

GRASSES GROWN FOR SEED - VOLUNTEER POTATOES

General Information

GENERAL INFORMATION

COLT AS herbicide is intended for control of annual and perennial broadleaf weeds in wheat, barley, and oats not underseeded with a legume, field corn, sweet corn, grass grown for seed, Conservation Reserve Program (CRP) acreage, and non-cropland.

APPLICATION PRECAUTIONS AND RESTRICTIONS

- Do not apply COLT AS directly to, or allow spray drift to come in contact with broadleaf crops or other susceptible broadleaf plants, including, but not limited to, alfalfa, canola, beans, cotton, flowers, grapes, lettuce, lentils, mustard, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes, vegetables, or other desirable broadleaf crops or ornamental plants or soil where sensitive crops will be planted the same season.
- Avoid application where proximity of susceptible crops or other desirable plants is likely to result in exposure to spray or spray drift.
- Do not contaminate irrigation ditches or water used for domestic purposes.
- Chemigation: Do not apply this product through any type of irrigation system.
- Many forbs (desirable broadleaf forage plants) are susceptible to COLT AS. Do not spray CRP or non-cropland containing desirable forbs, especially legumes, unless injury can be tolerated.
- Do not transfer livestock from treated grazing areas (or feeding of treated hay) to sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture (or feeding of untreated hay). If livestock are transferred within less than 7 days of grazing untreated pasture or eating untreated hay, urine and manure may contain enough clopyralid to cause injury to sensitive broadleaf plants.
- Do not use on newly seeded areas until grass is well established as indicated by vigorous growth and development of tillers and secondary roots.

- 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 variability in field conditions such as soil texture, soil organic matter, soil pH, or drainage. The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination) chlorosis (yellowing), and 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, do not plant the field to the test rotational crop; plant only a labeled crop or crop listed in the table below for which the rotational interval has clearly been met.

Crop Rotation Intervals

Residues of COLT AS in treated plant tissues, including the treated crop or weeds, which have not completely decayed may affect succeeding susceptible crops.

Crop Rotation Intervals for All States Except California, Idaho, Nevada, Oregon, Utah and Washington

Barley, grasses, field corn, oats, sweet corn, wheat: Rotation Interval: Anytime

Canola (rapeseed), cole crops (Brassica species), flax, garden beet, popcorn, spinach, sugar beet, Rotation Interval:turnip 120 days

Alfalfa, asparagus, dry beans, field peas (2), grain sorghum, mint, onions, safflower, soybeans, strawberries, sunflowers Rotation Interval:10.5 months

Chick peas, lentils, potatoes (including potatoes grown for seed), and broadleaf crops grown for seed (excluding Brassica species) Rotation Interval:18 months

1. A field bioassay is recommended prior to planting any broadleaf crops that are not listed. Do not rotate to unlisted crops prior to 10.5 months following application.
2. For rotation to field peas in 10.5 months, precipitation must be greater than 7.0 inches during the 10.5 months following application of COLT AS herbicide and greater than 5.5 inches during the June 1 through August 31 time period following application. Otherwise, rotation to field peas is recommended 18 months following application.

Crop Rotation Intervals for California, Idaho, Nevada, Oregon, Utah and Washington

only

Barley, grasses, field corn, oats, sweet corn, wheat Rotation Interval: Anytime

Canola (rapeseed), cole crops (includes Brassica species grown for seed), flax, garden beet, popcorn, spinach, sugar beet, turnip Rotation Interval:120 days

Alfalfa, asparagus, dry beans, grain sorghum, mint, onions, soybeans, strawberries, sunflowers Rotation Interval:12 months

Broadleaf crops grown for seed (excluding Brassica species), carrots, celery, cotton, lentils, lettuce, melons, peas, potatoes (including potatoes grown for seed), safflower, and tomatoes Rotation Interval:18 months

1.A field bioassay is recommended prior to planting any broadleaf crops that are not listed. Do not rotate to unlisted crops prior to 12 months following application.

Note: The above crop rotation intervals are based on average annual precipitation, regardless of irrigation practices. Observance of recommended crop rotation intervals should result in adequate safety to rotational crops. However, COLT AS herbicide is dissipated in the soil by microbial activity and the rate of microbial activity is dependent on 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 (<2.0%) 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.

AVOIDING INJURY TO NON-TARGET PLANTS

This product can affect susceptible broadleaf plants directly through foliage and indirectly by root uptake from treated soil. Do not apply COLT AS herbicide directly to, or allow spray drift to come in contact with broadleaf crops, including, but not limited to alfalfa, canola, beans, cotton, flowers, grapes, lettuce, lentils, mustard, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes, vegetables, or other desirable broadleaf crops or ornamental plants or soil where sensitive crops will be planted the same season.(See guidance in section entitled "Crop Rotation Intervals".)

Residues in Plants or Manure: Do not use plant residues, including hay or straw from

treated areas, or manure or bedding straw from animals that have grazed or consumed forage from treated areas, for composting or mulching, where susceptible plants may be grown the following season. Do not spread manure from animals that have grazed or consumed forage or hay from treated areas on land used for growing susceptible broadleaf crops. To promote herbicidal decomposition, plant residues should be evenly incorporated or burned. Breakdown of clopyralid in crop residues or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.

Avoid Movement of Treated Soil: Avoid conditions under which soil from treated areas may be moved or blown to areas containing susceptible plants. Wind-blown dust containing clopyralid may produce visible symptoms, such as epinasty (downward curving or twisting of leaf petioles or stems) when deposited on susceptible plants; however, serious injury is unlikely. To minimize potential movement of clopyralid on wind-blown dust, avoid treatment of powdery dry or light sandy soils until soil has been settled by rainfall or irrigation or irrigate shortly after application.

PRECAUTIONS FOR AVOIDING SPRAY DRIFT

Spray drift, even very small quantities of the spray that may not be visible, may severely injure susceptible crops whether dormant or actively growing. When applying COLT AS, use low-pressure equipment capable of producing sprays of uniform droplet size with a minimum of fine spray droplets. Under adverse weather conditions, fine spray droplets that do not settle rapidly onto target vegetation may be carried a considerable distance from the treatment area. A drift control or spray thickening agent may be used with this product to improve spray deposition and minimize the potential for spray drift. If used, follow all use recommendations and precautions on the product label.

Ground Applications: To minimize spray drift, apply COLT AS in a total spray volume of 8 or more gallons per acre using spray equipment designed to produce large-droplet, low pressure sprays. Refer to the spray equipment manufacturer's recommendations for detailed information on nozzle types, arrangement, spacing and operating height and pressure. Spot treatments should be applied only with a calibrated boom to prevent over application. Operate equipment at spray pressures no greater than is necessary to produce a uniform spray pattern. Operate the spray boom no higher than is necessary to produce a uniformly overlapping pattern between spray nozzles. Do not apply with hollow cone-type insecticide nozzles or

other nozzles that produce a fine-droplet spray.

Aerial Application: To minimize spray drift, apply COLT AS in a total spray volume of 3 or more gallons per acre. Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high potential for temperature inversion. Spray drift from aerial application can be minimized by applying a coarse spray at spray boom pressure no greater than 30 psi; by using straight-stream nozzles directed straight back; and by using a spray boom no longer than 3/4 the rotor or wing span of the aircraft. Spray pattern and droplet size distribution can be evaluated by applying sprays containing a water-soluble dye marker or appropriate drift control agents over a paper tape (adding machine tape). Mechanical flagging devices may also be used.

Do not apply under conditions of a low level air temperature inversion. A temperature inversion is characterized by little or no wind and lower air temperature near the ground than at higher levels. The behavior of smoke generated by an aircraft mounted device or continuous smoke column released at or near site of application will indicate the direction and velocity of air movement. A temperature inversion is indicated by layering of smoke at some level above the ground and little or no lateral movement.

APPLICATION DIRECTIONS

Application Timing

Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at, or following application may reduce weed control and increase the risk of crop injury at all stages of growth. Only weeds that have emerged at the time of application will be controlled. If foliage is wet at the time of application, control may be decreased. Applications of COLT AS herbicide are rainfast within 6 hours after application.

Effect of Temperature on Herbicidal Activity

Herbicidal activity of COLT AS is influenced by weather conditions. Optimum activity requires active plant growth. The temperature range for optimum herbicidal activity is 55°F to 75°F. Reduced activity will occur when temperatures are below 45°F or above 85°F. Frost before application (3 days) or shortly after (3 days) may reduce

weed control and crop tolerance.

Application Rates

Generally, application rates at the lower end of the recommended rate range will be satisfactory for young, succulent growth of susceptible weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds), the higher rates within the rate range will be needed. Weeds in fallow land or other areas where competition from crops is not present will generally require higher rates for control or suppression.

Spray Coverage

Use sufficient spray volume to provide thorough coverage and a uniform spray pattern. Do not broadcast apply in less than 3 gallons of total spray volume per acre. For best results and to minimize spray drift, apply in a spray volume of 10 gallons or more per acre. As vegetative canopy and weed density increase, spray volume should be increased to obtain equivalent weed control. Use only nozzle types and spray equipment designed for herbicide application. To reduce spray drift, follow precautions under "Avoiding Injury to Non-Target Plants."

Adjuvants

Generally, this product does not require the use of an adjuvant to achieve satisfactory weed control. However, the addition of an adjuvant may optimize herbicidal activity when applications are made (a) at lower use rates or lower carrier volumes, (b) under conditions of cool temperature, low relative humidity or drought, or (c) to small, heavily pubescent kochia.

Use with Sprayable Liquid Fertilizer Solutions

COLT AS is compatible with most non-pressurized liquid fertilizer solutions, however, if liquid fertilizer solutions are to be applied with COLT AS, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when the water source changes, or when tank mixture ingredients or concentrations are changed. A compatibility test is performed by mixing the spray components (in the desired order and proportions) into a clear glass jar before mixing in the spray tank. Use of a compatibility aid such as E-Z Mix or Compex may help obtain and maintain a uniform spray solution during mixing and application. Agitation in the spray tank must be vigorous to compare with jar test agitation. For best results, liquid fertilizer should not exceed 50% of the

total spray volume. Premix COLT AS with water and add to the liquid fertilizer/water mixture while agitating contents of the spray tank. Apply the spray the same day it is prepared while maintaining continuous agitation.

Advisory: Foliar-applied liquid fertilizers, used as a carrier for COLT AS, can cause yellowing or leaf burn of crop foliage.

Spot Treatments

To prevent misapplication, it is recommended that spot treatments be applied only with a calibrated boom or with hand sprayers according to directions provided below.

Hand-Held Sprayers: Hand-held sprayers may be used for spot applications. Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on an area of 1,000 sq ft. Mix the amount of COLT AS (fl oz or ml) corresponding to the desired broadcast rate in 1 or more gallons of spray. To calculate the amount of COLT AS required for larger areas, multiply the table value (fl oz or ml) by the area to be treated in “thousands” of square feet, e.g., if the area to be treated is 3,500 sq ft, multiply the table value by 3.5 (calc. $3,500 \div 1,000 = 3.5$). An area of 1000 sq ft is approximately 10.5 x 10.5 yards (strides) in size.

Perennial weeds: COLT AS will control the initial top growth and inhibit regrowth during the season of application (season-long control). At higher use rates shown on this label, COLT AS may cause a reduction in shoot regrowth in the season following application; however, plant response may be inconsistent due to inherent variability in shoot regrowth from perennial root systems.

Management of Kochia Biotypes: Research has suggested that many biotypes of kochia can occur within a single field. While kochia biotypes can vary in their susceptibility to COLT AS, all will be suppressed or controlled by the 1 pint per acre labeled rate. Application of COLT AS at rates below the 1 pint per acre rate can result in a shift to more tolerant biotypes within a field.

Best Resistance Management Practices: Extensive populations of dicamba tolerant kochia have been identified in certain small grain and corn production regions (such as Chouteau, Fergus, Liberty, Toole, and Treasure counties in the state of Montana). For optimal control of dicamba tolerant kochia in these counties, COLT AS is recommended at a minimum rate of 1.33 pint per acre. In addition, use of COLT AS

should be rotated with products that do not contain dicamba to minimize selection pressure. Use of these practices will preserve the utility of COLT AS for control of dicamba tolerant kochia biotypes.

Limitations, Restrictions, and Exceptions

GRASSES GROWN FOR SEED

Application Timing: Apply to established grasses in the spring from the tiller stage prior to early boot stage. New grass seed plantings may be treated from the 2 true leaf stage to just before early boot stage of growth. Applications in the boot stage and beyond can result in increased potential for injury. Do not apply to bentgrass unless injury can be tolerated. Apply when weeds are actively growing, but before weeds are 4 inches tall or vining. For control of late-emerging Canada thistle or kochia, a preharvest treatment may be made after grass seed is fully developed. Treatment of Canada thistle at the bud stage or later, or treatment of kochia greater than 8 inches tall may result in less consistent control. Post-harvest treatments in the fall may be made to actively growing Canada thistle after the majority of basal leaves have emerged.

In newly seeded grass stands with minimal crop competition, mayweed (dogfennel) and pineappleweed may not be adequately controlled.

Retreat as necessary, but do not exceed 2.66 pints per acre per growing season.

RESTRICTIONS:

- Grazing restrictions: There are no grazing restrictions for lactating or non-lactating dairy animals.
- Harvest restrictions: Do not harvest grass for hay or silage from treated areas within 7 days of application.
- Slaughter restrictions: Meat animals must be withdrawn from treated forage at least 2 days before slaughter.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

Rates

[field_rates 0](#)

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Restricted Entry Interval

12 hours

Timings

[Postemergence \(Crop\)](#)

[Post-harvest](#)

[Preharvest](#)

[Postemergence \(Weed\)](#)