

TECHNICAL EDUCATION BULLETIN

Flexibility that fits for early postemergence weed control

Introducing Katagon™, a new postemergence herbicide for targeted control of broadleaf and grass weeds that is safe for use in many different types of field corn.

A first of its kind premix, Katagon provides corn growers with greater options and flexibility while protecting corn yields from yield-robbing threats caused by herbicide resistance.

Technical Overview

Katagon is a selective HPPD premix herbicide for postemergence control of broadleaf weeds plus top-performing grass control when used in combination with atrazine.

With a novel co-formulation of two active ingredients, tolpyralate and nicosulfuron, Katagon delivers a step change in resistance management by effectively targeting glyphosate, PPO, triazine and ALS-resistant weed species.

Katagon is labeled for use in field corn grown for grain, silage and seed, that are herbicide-resistant, conventional or non-GMO hybrids. Providing corn growers with the freedom to plant soybeans the following season, Katagon reduces concerns with carryover as often reported with other Group 27 herbicides.

A new and innovative solution, Katagon offers unmatched performance and greater use conveniences while promoting a cleaner, more profitable finish to the season.

Performance Benefits

- Novel premix of two proven actives
- Multiple sites of action
- Weed resistance management
- Convenient low dose formulation

Flexibility Without Limitation

- Safe to use in different types of field corn
- Application window up to 20-inch tall corn (V5)
- Flexibility to plant soybeans the next season
- Tank mix compatibility (including insecticides)



When combined with atrazine, Katagon controls tough driver weeds like waterhemp, ragweed and foxtails for a cleaner finish to the season.

Product Specifications

Brand Name	Katagon™	
Active Ingredient	Tolpyralate	11.72%
	Nicosulfuron	11.72%
Category	Herbicide	
Crops	Corn (field and seed)	
Site of Action	Group 27 & Group 2	
Chemistry Family	Pyrazole & Sulfonylurea	
Formulation	Oil dispersion	
AI/Gallon	1 lb Tolpyralate per gallon	1 lb Nicosulfuron per gallon
Application	Postemergence	
Rates		
Used Alone	Katagon @ 2.3 - 3.4 fl oz/A	
Tank mix	Katagon @ 2.3 - 3.4 fl oz/A + Atrazine ¹	
Rainfastness	4 hours after application	
Signal Word	Caution	

Application Guidelines

- Apply using broadcast ground application.
- Apply to weeds 5-inches or smaller.
- Use a minimum 10 gallons/A of water or more for best control.
- Full coverage of emerged target weeds is essential for postemergence applications.
- Cloudy, foggy, cool weather conditions and/or drought slow efficacy and may take up to 14 days for maximum control.
- During warm periods when weeds are actively growing, maximum weed control can usually be achieved within 7 days.

Adjuvants & Additives

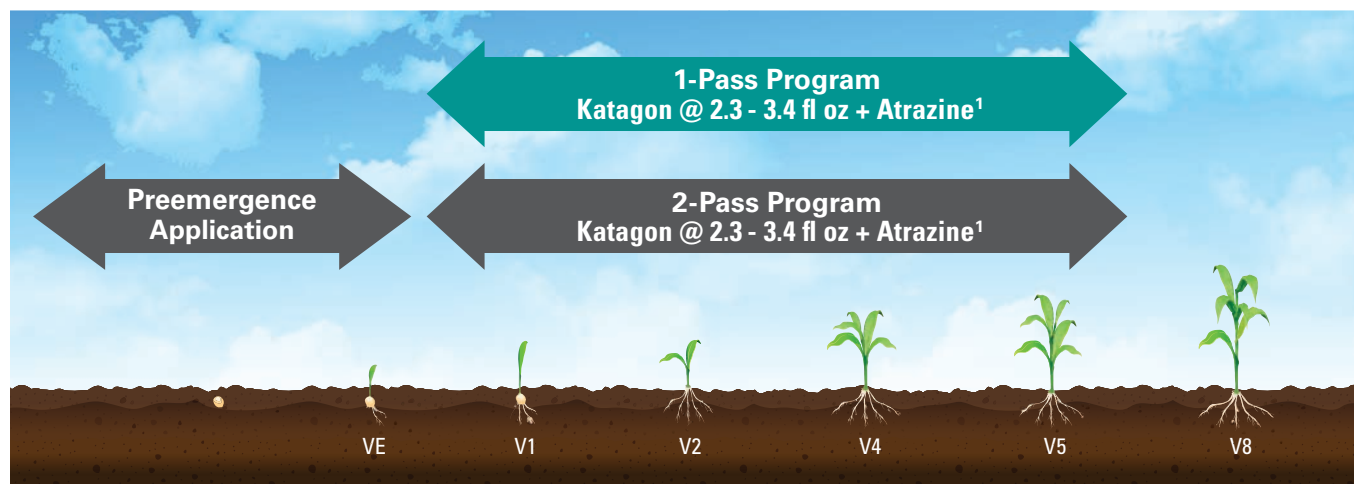
- Katagon is not formulated with an adjuvant package in the jug.
- MSO is recommended for most consistent results across more agronomic conditions.
- COC can be used if injury potential with MSO is a concern. Consistency will be reduced.
- NIS not recommended for achieving best results.

Powered for 1-Pass and 2-Pass Programs

Katagon can be applied alone or in combination with atrazine in an early to mid-season post application up to 20-inch tall corn, or up to and including five-leaf collars (V5), whichever is most restrictive.

The recommended use rate for Katagon is 2.3 to 3.4 fluid ounces per acre. To enhance weed control spectrum and residual activity, use Katagon in a tank mixture that includes at least 0.5 pounds of atrazine per acre. Post applications that include atrazine can be applied to field corn up to 12-inches in height¹.

Using higher rates of atrazine to supplement control, Katagon is powerful enough to use in a one-pass postemergence program. However, if tough-to-manage or resistant weed species are present, growers will be encouraged to use Katagon as part of a two-pass sequential weed control program.



For best results, apply Katagon early postemergence when target weeds are actively growing and less than 5-inches tall. Katagon-treated weeds stop growing within a few hours after application with visible signs in gradual stunting and yellow discoloration or bleaching followed by necrosis within 7 to 14 days.

¹ In a tank mix with Katagon, the maximum single application rate for atrazine is 2.0 pounds per acre. Do not exceed 2.5 pounds of atrazine per acre per year.

Field Trial Data

In product development trials, Katagon has shown high levels of performance in controlling emerged broadleaf and grass weeds, including biotypes resistant to glyphosate, PPO, triazine and ALS.

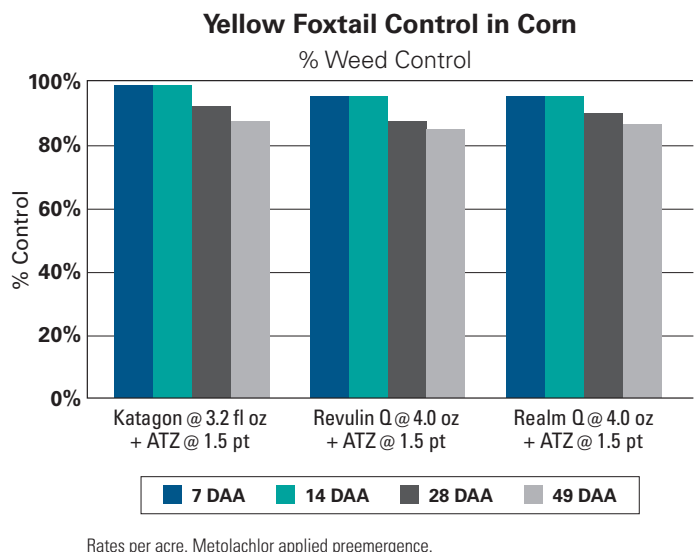
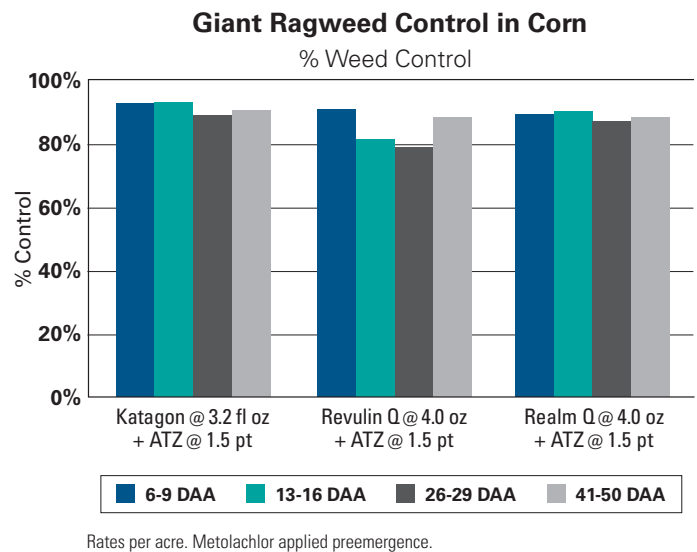
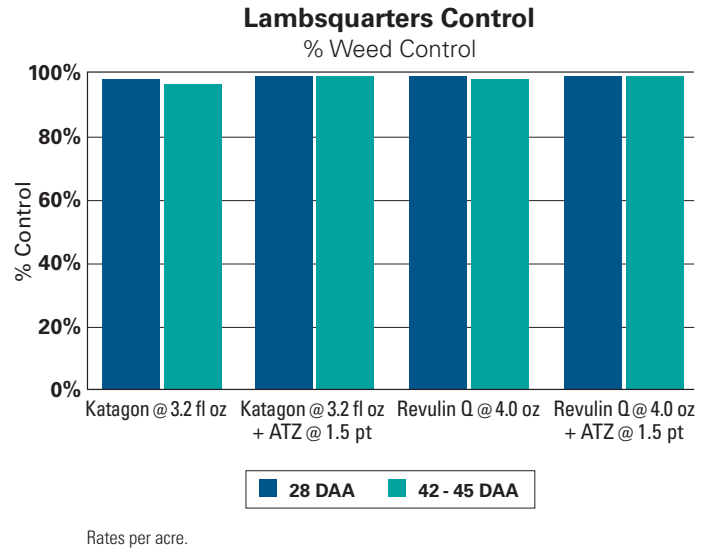
Delivering cross-spectrum post activity, Katagon is a flexible fit for corn growers wanting the freedom to farm with less restrictions and limitations.

Plant Back Restrictions	
Crops	Months
Corn (field, seed)	Immediate
Cereals, winter (barley, oats, rye, wheat)	4
Cereals, spring (barley, oats, rye, wheat)	8
Soybeans	9
Corn (popcorn, sweet)*	10
Dry beans, Dry Peas	10
Alfalfa	12
Red Clover	12
Sorghum**	18
All other crops	18

* Except the sweet corn varieties *Merit*, *Carnival*, and *Sweet Success* for which the minimum time interval is 15 months.

** Except in TX & OK east of Hwy 281 where the rotational interval is 10 months.

Primary Weeds Controlled or Suppressed			
		Katagon	Katagon + Atrazine ¹
Broadleaves	Amaranth, Palmer	Control	Control
	Lambsquarters, common	Control	Control
	Mallow, venice	Suppress	Control
	Morningglory, ivyleaf	Suppress	Control
	Pigweed, redroot	Suppress	Control
	Ragweed, common	Suppress	Control
	Ragweed, giant	Suppress	Control
	Sorghum	Control	Control
	Velvetleaf	Control	Control
	Waterhemp	Control	Control
	Grasses	Barnyardgrass	Suppress
Crabgrass, large		Control	Control
Foxtail, giant		Suppress	Suppress
Foxtail, green		Control	Control
Foxtail, yellow		Suppress	Control
Panicum, fall		Suppress	Suppress



For data provided, label recommended adjuvants were used in all treatments. Applied to 4" - 6" weeds.

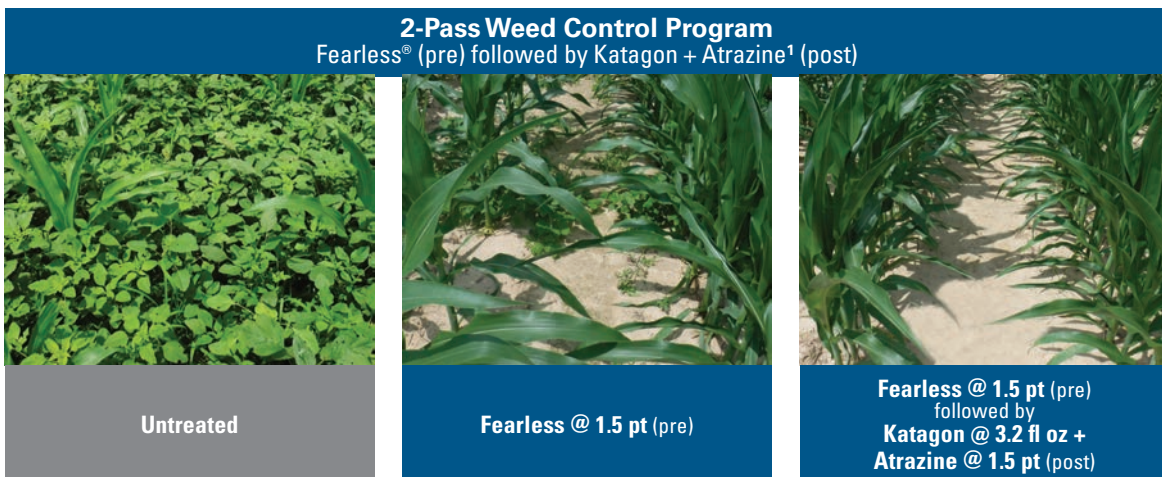
A Program to Fit Every Need

Pre-planned weed control programs need to offer value, flexibility and broad-spectrum control over target weeds. Katagon does all of that and much more, bringing two or more modes of action together when following a preemergence herbicide or when combined with atrazine.

Demonstrating Katagon's performance versatility, the below images show Katagon as being highly competitive to market leading brands when used in one-pass and two-pass weed control programs.



Memphis TN. Rates per acre. Katagon applications include MSO @ 1% v/v and UAN @ 2.5% v/v added. Applied to 12" tall corn.



Memphis TN. Rates per acre. Katagon applications include MSO @ 1% v/v and UAN @ 2.5% v/v added. Applied to 12" tall corn.

¹ In a tank mix with Katagon, the maximum single application rate for atrazine is 2.0 pounds per acre. Do not exceed 2.5 pounds of atrazine per acre per year.



For more information, visit discoverhelm.com.

HELM Agro US, Inc.
401 E. Jackson St.
Suite 1400
Tampa, FL 33602
P: 813.621.8846
F: 813.621.0763
connect@helmagro.com