CONIFER SITE PREPARATION - RED PINE

General Information

GENERAL INFORMATION

Alligare SFM Extra is a dispersible granule that is mixed in water and applied as a spray or impregnated on dry, bulk fertilizer for the following uses:

- In conifer plantations and non-crop sites for control of many annual and perennial grasses and broadleaf weeds.
- For general weed control on terrestrial non-crop sites and for selective weed control in certain types of unimproved turf grasses on these same sites.
- For control of certain woody plants, vines and herbaceous weeds in site preparation and release of various conifers.
- Tank mixed with other herbicides registered for use in conifer plantations and noncrop sites: When tank mixing, use the most restrictive limitations from the labeling of both products.

Alligare SFM Extra may be applied to non-crop sites and conifer plantations that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. Intermittently flooded low lying sites, seasonally dry flood plains, transitional areas between upland and lowland sites, marshes, swamps, bogs and seasonally dry flood deltas may be treated when no water is present. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

Herbaceous weeds are controlled by both preemergence and postemergence activity with best results obtained when the application is made before or during the early stages of weed growth before weeds develop an established root system. For best results on undesirable hardwoods and vines, apply as a foliar spray between full leaf expansion in the spring and normal defoliation in the fall.

For preemergence control, moisture is required to move Alligare SFM Extra into the

root zone of weeds. For best postemergence results, apply Alligare SFM Extra to young, actively growing weeds. Weed species, size at application and soil texture determines the use rate recommended, and the degree and duration of control may depend on the following:

- Weed size at time of application
- Weed infestation intensity and spectrum
- Environmental conditions at and following treatment
- Soil pH, soil moisture, and soil organic matter

Use the higher rates listed on established plants and on fine-textured soils and the lower rates listed on smaller weeds and coarse-textured soils.

A drift control agent may be used at the manufacturer's recommended rate in the application of Alligare SFM Extra.

Alligare SFM Extra is non-corrosive, nonflammable, nonvolatile, and does not freeze.

USE PRECAUTIONS

Do not apply more than a total of 6 ounces of sulfometuron methyl per acre per year when applying Alligare SFM Extra alone or in combination with other products containing sulfometuron methyl.

Do not apply more than a total of 2.4 ounces of metsulfuron methyl per acre per year when applying Alligare SFM Extra alone or in combination with other products containing metsulfuron methyl.

Do not apply more than 10 2/3 ounces of Alligare SFM Extra per acre per year.

Do not use on food or feed crops.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

Alligare SFM Extra rapidly inhibits the growth of susceptible weeds by being absorbed through both the roots and foliage of plants when applied as a spray. Alligare SFM Extra is absorbed primarily via the roots when applied on dry fertilizer. Two to 3 weeks after application to weeds the growing points turn reddish-purple and leaf growth slows. Within 4 to 6 weeks of application, leaf veins and leaves

become discolored followed by the growing points dying.

Cold, dry conditions will delay the herbicidal activity of Alligare SFM Extra while warm, moist conditions following application will accelerate it. Vines, undesirable hardwoods and weeds hardened-off by drought stress are less susceptible to Alligare SFM Extra. For preemergence weed control, moisture is necessary to move Alligare SFM Extra into the soil.

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominate in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem areas using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tankmix partners and or sequential herbicide applications that have a different site of action. Do not let weed escapes go to seed. If applicable see Weeds Controlled section of label for additional information on managing herbicide resistant weed biotypes.

INTEGRATED PEST MANAGEMENT

This product may be used as a part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

DIRECTIONS FOR USE

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

Alligare SFM Extra should be used only in accordance with recommendations on the label or in Alligare SFM Extra supplemental labeling. 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 in your State responsible for pesticide regulation.

Alligare, LLC is not responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by Alligare, LLC. The user assumes all risks associated with any non-recommended uses.

GRASS REPLANT INTERVALS

The following grasses may be replanted following Alligare SFM Extra treatments at use rates up to 2 ounces per acre:

Alta fescue, Smooth brome, Meadow foxtail, Sheep fescue, Orchardgrass, Western wheatgrass

The recommended intervals are for soils with a pH less that 7.5; soils having a pH greater than 7.5 require longer intervals. Recommended intervals are for applications made in the spring.

Applications made in the fall should consider the intervals as beginning in the spring following treatment because Alligare SFM Extra degradation is slowed by cold or frozen soils.

Testing indicates that there is considerable variation in response among species of grasses when seeded into areas treated with Alligare SFM Extra. If species other than those listed above are to be planted into areas treated with Alligare SFM Extra, previous experience may be used to determine the feasibility of replanting treated areas or a field bioassay should be performed.

ADDITIONAL USE INSTRUCTIONS FOR CONIFER PLANTATIONS, NON-CROP SITES AND TURF

APPLICATION

GROUND

When applying Alligare SFM Extra as a broadcast or directed spray, use a delivery system and sufficient volume of water that will ensure thorough coverage and a uniform spray pattern.

Before applying, be sure to calibrate the sprayer. To avoid injury to desired species, avoid overlapping and shut off spray booms when starting, turning, slowing, or stopping.

AIR

Use a delivery system and sufficient volume of water that will ensure thorough coverage and a uniform spray pattern. Before applying, be sure to calibrate the sprayer. To avoid injury to desired species, avoid overlapping and shut off spray booms when starting, turning, slowing, or stopping.

IMPORTANT PRECAUTIONS FOR CONIFER PLANTATIONS, NON-CROP SITES AND TURF

Failure to observe the following may result in injury to or loss of desirable trees or other plants:

- Do not drain or flush on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Exposure to Alligare SFM Extra may injure or kill most crops. Injury to crops may result if treated soil is washed, blown or moved onto land used to produce crops. Off target movement and possible damage to susceptible crops when soil particles are moved by wind or water may occur when treating powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment. Injury may be more severe when the crops are irrigated. Do not apply Alligare SFM Extra if these conditions are present and powdery, dry soil or light or sandy soil are known to be prevalent in the area to be treated.
- Crop injury may occur if applications are made where runoff water flows onto agricultural land and treated soil should be left undisturbed to reduce the potential

for Alligare SFM Extra movement by soil erosion caused by wind or water. During periods of rainfall, applications made to soils saturated with water, soils through which rainfall will not readily penetrate, or surfaces paved with materials such as asphalt or concrete may result in runoff and movement of Alligare SFM Extra. Do not treat frozen soil.

Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla and Conejos.

Do not use this product in California.

Do not apply through any type of irrigation system.

Keep from contact with fertilizers, insecticides, fungicides and seeds.

Do not use on lawns, walks, driveways, tennis courts, or similar areas.

Do not apply in or on irrigation ditches or canals including their outer banks.

Unless specifically directed by supplemental labeling, do not use the equipment used to mix or apply Alligare SFM Extra on crops. When applied on fertilizer, do not use the impregnation, transport or application equipment to make subsequent applications to crops; the mixing and application equipment may be used for conifer plantations and non-crop applications only.

Do not plant the treated site with a crop for at least one year after the Alligare SFM Extra application if non-crop or conifer plantation sites treated with Alligare SFM Extra are to be converted to a food, feed, or fiber agricultural crop or to a horticultural crop. A field bioassay must then be completed prior to planting to crops. To conduct a field bioassay, grow to maturity test strips of the crop(s) you plan to grow the following year. The test strips should cross the entire field including knolls and low areas. Crop response to the bioassay will indicate whether or not it is safe to plant the crop(s) grown in the test strips. In the case of suspected off-site movement of Alligare SFM Extra to cropland, in addition to conducting the above described bioassay, soil samples should be quantitatively analyzed for Alligare SFM Extra or any other herbicide that may cause an adverse effect on the crop.

Refer in the label regarding tank mix information.

Limitations, Restrictions, and Exceptions

CONIFER PLANTATIONS

APPLICATION INFORMATION

Alligare SFM Extra controls certain undesirable woody plants, vines, and many broadleaf weeds and grasses in conifer plantation sites when applied as a spray using ground equipment or a helicopter. Alligare SFM Extra controls woody plants and vines by postemergent foliar activity when applied as a spray, with the best results obtained when applied between full leaf expansion in the spring and normal defoliation in the fall.

To control broadleaf weeds and grasses, Alligare SFM Extra may be applied in impregnated fertilizer by using ground equipment or by air (helicopter or fixed wing aircraft).

Alligare SFM Extra may be tank mixed with other herbicides registered for use in conifer plantations. When tank mixing, always be sure to follow the most restrictive limitations from the labels of the tank mix partners.

APPLICATION TIMING

Apply Alligare SFM Extra sprays before herbaceous weeds emerge or shortly thereafter for control of broadleaf weeds and grasses. For impregnated fertilizer applications, apply before weeds emerge.

APPLICATION RATES

Apply Alligare SFM Extra at the rates indicated by conifer species. Use a lower rate on coarse-textured soils (i.e., loamy sands, sandy loams) and a higher rate on fine textured soils (i.e. sandy clay loams and silty clay loams).

WEEDS CONTROLLED

When applied at the rates specified, Alligare SFM Extra effectively controls or suppresses the weeds and vines listed under the "Weeds Controlled" listing in the Non-Crop section of the label.

BROADCAST APPLICATION

Applications may be made by ground or by air using either a helicopter or fixed wing aircraft. For uniform distribution, accurate calibration of the application equipment is essential.

Overlaps or skips between adjoining swaths or non-uniform distribution of impregnated fertilizer within the swath will deliver poor results and may result in tree injury or mortality.

IMPORTANT PRECAUTIONS

CONIFER PLANTATIONS ONLY

Conifers suffering from loss of vigor caused by insects, disease, drought, winter damage, animal damage, excessive soil moisture, planting shock, previous agricultural practices, or other stresses may be injured or killed if Alligare SFM Extra is applied.

Following transplanting, applications of Alligare SFM Extra made after transplanting should only be made after adequate rainfall has closed the planting slit and settled the soil around the roots.

Do not apply Alligare SFM Extra to conifers grown for Christmas trees or ornamentals.

When making over the top applications for herbaceous weed control in conifer seedlings in the spring after transplanting, do not use a surfactant with Alligare SFM Extra. When targeting specific weed problems such as undesirable hardwoods, a surfactant specifically registered for conifer release may be used. Refer to the surfactant label for recommended use rates.

Alligare SFM Extra applications may result in damage and mortality to other species of trees when they are present on sites with those listed in the preceding recommendations for conifer plantation uses.

CONIFER SITE PREPARATION

APPLICATION BEFORE TRANSPLANTING

To control specified hardwoods, vines, broadleaf weeds and grasses, make all applications before transplanting. To improve control of targeted pests, add a

surfactant at the rate specified on the manufacturer's label or in tank mixes as limited by the companion product label.

Other species of conifers may be planted providing the user has experience indicating acceptable tolerance to Alligare SFM Extra. Without prior experience, before large-scale plantings are made it is recommended that small area plantings be tested for tolerance to Alligare SFM Extra. The user accepts all responsibility for injury on any conifer species not listed in the label.

When to Transplant into Treated Areas

The following spring or summer but not less than 3 months after application. Areas receiving 0.67 to 1.33 oz./acre may be transplanted in a minimum of 30 days following application.

Method

Broadcast/Foliar Air
Broadcast/Foliar Ground
Broadcast/Foliar Air
Broadcast/Foliar Ground
Rates
field_rates 0

Restricted Entry Interval

4 hours

Timings
Preemergence (Weed)
Pretransplant