March 21, 2017

Aim® EC Herbicide

- Add Aim® EC herbicide at 1.0 oz./acre to your burndown program for control of glyphosate-resistant kochia.
- Excellent activity on annual and winter annual weeds <4” tall.
- Zero day plant black to all registered crops: alfalfa, small grains, canola, flax, soybean, sunflower, sorghum, and dry legumes.
- In cool weather conditions glyphosate efficacy decreases due to temperature dependency: **Aim EC herbicide is NOT temperature dependent** making for an excellent burndown partner in the spring of the year.
- Tank mix Aim EC herbicide with MSO or COC at 1% v/v.

Glyphosate 22 oz. + AMS 30 days after application

Glyphosate 22 oz. + Aim® EC herbicide 1.0 oz. + 1% MSO v/v + AMS 30 days after application

Untreated

1 oz. Aim® EC Herbicide + 7 oz. Authority® Assist herbicide + 1%v/v MSO + 3 2oz. glyphosate + AMS
**Spartan® Elite & Spartan® Charge Herbicides:**
Preplant / Preemergence for Dry Field Peas, Chickpeas

**Aim® EC herbicide: 0.75 – 1.5 fl. oz./A**
- Non-residual burndown control of emerged weeds in tank-mix programs
- Combine with Spartan Elite herbicide to improve burndown on kochia, Russian thistle, lambsquarters, mustard species
- Non-residual program: Aim EC herbicide 1.0-1.5 oz. + glyphosate 1-1.5 lb ai + MSO 1.0% v/v + AMS
- Use 1.0-1.5 oz. for heavy weed and resistant populations
- Use preplant up to 1-day after planting

**Spartan Elite herbicide: 19 – 28 oz./A** See label for specific soil type and organic matter recommendations.
- Combines broadleaf control of Spartan® Brand herbicide with grass control of s-metolachlor
- Excellent on small-seeded broadleaves. Stronger on pigweeds lambsquarter, nightshade with two modes of action working on those weeds where soil type has limited the rate on Spartan Charge herbicide past

**Spartan Charge herbicide: 3 – 6 oz./A** See label for specific soil type and organic matter recommendations.
- Includes the post activity of Aim EC herbicide for increased burndown on kochia, R. thistle, mustards, lambsquarter
- Tank mix with residual grass partner - Dual® herbicide, Prowl® herbicide - or follow with post grass herbicide

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**Best Management Recommendations for Spartan Brand Herbicide Applications for Field Peas**
- Spartan Charge & Spartan Elite herbicides: Tank-mix with glyphosate for no-till for complete burndown
- Add NIS or COC as desired for increased burndown performance
- Preplant applications (7-14 days) have shown good weed control and improved crop safety. Preplant applications also may allow slightly higher rate for improved weed control with excellent safety, especially on lighter, low O.M. soils

**Weed Control in Dry Field Peas**
Univ. of NE – HPAL, Sidney, NE 2014
% Control 57 DAT
![Graph showing weed control results]

Spartan® Charge herbicide vs. UTC on Kochia. Colorado - 2015
Authority® Brand Herbicides – Early Preplant Applications for Soybeans

**Advantages of Early Preplant Applications**
1. Get ahead of corn planting by getting soybean acres sprayed.
2. Early weed control. Control weeds before they get established. Warm spring has weeds growing early.
3. Move from corn planting into soybeans without worry about plant-back restrictions on burndown programs.

**Early Preplant vs. Preemergence applications** All the Authority brand herbicide products can be applied up to 45 days ahead of planting in the spring. Use the higher end of the rate ranges below when applying EPP from late March to April 20th – 25th for extended residual. You don’t want to use a low rate then have it run out too early in the season. For resistant weeds like waterhemp, Palmer amaranth, giant ragweed, keep the rates up no matter when the application is made to get the best control.

Weeds like kochia, giant ragweed, marestail and lambsquarter come up very early. Applying Authority brand herbicides before they get going is critical in keeping fields clean.

- **Authority® First DF herbicide:** 5 - 6.4 oz./A
  - Provides strong activity on ragweeds and marestail making either a great choice for tough no-till environments with these problem weeds

- **Authority® Assist herbicide:** 8 - 10 oz./A
  - Long residual of Authority brand herbicides provides superior residual on kochia, waterhemp, lambsquarter, nightshade, morningglories and velvetleaf, plus excellent grass control

- **Authority® MTZ DF herbicide:** 14 - 18 oz./A
  - Rotation flexibility to plant corn after 4 months. Excellent product for soybeans going to seed corn the following year. Controls kochia, waterhemp, lambsquarters, morningglories, nightshade

- **Authority® Elite herbicide:** 24 - 30 oz./A
  - Strong grass and small-seeded broadleaf control with combination of Authority brand herbicides + s-metolachlor. Kochia, waterhemp, lambsquarters, nightshade, foxtails

**For Emerged Weeds in No-till**
Add **Aim® EC herbicide 0.5-0.75 oz. + 2,4-D LV4 1.0 pt. + MSO 1% v/v**
  - For emerged, glyphosate-resistant Kochia – increase **Aim EC herbicide rate to 0.75-1.0 oz./A**