GRASSES GROWN FOR SEED OR SOD PRODUCTION - SUSCEPTIBLE BROADLEAF WEED

General Information

RESISTANCE MANAGEMENT RECOMMENDATIONS
Moxy 2E is a Group 6 herbicide. Any weed population may contain or develop plants naturally resistant to Moxy 2E or other Group 6 herbicides. Weed species with acquired resistance to Group 6 may eventually dominate the weed population if Group 6 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Moxy 2E or other Group 6 herbicides.

To delay herbicide resistance consider:

• Avoiding the consecutive use of Moxy 2E or other target site of action Group 6 herbicides that have a similar target site of action, on the same weed species.

• Using tank-mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of concern.

• Basing herbicide use on a comprehensive IPM program.

• Monitoring treated weed populations for loss of field efficacy.

• Contacting your local extension specialist, certified crop advisors, and/or Winfield Solutions, LLC representative for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

GENERAL INFORMATION
MOXY 2E is formulated as an emulsifiable concentrate of octanoic acid ester of bromoxynil containing the equivalent of 2 pounds of bromoxynil per gallon.

MOXY 2E is a selective postemergence herbicide for control of important broadleaf weeds infesting field corn, popcorn, sorghum, wheat, barley, oats, rye, triticale,

seedling alfalfa, flax, onions (dry bulb), garlic, mint, and grasses grown for seed or sod production, non-residential turfgrass, and non-cropland, and industrial sites. Optimum weed control is obtained when MOXY 2E is applied to actively growing weed seedlings. MOXY 2E is primarily a contact herbicide; therefore, thorough coverage of the weed seedlings is essential for optimum control. MOXY 2E has little residual activity; therefore, subsequent flushes of weeds will not be controlled by the initial treatment. Generally, crops that form a good canopy will help shade subsequent weed flushes. However, certain crops or short-straw varieties, for example Yaccora Rojo wheat, may not develop the crop canopy fast enough to shade the subsequent flushes of weeds. Occasional transitory leaf burn may occur. The temporary leaf burn is similar to that seen with liquid fertilizer. Because the activity of MOXY 2E is not systemic, recovery of the crop is generally rapid with no lasting effect. Frequency and amount of leaf burn may be greater when crops are stressed by abrasive winds, cool to cold evening temperatures or mechanical injury, such as that caused by hail, sleet or insect feeding. To reduce the potential for temporary leaf burn, applications should be made to dry foliage in the recommended spray volumes per acre when weather conditions are not extreme.

SPRAYABLE LIQUID FERTILIZERS AND SPRAY ADDITIVES
MOXY 2E can be applied in combination with sprayable liquid fertilizer or spray additives such as surfactants or crop oil concentrate.

When tank mixing with liquid fertilizer always add the fertilizer to the spray tank first and agitate thoroughly before adding MOXY 2E. Always predetermine the compatibility with liquid fertilizer by mixing small proportional quantities in advance. Agitation must be maintained during filling and application operations to ensure that MOXY 2E is evenly mixed with the fertilizer. Leaf burn may occur when MOXY 2E is applied with liquid fertilizer, but new leaves are not adversely affected.

PRECAUTION: Fertilizers and spray additives can increase foliage leaf burn when applied with MOXY 2E. Do not apply fertilizers or spray additives with MOXY 2E if leaf burn is a major concern due to environmental conditions, crop or variety sensitivity to MOXY 2E. Do not apply MOXY 2E in combination with fertilizer or spray additive if restricted under the individual crop use directions.

APPLICATION PROCEDURES

MOXY 2E can be applied to registered use areas by ground, aerial and sprinkler irrigation equipment. The following provides methods of application for each crop.

GROUND APPLICATION

Use a standard herbicide boom sprayer that provides uniform and accurate application. Sprayer should be equipped with screens no finer than 50 mesh in the nozzle tips and in-line strainers.

Select a spray volume and delivery system that will ensure thorough and uniform spray coverage. For optimum spray distribution and thorough coverage, use of flat fan nozzles (maximum tip size 8008) with a spray pressure of 40 - 60 psi. Other nozzle types that produce coarse spray droplets may not provide adequate coverage of the weeds to ensure optimum control. Raindrop® nozzles are not recommended as weed control with MOXY 2E may be reduced. In general, a minimum spray volume of 10 gallons per acre (GPA) is recommended for optimum spray coverage. A minimum of 5 GPA with a minimum spray pressure of 50 psi may be used with higher speed, low volume ground application if ground terrain, crop and weed density allow effective spray distribution. When using higher speed equipment a maximum speed of 10 mph is suggested if field conditions cause excessive boom movement during application and subsequent poor spray coverage. Ground applications made when dry, dusty field conditions exist may provide reduced weed control in wheel track areas.

When weed infestations are heavy, use of higher spray volumes and spray pressure will be helpful in obtaining uniform weed coverage. When corn or grain sorghum are large enough to interfere with the spray pattern, drop nozzles should be used to obtain uniform weed coverage. If you are unsure of the infestation level or the size of the crop, consult your local extension service.

Do not apply when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement.

AERIAL APPLICATION

Use orifice discs, cores and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage. In general a minimum spray volume of 5 GPA and a maximum pressure of 40 psi are recommended. A minimum spray volume of 3 GPA may be used if crop canopy and weed density allow

adequate spray coverage at that gallonage.

Do not apply during inversion conditions, when winds are gusty or when other conditions favor poor spray coverage and/or off target spray movement. Off target spray movement can be minimized by increasing the spray volume per acre and not applying when winds exceed 10 mph.

SPRINKLER IRRIGATION APPLICATION
MOXY 2E can be applied through sprinkler irrigation systems to wheat, barley, oats, rye, triticale, field corn, popcorn, and grain sorghum, onions (dry bulb), garlic, and seedling alfalfa.

Apply MOXY 2E through sprinkler including center pivot, lateral move, side (wheel) roll, solid set or hand move irrigation systems only. If hand moved pipe is used for chemigation, the pipe must not be handled in any way until 24 hours after chemigation has been completed and residues have been flushed from the system. When applying by chemigation, no person may enter the application site unless in an enclosed vehicle. Do not apply this product through any other type of irrigation system.

Specific Requirements for Application through Automated Sprinkler Irrigation System.

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

5. The irrigation line or water pump must include a functional pressure switch which

will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Do not apply when wind speed favors drift beyond the area intended for treatment.

8. Agitation is recommended in the pesticide supply tank when applying the MOXY 2E.

9. MOXY 2E should be applied continuously for the duration of the water application with center pivot and continuous lateral move systems. Application of MOXY 2E should be made during the last 30-45 minutes of the irrigation set with other overhead sprinkler systems.

10. For best performance, set the sprinkler system to deliver approximately 0.5 inch or less of water per acre.

11. Remove scale, pesticide residues and other foreign matter from the supply tank and entire injector system. Flush with clean water.

12. If MOXY 2E is diluted in the supply tank, fill the tank with half of the water amount desired, add the MOXY 2E and then add remaining water amount with agitation. Always dilute with at least 4 parts water to 1 part MOXY 2E.

13. Start the sprinklers and then inject MOXY 2E into the irrigation line. MOXY 2E should be injected with a positive displacement pump into the main line at least 8 feet ahead of a right angle turn to insure adequate mixing. Refer to the MOXY 2E label for detailed information on application rates and timings.

CHEMIGATION USER PRECAUTIONS
Application of more than 0.5 inch/acre of irrigation water may result in decreased product performance on certain soils.

Do not apply when conditions favor drift, when system connections or fittings leak, or when nozzles do not provide uniform distribution.

Allow sufficient time for pesticide to be flushed through all the lines and nozzles before turning off irrigation water.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

Do not connect an irrigation system used for pesticide application to a public water system.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operations, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

CULTIVATION

When properly utilized, timely cultivations of row crops may aid overall weed control efforts as well as crop growth. However, cultivation BEFORE or DURING MOXY 2E applications may place target weeds under stress, resulting in erratic weed control. Whenever MOXY 2E is being utilized in an overall weed control program, plan to postpone any anticipated cultivations until 5-7 days after application to ensure best performance.

GENERAL WEED LIST

Postemergence application of MOXY 2E will control the following weeds when sprayed in the seedling stage. Maximum weed stage of growth is listed under uses for each crop.

WEED SUPPRESSION

MOXY 2E suppresses the growth of Canada thistle (Cirsium arvense) by burning down top growth. Regrowth may occur.

CALIFORNIA REGISTRATIONS

Only the following instructions referenced in this label are registered for use in California: seedling alfalfa, wheat, barley, oats, rye, triticale, flax, corn (post-emergence application only), sorghum (post-emergence application only), onions

(dry bulb), garlic; chemigation in seedling alfalfa, wheat, barley, oats, rye, triticale, onions (dry bulb) and garlic; 2,4-D and MCPA tank mixtures in wheat, barley, oats, rye, and triticale; 2,4-D and atrazine tank mixtures in corn and sorghum; 2,4-DB tank mixture in seedling alfalfa grass for seed and sod production, non-residential turfgrass; and non-cropland and industrial sites. All applications must be made with a minimum spray volume of 10 GPA by ground or 5 GPA by air equipment.

Limitations, Restrictions, and Exceptions

GRASSES GROWN FOR SEED OR SOD PRODUCTION

Apply to established and newly seeded grasses for seed or sod production before the boot stage. Established grasses tolerant to MOXY 2E include bentgrasses, Kentucky Bluegrass, Fescues, Ryegrass, Bermudagrass, St. Augustinegrass and Zoysiagrass. MOXY 2E may also be used on seedling grasses such as Merion, Park, Delta, or common Kentucky Bluegrasses, Pennlawn, Chewings, Illahee or Alta Fescues, Orchardgrass, Highland, Seaside or Astoria Bentgrasses, perennial Ryegrasses, Bahiagrass and Zoysiagrass.

WEEDS

Optimal control will be attained when weeds are treated in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).

Kochia, Redroot Pigweed, Spiny Pigweed, Tall Waterhemp: For effective control, these weeds should not exceed the 4 leaf stage or 2 inches in height, whichever comes first.

RESTRICTIONS AND PRECAUTIONS:

- Do not apply more than 2 pints of Moxy 2E per acre in a single growing season.

- Do not allow livestock to graze in treated areas or feed grasses, forage, hay, straw, silage, or seed to livestock.

- Do not plant rotational crops within 30 days following Moxy 2E application.

Method
Broadcast/Foliar Air
Broadcast/Foliar Ground
Broadcast/Foliar Air

Broadcast/Foliar Ground

Rates

field_rates 0

field_rates 1

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Restricted Entry Interval

24 hours

The REI for harvesting sod farm turf is 12 days.

Timings

When weeds are in the seedling stage (less than 4 leaf stage, 2 inches in height, or 1 inch in diameter).

Apply to established and newly seeded grasses for seed or sod production before the boot stage.