



Home of the Tillage Radish™

TECHNICAL BULLETIN *Controlling Annual Ryegrass*

Annual Ryegrass Control Made Easier, More Effective

Annual Ryegrass (ARG) is an outstanding cover crop for building soil health. But don't let it go to seed or it will create weed management problems in the future. The goal is successful control following the first herbicide application. If complete control was not achieved, here are a few things to consider.

THE PLANT

- Control Annual Ryegrass before the first node appears when possible.



First node / joint

Control is most effective before the first node/joint appears. Once the third node/joint appears control is poor because of limited translocation, as active growth in the plant goes to reproduction.



UNCERTIFIED CERTIFIED

Uncertified Annual Ryegrass seed may grow at different rates, which makes control more difficult because of uneven maturity. Certified seed grows at a uniform rate, which makes control with a single application easier to achieve.

THE CHEMISTRY

- Remove all traces of atrazine or mesotrione (Calisto,* Lumax, Lexar) in the spray tank when using glyphosate.
- Glyphosate recommendations are now 2 qts per acre.
- Inconsistent control has been experienced using Accent (nicosulfuron) or Steadfast post emergence on corn. Follow the label even with adding fertilizer, AMS and crop oil to improve herbicide absorption efficiency.
- Glyphosate works effectively alone or with 2,4-D. **MAINTAIN** the 2 qt. rate of glyphosate **IF** adding Princep, Balance Pro (isoxaflutole), Prowl H2O (pendimethalin), Resolve Q (rimsulfuron), Basis Blend (rimsulfuron & thifensulfuron), Corvus (Thiencarbazone-methyl & Isoxaflutole) or Axiom (fluefenacet + metribuzin) to the glyphosate application.

TECHNIQUE

- Do not repeat mistakes that may have happened on the first application.
- Make sure the spray tank water is between 4.5 to 5.5 pH. Make sure to add AMS (ammonium sulfate) or citric acid, with 3-5 minutes of agitation for pH adjustment. This step is critical when water is high in calcium, magnesium, iron and other minerals that interfere with glyphosate activity. Agitation of the mixture is cheap insurance.
- Don't pull your punches. Use the full strength of the suggested control rate. The goal is complete control on the first pass.
- If you use a generic brand of control, make sure to adjust the rate.
- Plant contact is critical. Use a medium spray droplet size or moderate spray pressure. Spray application volume should be 8 to 12 gallons per acre, so spray strength is important.

TIMING

- Warm temperatures are essential to translocate glyphosate throughout the plant so that it is absorbed into the roots for control.

CONTROL IS BEST WHEN THE PLANT IS ACTIVELY GROWING (HIGH TRANSLOCATION)

Key trigger points to consider when controlling with glyphosate.

1. Top Growth should be more than 7 inches, actively growing
2. Sunlight – the more the better
3. Soil Temperatures – above 45 degrees F
4. Air Temperatures – above 60 degrees F
5. Moisture – growing conditions should be good

If night temperatures go below 38 degrees wait 3 days before spraying. This is due to a protection mechanism by the plant to prevent freezing tissue.

- Spray at least 4-5 hours prior to sunset to allow translocation time.
- If a second pass is needed, there needs to be new regrowth to spray after the first control application. The regrowth and retillering will allow for more herbicide to get to the roots for final control. Timing will depend on what herbicide is used and the temperature.

FOR ROUNDUP READY CORN OR SOYBEANS

When planting Roundup Ready corn or soybeans after emergence use a full rate of glyphosate. The rate is 1.25 to 1.5 lbs. of active ingredient per acre.

On Roundup Ready soybeans you can add SelectMax (clethodim), Poast Plus (sethoxydim) or Fusilade DX (fluzazifop), using label instructions on the use of fertilizer, AMS or crop oil.

FOR LIBERTY LINK CORN OR SOYBEANS AFTER EMERGENCE

CORN Liberty does not control annual ryegrass very well. Products with Accent (nicosulfuron) have been inconsistent. Use label recommendations of adding fertilizer, AMS or crop oil to improve performance.

SOYBEANS Add SelectMax (clethodim), Poast Plus (sethoxydim) or Fusilade DX (fluzazifop). Liberty has little effect on ryegrass and mixed with systemics it reduces control

FOLLOW THROUGH

- Inspect fields 7-10 days after control application. Be alert for regrowth or missed areas that need further control.
- The following year, scout these areas for volunteer ARG.

TIP *Select cover crop seed like you select cash crop seed – for bottom line results.*

RootMax™ Deep Root Annual Ryegrass is certified, producing uniform emergence and exceptionally deep roots. Properly managed, RootMax™ improves soil health leading to improved crop yields and reduced input.



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SOURCES: Annual Ryegrass Cover Crop Management for Corn and Soybean Production 2013 Management Recommendations by Mike Plumer, Cover Crop Specialist, Illinois Mark Mellbye, Oregon Seed Industry Dan Towery, Conservation Cropping Systems Specialist, Indiana Andy Hulting, Weed Scientist, Oregon State University