

# **RICE - SMARTWEED PENNSYLVANIA, MORNINGGLORY AND RED STEM (1 TO 4 INCHES WEED SIZE)**

## General Information

### PRODUCT INFORMATION

Do not apply the product through any type of irrigation system.

Regiment Herbicide is a selective, postemergence contact herbicide which provides control of many weeds infesting rice. It has an exceptionally wide window of application and should be used as an integral part of a weed control program in conjunction with a resistance management strategy (See resistance management statement on the label). The mode of action is the inhibition of the acetolactate synthase (ALS) enzyme, and thus, activity is relatively slow, 14 to 21 days for complete control. Susceptible weeds turn yellow and stop growing 3 to 7 days after treatment. Browning of sensitive weeds is evident in 7 to 14 days after treatment with death of the stem and roots occurring within 14 to 21 days after treatment. Regiment Herbicide is not a residual/soil active herbicide and will not prevent reinfestation of weeds which germinate after application. Thorough application spray coverage of weed foliage is needed for acceptable control. Regiment Herbicide is rainfast 8 hours after application. Temporary injury to rice may occur after application, but injury is transient and yields are not adversely affected. Fertilizer topdressing will speed temporary injury recovery.

### APPLICATION PROGRAMS

Regiment Herbicide alone or in combination with other herbicides (refer to “Tank Mix Application” section) may be applied as a single application at rates, timings and for control of weed species stated in the table when used as part of a weed control program. Regiment Herbicide may also be used in one of the following split application programs:

1. Early postemergence application of Regiment Herbicide in combination with a preemergence herbicide, followed by a Regiment Herbicide application either just prior to permanent flood or early post flood. Apply Regiment Herbicide at 0.2 oz per acre plus the label rate of either Bolero 8 EC, Command 3 ME, Facet or Prowl 3.3 EC

when rice is in at least the 2-leaf stage (2nd leaf fully expanded) followed by an application of Regiment Herbicide at 0.53 to 0.67 oz per acre alone (refer to the table) or in combination with other herbicides (refer to “Tank Mix Application” section).

2. Mid postemergence application of Regiment Herbicide followed by a Regiment Herbicide application either just prior to permanent flood or early post flood. Apply Regiment Herbicide at 0.5 oz per acre when barnyardgrass is in the 3 to 5-leaf stage followed by an application of Regiment Herbicide at 0.5 oz per acre alone (refer to the table) or in combination with other herbicides (refer to “Tank Mix Application” section).

#### DRY-SEEDED OR WATER-SEEDED RICE - U.S. RICE GROWING REGIONS (Except California)

- Except where noted, Regiment Herbicide may be applied to rice after the 3-leaf (3rd leaf fully expanded) stage of development until the panicle initiation (green ring/just prior to joint movement) stage of development. Do not apply to rice before the 3rd leaf is fully expanded, except in the early postemergence split application technique where it can be applied at a reduced rate to rice in the 2-leaf stage of development (2nd leaf fully expanded), or after panicle initiation. Regardless of seeding method, rice must have the 3rd leaf fully expanded, except where noted and the root system must be completely below the soil surface prior to Regiment Herbicide application. Medium grain varieties may be more sensitive to Regiment Herbicide than long grain varieties. Pubescent (hairy) leaf varieties may be more sensitive to Regiment Herbicide than glabrous (smooth) leaf varieties, as may be varieties with low seedling vigor. Do not apply to the rice variety Bengal.

- Pre-Flood Application: At application, the soil should be wet to the surface and the weeds actively growing. Following application, wait at least one day for herbicide uptake, then establish the permanent flood as soon as the rice will tolerate flooding. Under conditions in which the permanent flood is delayed, flush as necessary to maintain rice growth and maintain moisture in the weed root zone in order to ensure active weed growth. If soil is allowed to dry after application, a reduction in efficacy and/or weed re-growth may occur. Establishing the permanent flood 2 to 7 days after application will optimize weed control. Reinfestation of weeds and/or weed re-growth may occur if a permanent flood is not established in a timely manner.
- Post-Flood Application: Prior to application, the floodwater must be lowered so that at least 70% of the weed plant surface is above the floodwater. Failure to do so will result in insufficient weed control. Bring the field to normal flood level 2 to 3 days after application.
- When nighttime temperatures are below 60°F for 3 or more consecutive nights before or after Regiment Herbicide application, loss of weed control and/or weed re-growth may occur.
- Use the upper end of the recommended use rate range when weed populations are approaching the maximum controllable size and/or weed infestation is severe. When weed populations are severe, a second application of Regiment Herbicide or another herbicide may be necessary.
- Multiple applications of Regiment Herbicide may be made as long as the total seasonal amount does not exceed 1.06 oz per acre and at least 3 weeks elapse between applications.
- Late Application Barnyardgrass Suppression: When barnyardgrass develops to stages between 4-tiller and booting, a negative influence on yield has already occurred. Controlling or suppressing barnyardgrass at these stages will maximize the remaining yield potential and reduce weed seed production.
- Suppression of Knotgrass: Make application after the rice is in permanent flood and 70% of the knotgrass is above the flood level. Make application prior to knotgrass heading.

- Regiment Herbicide may be used on Clearfield and hybrid varieties.

## METHOD OF APPLICATION

Regiment is a contact herbicide and does not have any systemic activity and thus, thorough coverage is essential for acceptable weed control. Inadequate coverage will result in unacceptable weed control and/or weed re-growth. Uniformly apply Regiment or Regiment tank mixes by aircraft in no less than 10 gallons of water per acre total spray volume or by ground equipment in a minimum of 15 to 20 gallons of water per acre total spray volume. Any factor, such as reduced spray volume, which adversely affects coverage and canopy penetration will have a negative effect on the performance of Regiment. Use nozzle types and nozzle arrangements which will provide maximum coverage and minimize the potential for off target movement of spray particles. Droplet size for both ground and air applications should be in the "Medium" size category as defined in the August 1999 ASAE S572 publication entitled, "Spray Nozzle Classification by Droplet Spectra". Refer to that publication for additional information. When making application with ground equipment, use flat fan nozzles only. Do not use air inducing or flood type nozzles. Do not use ditch water, turbid or high sediment water in spray equipment. Buffer application water if the pH is above 7.0 or below 6.0. (Refer to label section "Spray Drift").

## RESISTANCE MANAGEMENT

Regiment Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to herbicides in various mode of action classes. Resistant biotypes may eventually dominate the weed population if the same class of chemistry/mode of action herbicides are used repeatedly in the same field or in successive years. These resistant biotypes may not be adequately controlled by herbicides in a mode of action class for which resistance has developed. A gradual or total loss of weed control may occur over time. Other resistance mechanisms that are not linked to site of action, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

## TO DELAY HERBICIDE RESISTANCE

- Regiment Herbicide is a Group 2 herbicide.

- Avoid the use of herbicides that have a similar target site mode of action in consecutive years. Herbicide use should be based on an IPM program that includes scouting, record keeping, and consideration of cultivation practices, water management, weed free crop seed, crop rotation, and other chemical or cultural control practices.
- Monitor treated weed population for resistance development and report suspected resistance.
- Contact your local extension or crop expert (advisor) for any additional pesticide resistance management and/or IPM recommendations for specific crops and weed biotypes.
- For further information contact Valent U.S.A. Corporation at the following toll free number 1-800-682-5368.

#### USE PRECAUTIONS

- Water drained directly from treated fields must not be used to irrigate other crops.
- DO NOT double spray ends of field.
- DO NOT apply more than 1.06 oz of Regiment Herbicide per acre per year. DO NOT apply to second crop (stubble/ratoon crop) rice.
- Regiment Herbicide is a contact herbicide which is not soil active and does not provide residual activity. Reinfestation of weeds may occur if a permanent flood is not established in a timely manner.
- Any environmental (e.g., temperature, drought, etc.) or other stress (e.g., herbicide injury, fertilizer injury or nutrient deficiencies, etc.) factors which decrease plant metabolism and growth may reduce Regiment Herbicide efficacy and increase rice injury. DO NOT APPLY TO STRESSED RICE OR WEEDS.

- Temporary injury, chlorosis and/or stunting may occur after application but injury is transient. Fertilizer top-dressing will speed temporary injury recovery. Medium grain varieties may be more sensitive than long grain varieties. Pubescent (hairy) leaf varieties may be more sensitive to Regiment Herbicide than glabrous (smooth) leaf varieties.
- Varieties with low seedling vigor such as the Japanese cultivars and M-206 may be more sensitive to Regiment Herbicide, especially under stress conditions.
- Water-seeded rice that has not fully pegged (rice root system not completely below the soil surface) is susceptible to significant injury from Regiment Herbicide, regardless of number of leaves.
- DO NOT use Regiment Herbicide on the first rice crop grown in fields that have been land leveled resulting in severe cut and heavy fill areas (does not apply to maintenance leveling).
- Regiment Herbicide is a contact herbicide and does not have any systemic activity and thus, thorough coverage is essential for acceptable weed control. Inadequate coverage will result in unacceptable weed control and/or weed re-growth.
- When weed populations are severe, a second application of Regiment Herbicide or another herbicide may be necessary.
- Do not make an application of methyl parathion or malathion within 7 days of a Regiment Herbicide application.
- Do not apply to rice paddies where commercial crayfish farming is practiced.

#### Limitations, Restrictions, and Exceptions

#### RICE GROWING REGIONS (EXCEPT CALIFORNIA)

Adjuvant: Application of Regiment Herbicide must include a surfactant unless otherwise specified in another section of the label or in supplemental labeling. Refer to the Valent bulletin "Approved Surfactants for use with Regiment Herbicide" for a list of approved surfactants and rates. Use of surfactants other than the ones specified is done at the sole risk of the user. Under some adverse conditions the addition of UAN to the approved surfactants may improve control or suppression of listed weeds. Refer to Valent product bulletin "Approved Surfactants For Use With

Regiment Herbicide” for additional information.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Rates

[field rates 0](#)

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Restricted Entry Interval

12 hours

Timings

[1 to 4 inches.](#)