

## **SEEDING OF ANNUAL RYEGRASS AS A MIDWEST COVER CROP**

**Barry Fisher**  
**Conservation Tillage Coordinator**  
**Natural Resources Conservation Service**  
barry.fisher@in.usda.gov  
[www.agry.purdue.edu/cti/](http://www.agry.purdue.edu/cti/)

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

- **Seeding date.** The ideal time to plant annual ryegrass is from the middle of August to the end of September. Seeding up to mid-October is possible but more weather dependent, especially the farther north one goes. Annual ryegrass will germinate in 7-10 days with sufficient soil moisture. Dry soil conditions will delay germination and early growth. Ideally, annual ryegrass needs 60 days of growth before a hard killing frost. A dormant seeding in December through February is also possible (but not the preferred method).
- **Seeding method & depth.** The preferred method for seeding annual ryegrass is with a no-till drill (a main box works fine) about 1/4 to 3/8 inch deep. This provides optimal seed to soil contact. Other options include aerial seeding (this can be done into a standing crop just prior to leaf drop), mixing seed with fertilizer, and using an airflow or broadcasting with a fertilizer spinner. Running a fluffing harrow (like a Phillips or Phoenix) after the airflow or broadcasting will improve seed placement. However, dry soil conditions will delay germination and early growth. Annual ryegrass seed is lighter than fertilizer and will not spread as far with a spinner (you will need to split the middles to get uniform application). All of these seeding methods will work (with rain) and some are more efficient than others. However, in dry soil conditions, or if seeding in October, it is highly recommended that a drill be used.
- **Seeding rate.** Annual ryegrass is normally seeded at 15-20 lbs/A. Increase the seeding rate to 25-30 lbs/A if aerially seeding or using a dormant seeding and 20-25 lbs/A if broadcasting or seeding in October.
- **Burndown.** If winter annuals are present at planting, then a burndown herbicide (Roundup and/or 2,4-D) should be applied prior to planting the annual ryegrass. Winter annuals will compete aggressively with the annual ryegrass the following spring.
- **Nitrogen.** Apply 30 lbs/A of Nitrogen (DAP works well) to stimulate fall growth. This is especially important if seeding in October.
- **Expected growth.** If properly seeded (i.e., the instructions above are followed), one can expect to see 2-4 inches of top growth before a hard killing frost. Snow cover in northern areas will help protect annual ryegrass from winterkill. Even a thin stand with little fall growth may, with good weather, take off in March and early April and be 4-8 inches tall by the second week of April, time for the burndown to be applied.