent, respectively, compared with 27 and 18 percent control for the same treatment applied to 5- to 7-leaf cotton (Table 1). This study would also suggest that an application of Ignite on RR cotton or Gramoxone Inteon™ + Sencor™ on either RR or LL cotton before planting soybeans would be a very good control option. Another overall conclusion from this study is that RR cotton is a little easier to control than LL cotton. The best overall post-emergence option was 8 to 12 oz of Resource on 2- to 3-leaf cotton.

Table 1. Control of Volunteer Cotton in Soybeans

| Herbicide Product Rates | Cotton Stage | RR Cotton --- %--- | LL Cotton --- %--- |
|--------------------------------------|---------------------------|-----------------------|-----------------------|
| Classic 0.5 oz | 2 to 3 lf | 30 | 3 |
| Resource 8 oz | 2 to 3 lf | 97 | 89 |
| Resource 12 oz | 2 to 3 lf | 98 | 99 |
| Aim 0.38 oz + Classic 5 oz | 2 to 3 lf | 65 | 70 |
| Flexstar 24 oz | 2 to 3 lf | 85 | 77 |
| Gramoxone Inteon 40 oz + Sencor 4 oz | 2 to 3 lf | 98 | 98 |
| Ignite 29 oz | 2 to 3 lf | 99 | 0 |
| Roundup WeatherMax 22 oz | 2 to 3 lf | 0 | 40 |
| Classic 0.5 oz | 5 to 7 lf | 0 | 0 |
| Resource 8 oz fb Resource 8 oz | 5 to 7 lf fb 6 to 8 lf | 27 | 12 |
| Resource 12 oz | 5 to 7 lf | 27 | 18 |
| Aim 0.38 oz + Classic 5 oz | 5 to 7 lf | 7 | 3 |
| Flexstar 24 oz | 5 to 7 lf | 18 | 6 |
| Gramoxone Inteon 40 oz + Sencor 4 oz | 5 to 7 lf | 91 | 73 |
| Ignite 29 oz | 5 to 7 lf | 80 | 0 |
| Roundup WeatherMax 22 oz | 5 to 7 lf | 0 | 3 |
| LSD _{0,05} | 5 to 7 lf | 22 | 18 |

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

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