BURNDOWN AND WEED CONTROL OF ANNUAL RYEGRASS AS A MIDWEST COVER CROP

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Planting annual ryegrass as a cover crop is a relatively new practice in the Midwest. There are several management decisions that will affect the risk and likelihood of a successful experience. Proper management is required.

- **Burndown timing.** A burndown should be applied when annual ryegrass has 6-9 inches of top growth (80-90% of its root growth will have occurred by this time) or generally by the second week of April (before it reaches joint stage). Waiting longer to spray a burndown may result in additional management challenges.
- **Burndown options.** Plan on two burndown applications of Roundup, Touchdown, Paraquat, or Liberty. A second application may not be needed but always plan on two. Use the full rate of herbicide along with extra surfactant and an acidifier or ammonium sulfate, as appropriate. Spraying in the morning may result in better translocation. Cool, cloudy weather may reduce translocation. *Do not* mix products that cause leaf burn, such as atrazine or 28% nitrogen, with burndown herbicides, as less product will be absorbed. Rotate herbicide modes of action to prevent resistance.
- **Residual weed control.** Roundup mixed with Princep works as a burndown and prevents annual ryegrass from resprouting (provided there is moisture for Princep uptake). It also provides residual weed control. Atrazine can be applied 7-14 days after burndown. Post applied herbicide options are: Accent, Option, Steadfast, Lightning, and Liberty. Other post applied grass herbicides can control the annual ryegrass but may cause crop injury.
- Herbicidetolerant crops. If planting soybeans into annual ryegrass, Roundup Ready soybeans are a very good fit. Two applications of Roundup or Touchdown should provide good weed control. Roundup Ready or Liberty Link corn may also be a good fit for corn planted into annual ryegrass. More expensive post applied herbicides, or products that may result in crop injury, can then be avoided. However, a strategy for managing weed resistance and volunteer Roundup Ready corn the following year needs to be thought through.
- **Scouting.** Thoroughly scout fields (not from the road at 40 mph) 7-14 days after applying a burndown for escapes or regreening of annual ryegrass. Treat as needed. Scout again 30 days after planting and treat any escapes. Check fields at harvest for any volunteer ryegrass and treat as needed. Always spray a burndown ahead of planting wheat in the field.

Information compiled by Oregon Ryegrass Seed Commission, USDA-NRCS, University of Illinois Extension, and Ag Conservation Solutions. Mention of any product does not constitute any type of endorsement.