# **Specimen Label**

ACETOCHLOR	GROUP	15	HERBICIDE
TOPRAMEZONE	GROUP	27	HERBICIDE
CLOPYRALID	GROUP	4	HERBICIDE





TM® Trademarks of Corteva Agriscience and its affiliated companies.

An encapsulated herbicide for postemergence control of annual grasses and broadleaf weeds in field corn, field seed corn, field silage corn and popcorn.

Contains 333 grams/liter or 2.78 pounds/gallon acetochlor, 5.55 grams/liter or 0.046 pounds/gallon topramezone, and 29.59 grams/liter or 0.247 pounds/gallon clopyralid, acid equivalent (3,6-dichloropyridinecarboxylic acid).

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

#### **Precautionary Statements**

## **Hazards to Humans and Domestic Animals**

EPA Reg. No. 62719-766

## Keep Out of Reach of Children

## CAUTION

Harmful if swallowed.

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear long sleeved shirt and long pants, socks and shoes.

Prolonged or Frequently Repeated Skin Contact May Cause Allergic Reactions in Some Individuals

### Personal Protective Equipment (PPE)

## Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Waterproof gloves
 Follow manufacturer's instructions for cleaning/maintaining PPE. If no

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls: When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **User Safety Recommendations**

Users should:

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **First Aid**

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 day or night, for emergency medical treatment information.

## **Environmental Hazards**

This pesticide is toxic to fish. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

## **Non-Target Organism Advisory**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

## **Surface Water Advisory**

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as a high potential for reaching both surface water and aquatic sediment via runoff for several months or more after application.

A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this product and its transformation products from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

## **Groundwater Advisory**

This product has properties and characteristics associated with chemicals detected in groundwater. This product is known to leach through soil into groundwater under certain conditions as a result of label use. This product may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

## **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

## Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. **Pesticide Storage:** Store in original container only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

#### Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

## Refillable containers larger than 5 gallons:

Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

### Nonrefillable containers larger than 5 gallons:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth

## **Storage and Disposal (Cont.)**

several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### **Product Information**

Kyro herbicide is a postemergence herbicide used to control annual grass and broadleaf weeds in corn (field corn, field seed corn, field silage corn and popcorn) after crop and weed emergence up to 24 inch tall corn. At higher use rates, Kyro will provide residual control of grass and broadleaf weeds.

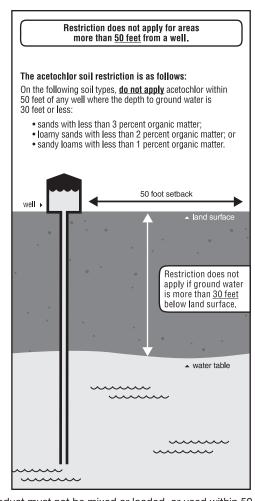
Kyro is a combination of the herbicides acetochlor (Group 15), topramezone (Group 27), and clopyralid (Group 4). This combination of three herbicide modes of action controls many grass and broadleaf weeds by interfering with normal germination, growth, and seedling development. Kyro may be used in tank mix combinations with other herbicides registered for use on the above corn crops to enhance or broaden the spectrum of control of weeds listed in the "Weeds Controlled" section of this label (Tables 2 and 3).

#### **Use Restrictions**

- Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.
- Not for use in the states of Hawaii or Alaska, or in the U.S. territories (Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the North Mariana Islands).

#### **Groundwater/Irrigation Restrictions**

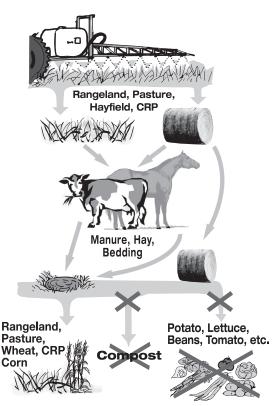
- Kyro must be used in a manner that will prevent back siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.
- DO NOT contaminate irrigation water used for crops other than corn or water used for domestic purposes.
- On the following soil types, DO NOT apply this product within 50 feet of any well where the depth to groundwater is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1 percent organic matter. See the figure for additional clarification.
- Do not use flood irrigation to apply or incorporate this product.
- Do not apply under conditions that favor runoff or wind erosion of soil containing this product to nontarget areas. To prevent off-site movement due to runoff or wind erosion:
  - Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.
  - Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered soils.
  - 3) Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.
- Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:
  - 1) Use low pressure application equipment capable of producing a large droplet spray.
  - Do not use nozzles that produce a fine droplet spray.
  - 3) Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
  - Keep ground-driven spray boom as low as possible above the target surface.
  - 5) Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when gusts approach 15 mph.
  - 6) Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Do not spray during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.



This product must not be mixed or loaded, or used within 50 feet of all wells, including abandoned wells, drainage wells, sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities DO NOT apply to vehicles when delivering pesticide shipments to the mixing/loading site. Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

- **DO NOT** apply this product through any type of irrigation system.
- This product is persistent and may be present in treated plant materials
  for months to years after application. Do not sell or transport treated
  plant materials or manure from animals that have grazed on treated
  plant materials off-site for compost distribution or for use as animal
  bedding/feed for 18 months after application.
- Manure from animals that have grazed or eaten forage or hay harvested from treated areas within the previous three days may only be applied to the fields where the following crops will be grown: pasture grasses, grass grown for seed, wheat and corn.
- Animals that have been fed clopyralid-treated forage must be fed forage free of clopyralid for at least 3 days before movement to an area where manure may be collected or sensitive crops are grown.

## **Forage and Manure Management**



Warning: Do not move treated plant materials or manure from animals who have grazed on treated plant materials to sites where manure may be collected or sensitive crops are grown.

For more information on how to manage clopyralid treated materials and to prevent clopyralid from contaminating compost please visit <a href="https://www.epa.gov/ingredients-used-pesticide-products/registration-review-pyridine-and-pyrimidine-herbicides#compost">https://www.epa.gov/ingredients-used-pesticide-products/registration-review-pyridine-and-pyrimidine-herbicides#compost</a>.

#### Aerial Application

**DO NOT** apply Kyro using aerial application equipment unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.

## Mandatory Spray Drift Management

## **Ground Boom Applications**

- Applicators are required to select a nozzle and pressure that deliver coarse or coarser droplets in accordance with American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- User must only apply with the release height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### **Spray Drift Advisories**

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
- BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.
- IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

 Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### • BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### • SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

## • TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### Weed Resistance Management

Kyro contains the active ingredients acetochlor (Group 15), topramezone (Group 27), and clopyralid (Group 4) based on the mode of action classification system of the Weed Science Society of America. Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is a best practice. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance.

The continued effectiveness of this product depends on the successful implementation of a weed resistance management program.

To aid in the prevention of developing weeds resistant to this product, users should:

- Start with a clean field, using either a burndown herbicide application or tillage.
- Scout fields before and after application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.
- If using post-emergence herbicides or tank mixes, control weeds early when they are relatively small.
- Apply full rates of Kyro for the most difficult to control weed in the field at the specified time to minimize weed escapes.
- Scout fields after application to detect weed escapes or shifts in control
  of weed species.
- Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Report any incidence of non-performance of this product against a particular weed to your local company representative, local retailer, or county extension agent.
- Contact your local company representative, crop advisor, or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. DO NOT assume that each listed weed is being controlled by multiple modes of action. Products with multiple active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.
- If resistance is suspected, treat weed escapes with an herbicide having a mode of action other than Group 15, Group 27 or Group 4 and/or use nonchemical methods to remove escapes, as practical, with the goal of preventing further seed production.
- Suspected herbicide-resistant weeds may be identified by these indicators:
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - A spreading patch of non-controlled plants of a particular weed species; and

 Surviving plants mixed with controlled individuals of the same species.

Additionally, users should follow as many of the following herbicide resistance management practices as is practical:

- Use a broad spectrum herbicide with other mode of action as a foundation in a weed control program, if appropriate.
- Utilize sequential applications of herbicides with alternative modes of action.
- Rotate the use of this product with non-Group 15, Group 27 and Group 4 herbicides.
- Avoid making more than two sequential applications of other Group 15, 27 or 4 herbicides within a single growing season unless mixed with an herbicide with a different mode of action with an overlapping spectrum for the difficult-to-control weeds.
- Incorporate non-chemical weed control practices; for example, mechanical cultivation, crop rotation, cover crops and weed-free crop seeds, as part of an integrated weed control program.
- Use good agronomic principles that enhance crop development and crop competitiveness.
- Thoroughly clean plant residues from equipment before leaving fields suspected to contain resistant weeds.
- Manage weeds in and around fields to reduce weed seed production.

Report any incidence of repeated non-performance of this product on a particular weed to your local Corteva Agriscience representative, retailer, or extension specialist.

Field Bioassay Instructions: In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample field conditions, such as soil texture, soil pH, drainage, and any other variable that could affect the seed bed of the new crop. Field bioassay at any time prior to the planting of the intended rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination) chlorosis (yellowing), necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, wait one year before repeating bioassay or plant only a labeled crop or crop listed in the table below for which the rotational interval has clearly been met.

#### **Rotational Crop Restrictions:**

When Kyro is applied as directed on this label, follow the crop rotation intervals in Table 1. If Kyro is tank mixed or used sequentially with other products, follow the most restrictive product's crop rotation interval.

Table 1: Time Interval between Kyro Application and Replanting or Planting of Rotational Crop

	Rotational Interval (months) (2)  Kyro use rate			
Rotational crop (1)	up to 35 fl oz/acre	up to 45 fl oz/acre	up to 60 fl oz/acre	
Field corn Field seed corn Field silage corn Popcorn (all types)	Anytime <sup>(3)</sup>	Anytime (3)	Anytime (3)	
Wheat	4	4	4	
Alfalfa (4) Barley Oats Peanut (5) Rice Rye Sorghum (6) Soybean (5) Sunflower (5) Sweet corn	10.5	10.5	10.5	
Cotton (7)	12	12	12	
All other rotational crops	18	18	18	

- (1) For best results, conduct a field bioassay prior to planting any broadleaf crops that are not listed.
- (2) Precaution: The above intervals are based upon average annual precipitation regardless of irrigation practices. Observance of listed crop rotation intervals should result in adequate safety to rotational crops. However, this product is dissipated in the soil by microbial activity and the rate of microbial activity is dependent upon several interrelating factors including soil moisture, temperature, and organic matter. Therefore, accurate prediction of rotational crop safety is not possible. In areas of low organic matter (<2%) and less than 15 inches average annual precipitation, potential for crop injury may be reduced by burning or removal of plant residues, supplemental fall irrigation and deep moldboard plowing prior to planting the sensitive crop.

- (3) Do not make a second application if the original corn crop is lost.
- (4) Idaho, Nevada, Oregon, Utah, and Washington: 12 months, areas receiving greater than 18 inches of annual rainfall, excluding irrigation; 18 months, areas receiving less than 18 inches of annual rainfall, excluding irrigation. All other states: 10.5 months.
- (5) Idaho, Nevada, Oregon, Utah, and Washington: 12 months, areas receiving greater than 18 inches of annual rainfall, excluding irrigation; 18 months, areas receiving less than 18 inches of annual rainfall, excluding irrigation. All other states: 10.5 months for soils greater than 2% organic matter AND rainfall more than 15 inches during 12 months following applications; 18 months for soils less than 2% organic matter and rainfall less than 15 inches during 12 months following applications.
- (6) Idaho, Nevada, Oregon, Utah, and Washington: 12 months. All other states: 10.5 months.
- (7) Follow a 12-month crop rotation due to the potential for crop injury unless previous experience has shown no crop injury with the minimum 10.5-month rotation interval. **Restriction:** For these crops, a minimum 10.5-month rotation interval must be observed.

#### **Rotation to Non-Food and Non-Feed Winter Cover Crops:**

Following harvest of corn treated with Kyro, only non-food or non-feed winter cover crops may be planted. Do not graze or harvest rotational cover crops for food or animal feed for 18 months following the last application of Kyro. This prohibition does not apply to winter wheat, which may be planted 4 months following the last application of Kyro.

## **Application Directions**

#### **Carriers**

Use only clean water as the carrier when applying Kyro after corn emergence. Do not use liquid fertilizer as the carrier or severe crop injury may occur.

## Adding Kyro to the Spray Tank

The spray tank must be clean, thoroughly rinsed and decontaminated before adding either Kyro alone or with tank mix combinations.

**Kyro Applied Alone:** When Kyro is used alone, add the specified amount of Kyro to the spray tank when the tank is half filled and then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform mixture.

Kyro Applied in Tank Mixtures: Refer to the sections of this label for recommended tank mixes. Always refer to labels of the tank mix partners for mixing directions and precautions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Do not exceed label dosage rates nor combined maximum seasonal doses for acetochlor, topramezone, or clopyralid. Kyro cannot be mixed with any product bearing a label prohibition against such mixing. If a tank mixture is used, a compatibility test must be done. See Appendix I for details on the procedure for such a test.

If the tank mix partner is compatible, fill the tank 1/2 to 3/4 of clean water. Start and continue agitation throughout mixing and spraying operation. All return lines to the spray tank must discharge below the liquid level to prevent foaming. Prepare the tank mix components and add them in the following order by formulation type:

- 1. Fill the spray tank with 1/2 to 3/4 of clean water and start agitation.
- While maintaining agitation, add products by formulation type in the order listed below. Allow sufficient time (2–3 min) between products to disperse products properly.
  - Dry products: Water Soluble Bags (WSB), Soluble Granules (SG), Water Dispersible Granules (WG), and Wettable Powders (WP)
  - These products must first be fully pre-dispersed in water prior to adding to spray tank
  - Suspensions: Capsule Suspensions (CS), Suspension Concentrates (SC) or Flowables, and ZC formulations (combination of CS and SC; Kyro is a ZC)
  - SuspoEmulsion (SE)
  - Oil Dispersion (OD)
  - Oil-in-water emulsions (EW)
  - Emulsifiable Concentrates (EC)
  - Soluble Liquids (SL)
- 3. Add adjuvants, if needded.
- Add micronutrients last, if possible, to provide best tank mix compatibility.
- Complete filling the sprayer tank and continue agitation. Apply as soon as possible after spray mixture is prepared. Do not leave the mixture in spray tank overnight without agitation or unattended.

**Note:** For all tank mixtures, maintain sufficient agitation during mixing and throughout application to ensure the spray mixture remains uniformly suspended. If the spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

## **Adjuvants**

When using an adjuvant with Kyro, it is recommended to use an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification program.

#### **Kyro Applied Alone:**

Use a crop oil concentrate (COC), high surfactant oil concentrate (HSOC), or methylated seed oil (MSO) with Kyro. Apply these oil-based adjuvant concentrates at 0.5% to 1.0% (0.5 to 1.0 gallons/100 gallons). Use the higher rate when applying during periods of hot, dry weather. Use of oil-type adjuvants (COC, HSOC, and MSO) increases the potential for necrosis a few days after treatment and occasionally crop height reduction.

#### OR

#### **Kyro Applied in Tank Mixtures:**

Use a nonionic surfactant (NIS) at 0.25% to 0.5% (1 to 2 quarts/100 gallons) with Kyro. Use the higher rate when making an application during periods of hot, dry weather. Oil-type adjuvants (COC, HSOC, and MSO) may be used in tank mixtures with Kyro. However, combinations with these adjuvants can cause elevated necrosis within a few days after treatment and occasionally crop height reduction. Oil-type adjuvants are not recommended when tank mixing with atrazine.

#### AND

## Nitrogen Fertilizer:

Recommended nitrogen-based fertilizers include urea ammonium nitrate (UAN; 28% or 32%) at 1.25 to 2.5 gallons per 100 gallons of water (1.25% to 2.5% v/v). Instead of liquid fertilizer, spray grade ammonium sulfate (AMS) at a minimum rate of 8.5 to 17 pounds per 100 gallons of water may be used. Use the higher rate when applying during periods of hot, dry weather.

## **Application Equipment**

#### **Ground Application:**

Spray nozzles should be uniformly spaced, the same size and type, and provide accurate and uniform application. Use spray nozzles that provide medium to coarse droplet size to avoid spray drift yet provide good coverage. Ensure that all in-line strainer and nozzle screens in the sprayer are 50-mesh or coarser. Use a pump that can maintain an operating pressure of at least 35-40 psi at the nozzles and provide proper agitation within the spray tank to keep the product dispersed. Lower pressures may be used with extended range or drift reduction nozzles as long as adequate spray coverage is maintained. Always make sure that agitation is maintained until spraying is completed, even if stopped for only brief periods of time. If agitation is stopped for more than five minutes, resuspend the spray solution by running at full agitation prior to spraying.

Good spray coverage of weeds is essential for optimum weed control. Boom height for broadcast over-the-top applications should be based on the height of the crop but set only high enough to provide uniform coverage with the spray nozzle used. Apply in a spray volume of 10-30 gallons per acre (GPA). When weed foliage is dense or corn approaches 11 inches in height, a minimum spray volume of 15 GPA is recommended. Use 80° or 110° flat fan nozzles for optimum postemergence coverage. Nozzles may be angled forward 45° to enhance penetration of the crop and provide better coverage. Do not use flood jet nozzles or controlled droplet application equipment for postemergence applications.

## **Spray Tank and Equipment Cleaning Recommendations**

- Completely drain the spray system, including pump, lines and spray boom.
- 2. Fill the spray tank with clean water to at least 10% of the total tank volume and circulate the rinsate through the entire system so that all internal surfaces are contacted with the rinsate for at least 15 minutes to complete the first rinse of the application equipment. Spray the solution out of the spray tank through the boom.
- Completely drain the spray system, including lines and spray boom. Remove filters/strainers and clean them separately.
- 4. During the second rinse, fill the container half full with clean water and then add a **commercial tank cleaner** at the manufacturer's recommended rates. Circulate the rinsate through the entire system for at least 20 minutes. Let the solution stand for several hours if possible. Again, circulate and flush the rinsate through the lines and boom.
- Completely drain and flush the spray system, including lines and spray boom.
- 6. Repeat step 2 above as third rinse.

Note: Rinsate may be disposed of onsite according to label use directions or at an approved waste disposal facility. Reduced results may occur if

water containing soil is used, such as visibly muddy water or water from ponds and ditches that is not clear.

## **Use Directions**

Kyro is applied postemergence in corn (field corn, field seed corn, field silage corn, popcorn) from emergence up to 24 inches tall for the control of many annual grasses and broadleaf weeds.

#### **Kyro Use Rates:**

Kyro can be used at rates from 35 to 60 fl oz/acre, depending on weed pressure and size. Kyro is most effective when applied to actively growing weeds that are 4 inches or less in height. See Tables 2 and 3 for the weeds controlled, rates required, and maximum heights.

For postemergence control of most grasses, a minimum use rate of 45 fl oz/acre of Kyro is required for grass weeds listed as controlled in Table 2. When rates below 45 fl oz/acre are applied, a tank mixture of Kyro + glyphosate or other postemergence grass control herbicide is recommended.

For postemergence control of broadleaf weeds larger than 4 inches in height and/or to provide extended residual control of germinating and emerging weeds, rates of 45 to 60 fl oz/acre should be used.

#### **Kyro Applied Alone:**

Kyro may be applied in conventional and herbicide-tolerant corn hybrids (field corn, field seed corn, field silage corn, and popcorn) after emergence through 24-inch tall corn. See the "Adjuvants" section of this label for adjuvant recommendations. Occasionally, corn leaves present at the time of application may exhibit necrotic spots, but new leaves, corn growth and development, and yield will not be affected. DO NOT apply postemergence to corn with liquid fertilizer as the carrier or severe crop injury may occur.

#### **Kyro Tank Mix Combinations:**

Kyro may be applied in tank mix combinations with labeled rates of other products registered for postemergence use in corn.

Consult the "Adjuvants" section of this label for recommendations when applying Kyro in tank mixtures to emerged corn. Use only those adjuvants approved for agricultural crop use. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### Kyro + Atrazine Tank Mixtures

To maximize the performance of Kyro, it is recommended to tank-mix Kyro with atrazine at 0.25 to 1.0 lb active ingredient/acre. Lower atrazine rates (0.25 to 0.5 lb active ingredient/acre) provide enhanced control of emerged weeds, while rates of 1.0 lb active ingredient/acre and higher provide additional soil residual control and potentially an additional effective mode of action to manage weed resistance. When using Kyro + atrazine, applications can be made to corn up to 12 inches tall.

#### Kyro + Glyphosate or Kyro + Glufosinate Tank Mixtures

To broaden the spectrum and improve postemergence control of some grass and broadleaf weeds, Kyro may be applied in a tank mixture with a glyphosate or glufosinate product that is registered for use in glyphosate-or glufosinate-resistant field corn. To minimize weed competition effects on the crop, apply Kyro + glyphosate or Kyro + glufosinate when weeds are 2-4 inches tall and before the corn reaches 24 inches in height (or the V6 growth stage if applying Kyro + glufosinate in glufosinate-resistant corn, whichever is most restrictive).

If the glyphosate or glufosinate product includes an adjuvant system (does not call for additional adjuvants), only spray-grade ammonium sulfate (AMS) at 8.5 lb/100 gallons should be added to this tank mixture. If the glyphosate product label calls for an adjuvant in addition to AMS, add a non-ionic surfactant (NIS) at 0.25% v/v and AMS to the mixture. **DO NOT** add urea ammonium nitrate (UAN) or crop oil concentrate (COC) adjuvants to mixtures with glufosinate or crop injury may occur. Follow all use directions and restrictions on the glyphosate or glufosinate product label.

#### **Use Precautions**

- Avoid spray overlap, as crop injury (chlorosis and necrotic spots on treated leaves) may result.
- Kyro controls or suppresses the growth of many emerged grass weeds present at application. To maximize control of grasses, Kyro should be used as a sequential treatment following a preemergence residual grass herbicide such as:

PRODUCT NAME	ACTIVE INGREDIENT(S)	EPA REG NO.
FulTime NXT	acetochlor; atrazine	62719-668
Keystone NXT	acetochlor; atrazine	62719-671
Keystone LA NXT	acetochlor; atrazine	62719-670
Resicore XL	acetochlor; mesotrione; clopyralid	62719-756
SureStart II	acetochlor; flumetsulam; clopyralid	62719-679
Surpass NXT	acetochlor	62719-672

See Tables 2 and 3 for a list of weeds controlled by Kyro.

- Where reference is made to weeds partially controlled, this can mean erratic or inconsistent control or efficacy at a level below what is generally considered acceptable for commercial weed control.
- Applied according to directions and under normal growing conditions, Kyro will not harm the treated crop. During early stages of growth, soil compaction, extended periods of cold, wet, hot, or dry weather, or insect feeding, plant disease, pesticide carryover, the use of certain soil-applied systemic insecticides, or improperly placed fertilizers or soil insecticides may weaken crop seedlings and stress crop growth. Kyro used under these conditions could result in crop injury.

#### **Use Restrictions**

CROPS	Maximum fl oz of Product/ Acre/Single Application	Maximum lb ai or ae/ Acre/Single Application	Maximum Number of Applications Per Year	Maximum fl oz of Product / Acre/Year	Maximum lb ai or ae/Acre/ Year	Preharvest interval
POST (from emergence up to 24 inches tall): field corn, field seed corn, field silage corn, popcorn	60 fl oz	1.30 lb ai acetochlor + 0.022 lb ai topramezone + 0.12 lb ae clopyralid	1	60 fl oz	1.30 lb ai acetochlor + 0.022 lb ai topramezone + 0.12 lb ae clopyralid	45 days for harvest of ears and forage 60 days for harvest for stover

- DO NOT use Kyro on any crop other than field corn (for grain, seed, or silage) or popcorn.
- Maximum Acetochlor Application Rates Per Calendar Year:

When tank mixing or sequentially applying products containing acetochlor to corn, **DO NOT** exceed an application rate of 3.00 lb active ingredient of acetochlor per acre per year. **Note:** For purposes of calculating total acetochlor active ingredient applied, Kyro contains 2.78 lb active ingredient acetochlor per gallon.

## • Maximum Topramezone Application Rates Per Calendar Year:

When tank mixing or sequentially applying products containing topramezone to corn, **DO NOT** exceed an application rate of 0.044 lb active ingredient of topramezone per acre per year. **Note:** For purposes of calculating total topramezone active ingredient applied, Kyro contains 0.046 lb active ingredient topramezone per gallon.

## • Maximum Clopyralid Application Rates Per Calendar Year:

When tank mixing or sequentially applying products containing clopyralid to corn, **DO NOT** exceed an application rate of 0.25 lb acid equivalent of clopyralid per acre per year. **Note:** For purposes of calculating total clopyralid acid equivalent applied, Kyro contains 0.247 lb acid equivalent clopyralid per gallon.

Preharvest Interval: DO NOT apply Kyro within 45 days of harvest for ears and forage or within 60 days of harvest for stover.

#### **Weeds Controlled**

Kyro applied as directed in this label will control or suppress the grass weeds listed in Table 2 and broadleaf weeds listed in Table 3. Additional weeds may be controlled with tank mixtures. See the "Kyro Tank Mix Combinations" section of this label for recommended tank mix combinations. Always consult the tank mix product labels for specific use rates and directions. Always follow the most restrictive label when tank mixing Kyro with another product. Kyro may be tank mixed with any other registered corn product as long as compatibility is verified and tank mixing is not prohibited by the tank mix product label.

Table 2: Grass Weeds Controlled or Partially Controlled by Postemergence Applications of Kyro

Grasses			
	Postemerge	ence Control	Residual Control
	45 fl oz/acre*	60 fl oz/acre	
	≤ 3 inch height	≤ 4 inch height	
Barnyardgrass	C <sup>1</sup>	С	С
Crabgrass, large	C <sup>1</sup>	C <sup>1</sup>	С
Crabgrass, smooth	C <sup>1</sup>	С	С
Cupgrass, prairie			С
Cupgrass, southwestern			С
Cupgrass, woolly	PC	С	PC
Crowfootgrass			С
Foxtail, giant	С	С	С
Foxtail, green	C <sup>1</sup>	С	С
Foxtail, yellow	PC	C <sup>1,2</sup>	С
Goosegrass	С	С	С
Johnsongrass (seedling)	PC	С	PC
Millet, foxtail			PC
Millet, wild proso	С	С	PC
Oats, wild			PC
Panicum, browntop			С
Panicum, fall	PC	C <sup>1,2</sup>	С
Panicum, Texas	PC	PC	PC
Rice, red			PC
Sandbur, field		PC	PC
Shattercane	PC	PC	PC
Signalgrass, broadleaf	PC	C <sup>1,2</sup>	PC
Witchgrass			С

C = Control, PC = Partial Control, -- = No Control

Table 3: Broadleaf Weeds Controlled or Partially Controlled by Postemergence Applications of Kyro.

Broadleaves				
	Postemergence Control			Residual Control
	35 fl oz/acre	45 fl oz/acre	60 fl oz/acre	
	≤ 4 inch height	≤ 4 inch height	≤ 6 inch height	
Amaranth, Palmer	С	С	С	С
Amaranth, Powell	С	С	С	С
Alfalfa, volunteer (seedling)	PC	С	С	
Beans, volunteer	С	С	С	
Beggarweed, Florida				С
Bindweed, field		PC	PC	
Buckwheat, wild			C <sup>1</sup>	
Buffalobur		PC <sup>1</sup>	PC <sup>1</sup>	
Burcucumber	С	C <sup>1,2</sup>	C <sup>1</sup>	
Carpetweed	С	С	С	С
Canola, volunteer	С	С	С	
Chickweed, common	С	С	С	
Clover species	С	С	С	
Cocklebur, common	С	С	С	
Dandelion, common		PC	PC	
Devil's-claw	C <sup>1,2</sup>	C <sup>1,2</sup>	C <sup>1</sup>	
Dock, curly			PC	
Galinsoga, hairy	С	С	С	

<sup>\*</sup>A minimum use rate of 45 fl oz/acre of Kyro is required for grass weeds listed as C = Control. When rates below 45 fl oz/acre are applied, a tank mixture of Kyro + glyphosate is recommended in glyphosate-tolerant corn.

<sup>&</sup>lt;sup>1</sup>The addition of atrazine at a minimum of 0.5 lb active ingredient/acre is required for control.

<sup>&</sup>lt;sup>2</sup>Apply before grass exceeds 3 inches in height.

Table 3: Broadleaf Weeds Controlled or Partially Controlled by Postemergence Applications of Kyro. (Cont.)

Broadleaves		Postemergence Control		Residual Control
	35 fl oz/acre 45 fl oz/acre 60 fl oz/acre		Tiooladai Gollaioi	
	≤ 4 inch height	≤ 4 inch height	≤ 6 inch height	
Henbit	C <sup>3</sup>	С	С	С
Horseweed (marestail)	C <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	
Jimsonweed	С	С	C	PC
Kochia	C <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	PC
Lambsquarters, common	С	С	С	PC
Lentils, volunteer	С	С	С	
Lettuce, prickly	C <sup>2</sup>	С	С	
Mallow, common	C <sup>1,2</sup>	C <sup>1,2</sup>	C <sup>1,2</sup>	
Mallow, Venice	C <sup>1,2</sup>	C <sup>1,3</sup>	C <sup>1,3</sup>	
Morningglory spp.	C <sup>1,2</sup>	C <sup>1,2</sup>	C <sup>1,2</sup>	
Mustard, wild	С	С	С	
Nightshade, black	С	С	С	С
Nightshade, eastern black	С	С	С	С
Nightshade, hairy	С	С	С	С
Peas, volunteer	С	С	С	
Pigweed, prostrate	С	С	С	С
Pigweed, redroot	С	С	С	С
Pigweed, smooth	С	С	С	С
Pigweed, tumble	C <sup>2</sup>	С	С	С
Purslane, common	PC <sup>2</sup>	PC <sup>2</sup>	C <sup>1</sup>	С
Pusley, Florida	C <sup>2</sup>	C <sup>2</sup>	С	С
Ragweed, common	С	С	С	PC
Ragweed, giant	С	С	С	
Shepherd's-purse	C <sup>2</sup>	С	С	
Sicklepod	PC <sup>1</sup>	PC <sup>1</sup>	PC <sup>1</sup>	
Sida, prickly	C <sup>1,2</sup>	C <sup>1,2</sup>	C <sup>1</sup>	PC
Smartweed, ladysthumb	PC <sup>1,2</sup>	C <sup>1,3</sup>	C <sup>1,3</sup>	PC
Smartweed, Pennsylvania	PC <sup>1,2</sup>	C <sup>1,3</sup>	C <sup>1,3</sup>	PC
Soybean, volunteer	С	С	С	
Sunflower, common	С	С	С	
Sunflower, volunteer	С	С	С	
Thistle, Canada	С	С	С	
Thistle, Russian	C <sup>2</sup>	С	С	
Velvetleaf	С	С	С	PC
Waterhemp, common	С	С	С	С
Waterhemp, tall	С	С	С	С

C = Control, PC = Partial Control, -- = No Control

## Appendix I

#### Tank Mix Compatibility Test

Complete a compatibility test before tank mixing to ensure compatibility of Kyro with other pesticides. The following test assumes a spray volume of 15 gallons per acre. For other spray volumes, make appropriate changes in the ingredients.

#### **Test Procedure:**

- Add 1.0 pint of carrier water to each of two 1-quart jars with tight lids. Note: Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
- To one of the jars, add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Compex or Unite (1/4 teaspoon is equivalent to 2.0 pints per 100 gallons of spray). Shake or stir gently to mix.
- 3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on specified label rates. If more than one pesticide is used, add them separately in the following order:
  - Dry products: Water Soluble Bags (WSB), Soluble Granules (SG), Water Dispersible Granules (WG), and Wettable Powders (WP)

- Suspensions: Capsule Suspensions (CS), Suspension Concentrates (SC) or Flowables, and ZC formulations (combination of CS and SC; Kyro is a ZC)
- SuspoEmulsion (SE)
- Oil Dispersion (OD)
- Oil-in-water emulsions (EW)
- Emulsifiable Concentrates (EC)
- Soluble Liquids (SL)
- 4. After each addition, shake or stir gently to thoroughly mix.
- 5. After adding all ingredients, put lids on and tighten and invert each jar ten times to mix. Let the mixtures stand 15-30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry pesticide(s) in water before addition, or (b) add 1/2 the compatibility agent to the water and the other 1/2 to the emulsifiable concentrate or flowable pesticide (if either formulation type is part of the tank mix) before addition to the mixture. If incompatibility is still observed, DO NOT use the mixture.

<sup>&</sup>lt;sup>1</sup>The addition of atrazine at a minimum of 0.5 lb active ingredient/acre is required for control.

<sup>&</sup>lt;sup>2</sup>Apply before weed exceeds 2 inches in height.

<sup>&</sup>lt;sup>3</sup>Apply before weed exceeds 3 inches in height.

6. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section of this label.

## **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent consistent with applicable law, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

## **Warranty Disclaimer**

Corteva Agriscience warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions for use, subject to the inherent risks set forth below. To the extent consistent with applicable law, Corteva Agriscience MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## **Inherent Risks of Use**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Corteva Agriscience or the seller. To the extent consistent with applicable law, Corteva Agriscience will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed by Corteva Agriscience. To the extent consistent with applicable law, all such risks associated with non-directed use shall be assumed by buyer and/or user.

#### **Limitation of Remedies**

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on

contract, negligence, tort, strict liability, or other legal theories), shall be limited to, at Corteva Agriscience's election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

To the extent consistent with applicable law, Corteva Agriscience shall not be liable for losses or damages resulting from handling or use of this product unless Corteva Agriscience is promptly notified of such loss or damage in writing. To the extent consistent with applicable law, in no case shall Corteva Agriscience be liable for consequential, incidental or special damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Corteva Agriscience or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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## Produced for Corteva Agriscience LLC 9330 Zionsville Road Indianapolis, IN 46268

Label Code: CD02-233-021 Replaced Label: CD02-233-020 EPA accepted 04/23/25

#### **Revisions:**

- Revised referral statement to: "Refer to inside of label booklet for additional precautionary information and Directions for Use."
- Added "Field Bioassay Instructions" above Rotational Crop Interval (months) Table:
- ) Revised Rotational Crop Interval (months) Table:
- a. Added "Sweet corn" to Rotations crop 10.5 section.
- b. Added Footnotes No. 1 and 2.
- c. Removed Florida information in Footnote No. 4.
- d. Added Footnote No. 5 and reference to "Peanut"
- e. Added Footnote No. 7 and related it to "Cotton".
- f. Removed "High Plains" footnote.
- Warranty Disclaimer Section" Added "for use" after "directions" in first sentence.
- 5) Throughout label, corrected spelling and punctuation errors.