



CoAXium™ Wheat Production System Stewardship Guidelines

Stewardship is critical to prolong the utility, features, and benefits of CoAXium™ Wheat Production System and Aggressor™ brand herbicides. Wheat producers, Ag chemical and seed retailers must follow the required and should follow the recommended Stewardship practices designed to maximize efficacy of CoAXium™ Wheat Production System and prevent the development of herbicide resistance in grassy weeds. For maximum benefit and longevity of CoAXium™ Wheat Production System, growers should apply Aggressor™ brand herbicides for control of winter annual grasses.

CoAXium™ Wheat Production System - Licenses and Agreements

- Growers must execute a CoAXium™ Wheat Production System Grower Stewardship Agreement using the on-line AgCelerate system prior to purchasing seed of a CoAXium™ wheat variety.
- In executing the CoAXium™ Wheat Production System Grower Stewardship Agreement, the grower agrees to use only purchased Certified seed and follow the Aggressor™ product label and use stated label rates and herbicide timings.



CoAXium™ wheat varieties

- Seed of CoAXium™ wheat varieties can only be purchased from authorized CoAXium™ wheat seed distributors.
- A CoAXium™ wheat variety can be identified by the AX suffix, which is included in the variety name.
- Growers must purchase new seed of CoAXium™ wheat varieties each year for planting.
 - Saving seed for replanting or reuse is not permitted.
 - CoAXium™ varieties are sold only as Certified seed.
 - Use of Certified seed assures the presence and purity of AXigen™ trait which confers tolerance to Aggressor™ brand herbicides.

Aggressor™ brand herbicides

- If applying an ACCase-inhibiting herbicide with the active ingredient Quizalofop P-Ethyl, growers must only apply Aggressor™ brand herbicides which are registered for use on CoAXium™ Wheat Production System.
- Always read and follow the Aggressor™ herbicide label instructions.
- Always use a certified adjuvant with Aggressor™ herbicides.
 - Surfactant selection depends on targeted weed species and growth stage. Recommended surfactants include:
 - Methylated seed oil (MSO) @ 1% vol/vol;
 - Crop oil concentrate (COC) @ 1% vol/vol; or
 - Non-ionic surfactant (min 80%) @ 0.25% vol/vol.
 - MSO and COC are to be used in Aggressor™ herbicide tank-mixes only if the tank-mix partner allows the use of MSO or COC.
- Aggressor™ herbicides can be applied with nitrogen based foliar fertilizers.
 - Liquid or dry spray-grade ammonium sulfate (AMS) at 28% N, 32% S or 10-34-0.
 - Total application of nitrogen-based fertilizer products are to be below 50% of the total spray volume.



Susceptible grassy weeds are killed while herbicide-resistant plants survive to yield without competition from unwanted grassy weeds.



Resistant wheat (background) sprayed with Aggressor™ herbicide. Susceptible variety in the foreground.

- Only apply Aggressor™ herbicide in combination with approved broadleaf herbicides to prevent CoAXium™ wheat crop injury.
- Never tank-mix MCPA Amine, Metribuzin herbicide or 2,4-D Amine formulations with Aggressor™ herbicides.
- Clean spray tank thoroughly before spraying Aggressor™ on CoAXium™ wheat.
 - Injury from residue of herbicides can occur if tanks are not properly cleaned.
- Aggressor™ herbicide should be applied to fields where CoAXium™ wheat is planted if winter annual grasses are present to help maximize the benefit and longevity of CoAXium™ Wheat Production System.
 - Especially important to prevent hybridization and gene flow from wheat into jointed goatgrass.

Best Management Practices

- Implement an integrated best management weed control program that includes the use of multiple modes of action of herbicides, mechanical and cultural practices while using CoAXium™ Wheat Production System.
- Limit sole reliance on ACCase inhibiting herbicides (Group 1). Follow the crop rotation guidelines listed below and on the Aggressor™ label.
 - Avoid repeated use of herbicides with the same mode of action which increases the selection pressure for weed resistant biotypes.
 - Use herbicides with different modes of action when using sequential or tank-mix partners.
- Start with a clean seed bed.
 - Use a burn-down herbicide program prior to planting to control emerged grassy weeds.
 - Use of pre-emergence herbicides, Group 15 or non-ACCase herbicides (non-Group 1), is recommended in cases of high populations of early season grassy weeds.
- Scout fields for weeds.
 - Before Aggressor™ herbicide application to ensure herbicides and rates will be optimum for the weed species and growth stage.
 - After Aggressor™ herbicide applications to evaluate weed control performance.
- Control weed escapes.
 - Use herbicides possessing a different mode of action or use a mechanical control measure to keep escapes from going to seed.
 - Control jointed goatgrass on field borders, adjacent fields, and in fallow to prevent hybridization of CoAXium™ wheat with jointed goatgrass.
 - Use best management practices on weed seed at harvest and post-harvest to prevent a buildup of the weed seed populations.
 - Thoroughly clean equipment used to plant, harvest, transport and condition CoAXium™ wheat to avoid the spread of weed seed.

Feral rye TREATED with Aggressor™ herbicide on the left and UNTREATED on the right.
Trial conducted by Montana State University – Ed Davis



Crop Rotations

- Follow crop rotation restrictions on the Aggressor™ label.
- Use crop rotation to manage herbicide resistance and reduce the probability of selecting resistant biotypes of grassy weeds.
 - In annual cropping systems, avoid consecutive crops of CoAXium™ Wheat and use of Aggressor™ herbicide on the same acre(s).
 - In a 2-year crop rotation of wheat-fallow only use CoAXium™ Wheat Production System and Aggressor for two winter wheat crops before rotating the third winter wheat crop year with a non-Group 1 herbicide mode of action for grassy weed control.
 - Rotate CoAXium™ Wheat Production System with spring crops such as corn, sorghum, sunflowers, soybeans, pulses or large seed legumes to break the cycle of winter annual grassy weeds and allow the use of alternate mode of action herbicides.
 - Do not rotate consecutively with another ACCase (Group 1) herbicide when controlling grasses in a different crop.
- Properly manage weeds in wheat-fallow-wheat rotations.
 - Control grassy weeds in fallow through the use of burn down (non-ACCase mode of action or non-Group 1 herbicide) herbicides and/or tillage.
 - Use of properly timed glyphosate is an excellent rotation of herbicide mode of action in control of grassy weeds.



Call 1-844-SEED-TIP to anonymously report suspected seed IP violations. <https://www.seedipalliance.com/tip-line-help/>



On Left: UNTREATED downy brome grass population. On Right: Aggressor™ @ 8 oz/acre applied. Downy brome grass is choking out the stand of wheat in the untreated check.

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