ANNUAL RYEGRASS MANAGEMENT

2016 QUICK GUIDE

PROVEN BENEFITS OF ANNUAL RYEGRASS (ARG):

- Greater rooting depth.
- Reduce or eliminate soil erosion.
- Reduce N and P runoff into surface water.
- Increase soil tilth and water infiltration.
- Capture residual soil N.
- Increase crop yields, especially in years of low summer rainfall.

ANNUAL RYEGRASS VARIETY SELECTION AND SEEDING DATES:

- Select a variety with adequate winter hardiness that has been tested in the Midwest.
- Mixes well with other species, such as radish and clover, but not with cereal rye.
- Plant when soil temp is still above 60° F.
- If seeding after corn/soybean harvest:
  - Above highway I-70, seed late August-September 15.
  - Below highway I-70 seed September 10 – October 1.
- N is not necessary on fields with adequate residual N.
- Adding 30 lb N/ac will increase plant growth and may help with winter survival.

BEFORE PLANTING ANNUAL RYEGRASS AS A COVER CROP:

- Residual herbicide in the soil can reduce or kill a cover crop.
- Some products have up to 24 months restrictions on planting cover crops.
- Check out the list of herbicides here: ryegrasscovercrop.com/publications.

EQUIPMENT:

- **Drilling** is the most dependable method (12-15 lb/ac).
  - Seed depth ¼ - ½ inch.
  - Germination occurs in 7-10 days.
- **Broadcast** with airflow spreader or fan spreader allows mix of fertilizer and seed (20-25 lb/ac). Experienced growers having good luck with lower rates.
  - May run vertical tillage tool or very shallow tillage to provide some incorporation.
  - Fan spreader pattern requires ½ rate, then double spreading due to light weight of ARG seed - spread width is 25 feet, not 60 feet.
  - Establishment is more weather dependent than planting with a no-till drill.
- **Aerial** allows early broadcast seeding; more important in locations north of I-70. More consistent results in corn. Seeding rate (20-25 lb/ac).
  - Pilot advisory: calibrate plane (light seed results in narrower swath) and do not broadcast if wind is > 7 mph. Spread end-rows first to prevent seed on neighbors.
  - In corn: seed after leaves turn yellow; 4-6 weeks before harvest.
  - In soybeans: in general, seed when beans are yellow and after 1st leaf drop. Successful seeding can occur when beans are green or turning yellow.
- **High clearance seeders** can also aid early planting into standing crops
  - Modified "Hi-Boy" sprayers have been used successfully.
  - Similar to broadcast methods, establishment depends on rainfall.

GROWTH AND DEVELOPMENT:

- Even if stand looks thin in the fall, it will develop significant root growth.
- By Mid-April, most root growth has occurred.
- Roots 28-31" in fragipan and claypan soils.
- Roots 48-50" in better soil with no restrictive layer.

Converting to no-till with cover crops requires new management know-how.

"RESIDUAL HERBICIDE CAN KILL A COVER CROP"

For information on using and managing Annual Ryegrass as a cover crop, visit: **ryegrasscovercrop.com/publications**

Annual Ryegrass is the fastest cover crop to establish, whether with a drill or broadcast.

Annual Ryegrass' deep roots allow subsequent corn and soybean roots to find additional moisture.

Continued On back

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ANNUAL RYEGRASS CONTROL:

- **WHEN?**
  - ARG should be actively growing (5-7 days), with soil temp above 45° F.
  - Late March/Mid-April – with the plant typically 6-9" tall.
  - Good spray coverage with medium spray droplets is key.

- **USING GLYPHOSATE?**
  - Use full rates: **1.25-1.50 lb a.e./ac minimum** even if the ryegrass is small.
  - Daytime temp a minimum of 55° F (Soil above 45° F).
  - Night time temp should be above 38° F (3 nights above 40° F).
  - Spray at least 4 hours before sunset.
  - Reduce water volume to 8-12 gpa.
  - Do not use nozzles that produce coarse spray droplets.
  - Pay attention to water quality. Use AMS plus water conditioners or pH buffers according to label directions and follow order of mixing carefully.
  - Two applications may be necessary if initial spray conditions were marginal.

- **USING GRAMOXONE OR GLUFOSINATE?**
  - Full label rate only 70-85% effective on ARG, worse after node development.
  - Two applications (2-3 weeks apart) improve control.

- **PLANTING CORN AFTER ARG:**
  - Don't add atrazine or Calisto to glyphosate. You'll cut effectiveness by 40%.
  - OK to add simazine, Prowl H2O, Basis Blend, or other residual herbicides for better weed control. Or apply 7-10 days later.
  - ARG "escapes" can be controlled with labeled rates of Accent Q, Steadfast Q, or Option.

- **PLANTING SOYBEANS AFTER ARG:**
  - Early kill of ARG allows quick decomposition and a good seed bed for beans
  - Using RR seeds allows easier control of "escapes".
  - ARG can be controlled in beans with Select Max, Poast Plus, or Fusilade DX. Use MSO and liquid fertilizer according to product labels.
  - Poast and Assure have shown poor control.

- **PLANTING WHEAT AFTER ARG:**
  - ARG can be a very competitive weed in winter wheat.
  - If ARG has sprouted, apply a glyphosate burn down before planting wheat.
  - Consider using a preemergence or early postemergence herbicide such as Axiom or Zidua to control annual ryegrass that emerges with the wheat.
  - Spray a post-emergence grass herbicide like Osprey, Axial XL, or PowerFlex in late fall or early spring. Check plant back restrictions.

Listing of brand or trade names is for guidance only, not a endorsement of those products.

Aerial seeding into a standing crop is an efficient method of broadcasting seed.

Annual ryegrass can substantially increase corn yield, especially in a dry year.

Seeding annual ryegrass into standing corn.

Preliminary research suggests annual ryegrass may also curtail soybean cyst nematode.

OREGON RYEGRASS GROWERS SEED COMMISSION

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Paid for by the Oregon Ryegrass Growers Seed Commission, an agency of the State of Oregon.