

GRAIN SORGHUM (MILO)

General Information

WEED RESISTANCE

Any weed population may contain plants that are naturally resistant to fluroxypyr, the active ingredient in this product, and to other herbicides with the same mode of action. **ATTENTION:** These resistant weed biotypes will not be controlled by this product. Consult advisors such as your agricultural extension service for agronomic management practices to minimize the occurrence of fluroxypyr resistance and considerations for supplemental control measures.

Weed Management

To minimize the occurrence of fluroxypyr resistant biotypes, observe the following general weed management practices:

- Scout application site before and after herbicide applications.
- Start with a clean application site, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g. a selective and/or a residual herbicide) and cultural practices (e.g. tillage or crop rotation) where appropriate.
- Utilize the specified label rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or tank mixture directions that encourage application rates of this product below the label directions.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Report any incidence of repeated non-performance of this product on a particular weed to your local retailer or county extension agent.

Management of Fluroxypyr Resistant Biotypes

Since the occurrence of fluroxypyr resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control fluroxypyr resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of confirmed fluroxypyr resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

Product Information

This product provides control of broadleaf annual and perennial weeds, and certain woody plants and vines on

- Airports, barrow ditches, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, industrial sites, irrigation ditch banks, dry irrigation ditches or canals, military lands, mining and drilling areas, non-irrigation ditch banks, oil pads, parking lots, petroleum tank farms, pipelines, railroads, roadsides, storage areas, storm water retention areas, substations, unimproved rough turfgrasses, vacant lots and other non-crop residential areas;
- Natural areas (open space) for example, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas;
- Conifer and tree plantations;
- Rangeland and permanent grass pastures;
- Established turfgrass, including sod farms, residential lawns, golf courses, recreational, commercial and public turf areas;

- On-Farm non-cropland;
- CRP acres;
- Fallow cropland;
- Grasses grown for seed, forage, or hay;
- Small grains (wheat, barley, oats, triticale);
- Grain sorghum (Milo);
- Field corn;
- Sweet corn;
- Including grazed areas on all of these sites

USE PRECAUTIONS

- Management of Kochia Biotypes: Research has suggested that many biotypes of kochia can occur within a single population. While kochia biotypes can vary in their susceptibility to this product, all will be suppressed or controlled at 12 fl. oz. per acre provided application timing and growing conditions are optimal. Application of this product at rates of less than 6 fl. oz. per acre can result in a shift to more tolerant biotypes within a population.
- Avoid applications where proximity of susceptible plants or other desirable plants is likely to result in exposure to spray or spray drift.
- Minimize overspray to open water when treating target vegetation non-flowing, quiescent or transient water. Note: Consult local public water control authorities before applying this product around public water; permits may be required to treat such areas.

USE RESTRICTIONS

- Do not contaminate irrigation ditches or water used for domestic purposes.
- Maximum Application Rate: Do not apply more than 23 fl. oz. per acre of this product per year. Split applications of Alligare Flagstaff Herbicide may be made during a single year provided the total amount of product applied does not exceed the maximum labeled rate of 23 fl. oz. per acre.
- Grazing restrictions: There are no grazing restrictions for livestock, including lactating or non-lactating dairy animals.
- Harvest restrictions: Do not apply within 7 days of harvesting grass for hay or

silage from treated areas.

- Slaughter restrictions: Meat animals must be withdrawn from treated forage at least 2 days before slaughter.
- Chemigation: Do not apply this product through any type of irrigation system.
- In Arizona: The state of Arizona has not approved this product for use on plants grown for agricultural/commercial production; such as on designated grazing areas.
- Do not store or handle other agricultural chemicals with the same containers used for this product. Do not apply other agricultural chemicals or pesticides with equipment used to apply this product unless equipment has been thoroughly cleaned (see Clean- Out Procedures for Spray Equipment).
- Non-irrigation Ditch Banks and Seasonally Dry Wetland Sites: It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs), and transitional areas between upland and lowland sites. Do not apply directly to water and take precautions to minimize spray drift to water. For control of woody plants and broadleaf weeds in these sites, follow use directions and application methods on this label for the specific site being treated.
- Dry Irrigation Canals/Ditches: Do not apply Alligare Flagstaff Herbicide to the inner banks of dry irrigation canals/ditches unless a 120-day restriction on use of irrigation water can be observed or residue levels of fluroxypyr (active ingredient in Alligare Flagstaff Herbicide) are determined by laboratory analysis, or other appropriate means of analysis, to be 1 ppb or less. Do not apply on ditches or canals currently being used to transport irrigation water or that will be used for irrigation within 4 months following treatment.
- Do not apply to St. Augustine grass in the state of Florida.

Avoiding Drift Run-off to Surface Water or Adjacent Land

Apply this product strictly in accordance with the run-off precautions on this label in order to minimize off-site exposure and potential effects on aquatic organisms and non-target plants.

Under certain conditions, this product may have a potential to run-off to surface water or adjacent land. Use vegetation filter strips or treatment setbacks along

rivers, creeks, streams, wetlands, etc. or on the downhill side of treated areas where run-off could occur to minimize water runoff.

Avoiding Injurious Spray Drift

Spray drift produced during application is the responsibility of the applicator and care should be taken to minimize off-target movement of spray during application. A drift control agent suitable for agricultural use may be used with this product to aid in reducing spray drift but the first choice should be a coarser spray category nozzle set-up. If used, follow applicable use directions and precautions on the manufacturer's label.

Do not apply where drift may be a problem due to proximity to susceptible crops or other non-target broadleaf plants. Do not apply or otherwise permit this product or sprays containing this product to contact crops or other desirable broadleaf plants, including alfalfa, beans, cotton, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tobacco, tomatoes, and other vegetable crops, flowers, fruit trees, ornamentals, shade trees or other susceptible broadleaf plants. Do not permit spray mist or drift containing this product to contact susceptible plants because even very small quantities of the spray, that may not be visible, can cause severe injury during either active or dormant periods.

Do not use in or around greenhouses.

Ground Application: To minimize spray drift, apply this product in a total spray volume of 5 gallons or more per acre using spray equipment designed to produce coarse or larger droplets per ASAE S-572 standard. Refer to the spray equipment manufacturer's recommendations for detailed information on nozzle types, arrangement, spacing and operating height and pressure.

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 in Rights-of-Way (Helicopter Only): In rights-of-way areas, do not apply this product with fixed-wing aircraft.

Aerial Application in Rangeland, Permanent Grass Pastures, and Conifer and Tree

Plantations: Both fixed wing and helicopter equipment may be used to apply this product on rangeland, permanent grass pastures and conifer and tree plantations, but fixed wing aircraft require additional drift mitigation measures.

To minimize spray drift, apply Alligare Flagstaff Herbicide in a total spray volume of 3 gallons or more 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. Avoid applying 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 that does not exceed 75% of wing span or 90% of rotor diameter. For fixed wing aircraft, do not exceed 140 mph during the application. Do not apply more than 10 feet above the vegetation canopy unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Do not apply under conditions of a low level air temperature inversion. A temperature inversion is characterized by little or no wind and air temperature that is lower 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 and following time of application may reduce weed control. Only susceptible weeds that are emerged at the time of application will be controlled. If foliage is wet at the time of application, control may be decreased. Applications of Alligare Flagstaff Herbicide are rain-fast within 1 hour after application.

Effect of Temperature on Herbicidal Activity

Herbicidal activity of Alligare Flagstaff Herbicide is influenced by weather conditions. Optimum activity requires active plant growth. The temperature range for optimum herbicidal activity is 55°F to 85°F. Reduced activity will occur when

temperature is below 45°F. Frost before application (3 days) or shortly after (3 days) may reduce weed control.

Application Rates

Generally, application rates at the lower end of the specified rate range will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials, brush 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 growing in the absence of competition from other vegetation generally require higher rates to obtain satisfactory control or suppression.

Spray Coverage

Use sufficient spray volume to provide through coverage and a uniform spray pattern. Do not broadcast apply in less than 3 gallons per acre by air or 5 gallons per acre by ground equipment. Inadequate spray volume and coverage may result in decreased weed control. As vegetative canopy and weed density increase, increase spray volume to obtain equivalent weed control. Refer to manufacturer's directions for information on relationships between spray volume, and nozzle size and arrangement.

Spot Treatments

Spot treatments may be applied with a calibrated boom or hand sprayer according to directions provided in the label.

Hand-Held Sprayers: Hand-held or backpack sprayers may be used for spot applications of Alligare Flagstaff Herbicide if care is 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 Alligare Flagstaff Herbicide (fl. oz. or ml) listed in the table with 1 gallon or more of water and apply to an area of 1,000 sq. ft. To calculate the amount of product required for larger areas, multiply the table value (fl. oz. or ml) by the area 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 (Calculation: $3,500 \div 1,000 = 3.5$). An area of 1000 sq. ft. is approximately 10.5 x 10.5 yards in size.

Limitations, Restrictions, and Exceptions

Grain Sorghum (Milo)

Apply Alligare Flagstaff Herbicide as a broadcast treatment using ground equipment or by air. See the Product Information section for details on application timing, effect of temperature on herbicidal activity, application rates, spray coverage and instructions for spot application.

Alligare Flagstaff Herbicide may be applied in tank mix combination with labeled rates of other herbicides such as atrazine. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

- Suppression is expressed as a reduction in weed competition (reduced population or vigor) as compared to untreated areas. The degree of weed control and duration of effect may vary with weed size, density, application rate, coverage, and growing conditions before, during and after treatment.

Application Timing

- Pre-emergence: For no-till or burndown applications, apply to emerged weeds after planting, but prior to grain sorghum emergence.

- Post emergence: Alligare Flagstaff Herbicide may be broadcast applied from the 3-leaf growth stage of grain sorghum through the 7-leaf stage. Use drop nozzles and directed spray from the 8-leaf stage to boot stage. Drop nozzles should direct the spray toward the soil surface to avoid contact with grain sorghum foliage and reduce the potential for crop injury. Do not apply after boot stage.

- For both pre-emergence and postemergence applications, apply when weeds are actively growing, but before weeds are 8 inches tall and before wild buckwheat is vining. Only weeds that have emerged at the time of application will be controlled.

- To control heavy weed populations, a pre-emergence application may be followed by a post emergent application. Do not exceed two applications per season.

Restrictions:

- Do not make more than two applications or apply more than 0.7 pint per acre per crop season.

- Pre-Harvest Interval: Do not allow livestock to graze or harvest forage within 40

days of application.

- Do not apply within 70 days of harvesting grain or stover.

Tank Mixing: Alligare Flagstaff Herbicide may be applied alone or in tank mix combination with other herbicides registered for post emergence application in grain sorghum unless tank mixing is specifically prohibited by the label of the tank mix product. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Do not apply in combination with Ally herbicide.

Adjuvants: Generally, this product does not require the use of an adjuvant to achieve satisfactory weed control when applied alone. Adjuvants may be used when required by a tank mix partner. Follow all applicable directions on the label for the tank mix partner. Use of a high quality adjuvant may improve weed control under hot, dry conditions.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Pre-Harvest Interval

Forage: 40 days

Grain or Stover: 70 days

Restricted Entry Interval

24 hours

Timings

[Postemergence \(Weed\)](#)