PM 23 8346-35 PA IL



UNITED STATES ENVIRONMENTAL PPOTECTION AGENCY

WASHINGTON, D.C. 20460

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OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

DIANE L. ROSSI HOECHST CELANESE CORP. C/O V A DOOR RT 202-206 BOX 2500 SOMERVILLE, NJ 08876

Subject: Label Amendment Submission of 9/15/93 Response to PR Notice 93-7 EPA Reg. No. 8340-35 WHIP 360 HERBICIDE

# Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

# WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

# WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

BEFORE selling or distributing any product bearing the final printed labeling
AND

■ WITHIN one year from date of this acceptance.





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Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL) Office of Pesticide Programs (7505C) U.S. Environmental Protection Agency 401 M Street, SW Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL) Office of Pesticide Programs Room 266A, Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Sincerely,

Jim Tompkins, Deputy Chief Registration Support Branch Registration Division (7505W) į

Attachment

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division

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Diane L Rosi HOECHST CELANESE CORP C/O V A DOOR RT 202-206 BOX 2500 SOMERVILLE NJ 08876

Comment for: EPA Reg Nr.8340-35 WHIP 360 HERBICIDE

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

Delete the following statement from your proposed label; it is not required for formulations of this type: "Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category \_\_\_\_\_ on an EPA chemical resistance category selection chart."

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# Revised: August 6, 1993 August 26, 1993

# WHIP 360<sup>®</sup> HERBICIDE

FOR THE SELECTIVE POSTEMERGENCE CONTROL OF MONOCOT ANNUAL AND PERENNIAL GRASSES IN RICE, SOYBEANS, AND ACREAGE CONSERVATION RESERVE (SET-ASIDE)

ACTIVE INGREDIENT:

• . •

fenoxaprop-ethyl: (±)-ethyl 2-[4-[(6-chloro-2benzoxazolyl)oxy]phenoxy]propanoate..... 7.70%\* INERT INGREDIENTS:.... 92.30%\*\*

TOTAL 100.00%

\* Equivalent to 0.67 pound of active ingredient per gallon \*\* Contains petroleum distillates

ACCEPTED with COMMENTS In EPA Letter Dated

KEEP OUT OF REACH OF CHILDREN

FEB 2 /: 1994 Under the Federal Insecticide, Fundicide, and Redesticide Act as amonded, for the posticide registered under KPA Rep. No. X340-35

CAUTION

EPA Reg. No. 8340-35

EPA Est. No. 8340-CN-01

Net Contents: [Various Sizes]

HOECHST CELANESE CORPORATION Route 202-206 P.O. Box 2500 Somerville, NJ 08876-1258

Hoechst

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#### PRECAUTIONARY STATEMENTS

#### CAUTION

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

#### Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: Long-sleeved shirt and long pants; shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

Users should:

 Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside.
Then wash thoroughly and put on clean clothing.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to a body of water outside of the treated rice field, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply in weather conditions favor runoff or drift. Do not contaminate arable land and/or water when disposing of equipment washwaters.

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# STORAGE AND DISPOSAL Do not contaminate water, food or feed by storage or disposal. Do not store over 100°F or below 10°F. PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL: Empty containers should be triple rinsed into the spray tank during the spray operation. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state

STATEMENT OF PRACTICAL TREATMENT

smoke.

If swallowed: Do not induce vomiting. Call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.

and local authorities, by burning. If burned, stay out of

If in Eyes: Flush with plenty of water. Get medical attention if irritation persists.

For medical or environmental emergency,

call 1-800-228-5635, ext. 132

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#### IMPORTANT NOTICE: DISCLAIMER

Read "IMPORTANT NOTICE: DISCLAIMER" before buying or using. If terms are not acceptable, return at once unopened.

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, or use of this product in a manner inconsistent with its labeling, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

HOECHST CELANESE CORPORATION warrants only that the product conforms to the chemical description on the label and is reasonably fit for the purpose stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to HOECHST CELANESE CORPORATION and user assumes the risk of any such use. HOECHST CELANESE CORPORATION MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY. In no case shall HOECHST CELANESE CORPORATION be liable for consequential, special, indirect or incidental damages resulting from the use or handling of this product. The foregoing conditions of sale and warranty can be varied only by an agreement in writing signed by a duly authorized representative of HOECHST CELANESE CORPORATION.

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#### GENERAL INFORMATION

Whip 360° Herbicide is a water emulsion formulation for use in selective postemergence control of annual and perennial grassy weeds in soybeans, rice, and acreage conservation reserve (setaside). Thorough spray coverage of emerged grasses is important. Visible effects begin as a general chlorosis (yellowing) followed by death of the weed. Visible injury of the grasses is evident approximately 4-10 days after application (dependent upon environmental conditions); but complete kill of the target grass will take 12-21 days.

Because many monocot grass crops (such as sorghum and corn) are sensitive to Whip 360 Herbicide, avoid all direct or indirect contact to neighboring fields.

Whip 360 Herbicide does not control broadleaf weeds or sedges.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply until you have read the entire label. 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 responsible for pesticide regulation.

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#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 240 CPR part 170. This Standard contains requirements for the officient one off-agricultural workers on farss, forests, how error and greenhouses stand handlers of agricultural pesticides of the off-and greenhouses stand for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipments (PPS) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls; waterproof gloves; shoes plus socks

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. The Acreage Conservation Reserve (set-aside) is not within the scope of the WPS.

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# SOYBEANS

# **APPLICATION INFORMATION:**

**Ground Application:** <u>Broadcast</u> - Refer to the Rate and Grass Recommendation Chart for proper application rates. Whip 360 Herbicide should be applied in a minimum of 10 gallons of water per broadcast acre. Flat fan or hollow cone nozzles are recommended. Use a minimum pressure of 40 pounds per square inch. Under dense weed/crop canopies, high spray pressure is very important for obtaining thorough coverage; therefore, use higher spray pressure under these conditions. <u>Spot Treatment</u> - Whip 360 Herbicide may be applied for the control of grasses through knapsack sprayers or high-volume equipment utilizing handguns or other suitable nozzle arrangements in a 0.89% v/v solution with water (e.g., 1 quart per 28 gallons of water). Apply to actively growing grasses. Apply to the foliage of grasses on a spray-to-wet basis. DO NOT spray to the point of runoff. The spray gallonage should not exceed 25 gallons per acre. Spray coverage should be uniform and complete.

Air Application: Whip 360 Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 150-300 micron size droplets. DO NOT USE raindrop nozzles. Aerial applications with this product should be made at a height which provides the most effective swath width for the aircraft and yet provides uniform application of recommended rates.

# DO NOT APPLY by aircraft when wind speeds exceed 8 mph. Avoid all direct or indirect contact to neighboring fields.

#### TIMING OF APPLICATION:

Whip 360 Herbicide will control grasses at most growth stages; but for optimum grass control, applications should be made during periods of rapid growth. Follow the recommendations for time of application listed on the rate/grass recommendation chart below. Earlier applications of Whip 360 Herbicide (before all grasses have emerged) could result in late flushes of monocot grassy weeds in the treated area.

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# RATE AND GRASS RECOMMENDATION CHART

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Recommended Rate of Whip 360 Herbicide			
Monocot Grassy Weeds	Maximum Height	Maximum Height	
Annual Grasses	0.6 pt/A (9.6 fl oz/A)	0.7 pt/A (11.2 fl os/A)	
Giant foxtail	3#	6"	
( <u>Setaria faberii</u> ) Green foxtail	3"	6"	
( <u>Setaria viridis</u> ) Volunteer corn ( <u>Zea mays</u> )	10"	24"	
Wild proso millet	6"	10"	
( <u>Panicum miliaceum</u> ) Johnsongrass, seedling	6"	12"	
( <u>Sorghum halepense</u> ) Wild cane/Shattercane	6 <b>"</b>	12"	
( <u>Sorghum bicolor)</u>	1.1 pt/A (17.6 fl oz/A)	1.3 pt/A (20.8 fl og/A)	
Barnyardgrass			
(Echinochloa crus-	3"	6"	
<u>galli</u> ) Broadleaf signalgrass	3"	6"	
( <u>Brachiaria</u> <u>platyphylla</u> ) Fall panicum	3 "	6"	
( <u>Panicum</u>	3"	6"	
<u>dichotomiflorum</u> ) Bristle foxtail	3"	6 <b>"</b>	
( <u>Setaria</u> <u>verticillata</u> ) Europa fortail	3"	6"	
Purple foxtail ( <u>Setaria viridis</u>	<b>.</b>	6	
<u>robusta purpurea</u> ) Robust foxtail	3"	6"	
( <u>Setaria viridis</u> <u>robusta alba</u> ) Sandbur	2"	6"	
( <u>Cenchrus incertus</u> ) Yellow foxtail			
( <u>Setaria lutescens</u> )			

Recommended R	ate of Whip 360 Her	picide	
	Maximum Height	Maximum Height	
Monocot Grassy Weed Annual Grasses	1.1 pt/A (17.6 fl oz/A)	1.3 pt/A (20.8 fl og/A)	
Jungle rice	3"	6"	
( <u>Echinochloa</u> <u>colonum</u> ) Southwestern cupgrass	3"	6"	
(Eriochloa gracilis) Sprangletop	3"	6"	
( <u>Leptochloa filiformis</u> ) Wild oats	3"	6"	
( <u>Avena fatua</u> ) Witchgrass	3"	6 <sup>n</sup>	
( <u>Panicum capillare</u> ) Wooly cupgrass	3"	6"	
( <u>Eriochloa</u> <u>villosa</u> ) Large crabgrass	2"	6"	
( <u>Digitaria sanguinalis</u> ) Smooth crabgrass	2 "	6"	
( <u>Digitaria</u> <u>ischaemum</u> ) Goosegrass	2"	6"	
( <u>Eleusine indica</u> ) Itchgrass	2"	6"	
( <u>Rottboellia</u> <u>exaltata</u> ) Texas panicum	2"	6"	
( <u>Panicum texanum</u> ) Wirestem muhly ( <u>Muhlenbergia</u> <u>frondosa</u> )	2"	6"	
Perennial Grasses	1.1 pt/A (17.6 fl og/A)		
Johnsongrass from rhizomes ( <u>Sorghum</u> <u>halepense</u> )	20"		
	0.7 pt/A (11.2 fl og/A)		
Johnsongrass from rhizomes ( <u>Sorghum halepense</u> ) (Second application if needed)	20"		
(A timely cultivation may override the necessity for a second application.)			

#### ADDITIVES

Annual Grasses: Always add a nonphytotoxic oil concentrate or a nonionic surfactant when controlling annual grasses. The addition of nonphytotoxic oil concentrate to the spray solution at 1 quart per acre for ground applications and 1 pint per acre for aerial applications, or a nonionic surfactant at 1/4<sup>4</sup>-1/2<sup>4</sup> by volume to the spray solution will improve the herbicidal activity of Whip 360 Herbicide on annual grassy weeds. Add a nonphytotoxic oil concentrate or a once-refined vegetable oil or soybean oil concentrate containing 15<sup>4</sup>-20<sup>4</sup> approved emulsifiers. Crop oil concentrates vary in their viscosity; therefore, it is important to maintain constant agitation while the spray mixture is in the spray tank.

**Rhizome Johnsongrass:** DO NOT include the above additives when controlling rhizome Johnsongrass. The increased speed of foliage burn resulting from the addition of crop oil concentrate or nonionic surfactants may reduce the translocation of Whip 360 Herbicide to the Johnsongrass roots and rhizomes.

#### TANK MIX RECOMMENDATIONS FOR SOYBEANS

Whip 360 Herbicide may be tank mixed with Basagran® Herbicide, Blazer®, Reflex® 2LC Herbicide, Pinnacle® Herbicide, Pinnacle plus Classic® Herbicide, Pursuit® Herbicide, or Fusilade® 2000 Herbicide in a postemergence program for broader spectrum weed control in soybeans. Tank mix applications are to be used only when both the annual grass and broadleaf weeds are in the proper stage of growth as specified on each respective herbicide label. When tank mixing, always follow the use directions in accordance with the respective label. No label dosage rates should be exceeded. Best results occur when weeds are actively growing.

**SPECIAL NOTE:** DO NOT apply Whip 360 Herbicide in tank mixtures with the above herbicides when the weeds are drought stressed or when the soybean plants show signs of injury or disease.

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#### Water Volume and Spray Pressure

**Ground Equipment:** For the tank mix, use a minimum of 20 gallons per acre of total spray solution and a minimum pressure of 40 psi. Use standard high pressure hollow cone or flat-fan nozzles. Do not use flood nozzles.

Aerial Equipment: For tank mixes, use a minimum of 5 gallons per acre of total spray solution and a minimum pressure of 40 psi.

**Mixing:** Fill the spray tank half full with water while the agitator is running. Add the recommended amount of Whip 360 Herbicide followed by the tank mix component. Then add the remaining amount of water.

#### fank Mix with Basagran

Whip 360 Herbicide should be applied at a rate of 1.1 to 1.4 pints per acre and Basagran at a rate of 1.5 to 2.0 pints per acre. The choice of rates of each product and additives is dependent on the weed size and weed spectrum present. Refer to the Basagran label to identify the proper rate and additives for control of the species and size of the broadleaf weeds present.

The Whip 360 Herbicide rates for tank mixing with Basagran are 1.1 pint per acre when the annual grassy weeds are 1 to 3 inches tall and 1.4 pints per acre when the annual grassy weeds are 4 to 6 inches tall or less than 2 tillers. DO NOT use this tank mix if the annual grassy weeds have developed more than 2 tillers or are larger than 6 inches tall. For the control of shattercane 6 to 12 inches tall, volunteer corn 10 to 24 inches tall, and broadleaf weeds that are on the Basagran label, tank mix Whip 360 Herbicide at a rate of 1.1 pint per acre with Basagran at 1.5 to 2.0 pints per acre. DO NOT use this tank mix to control rhizome Johnsongrass.

Sequential applications (instead of a tank mix application) of Whip 360 Herbicide and Basagran may be necessary if the stages of the grass and broadleaf weeds are not within tank mix label recommendations at the same time.

#### Tank Mix with Blazer

Whip 360 Herbicide should be tank mixed at a rate of 1.4 pints per acre. Blazer should be tank mixed at a rate of 1.5 to 2.0 pints per acre. In no instances should crop oil concentrate or a surfactant be used with this tank mix. This tank mix should not be used for the control of rhizome Johnsongrass.

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#### Tank Mix with Blazer (continued)

The stage of growth of both the annual grassy weeds and the broadleaf weeds should conform to the directions on each product label. The tank mix of Whip 360 Herbicide plus Blazer should not be applied after the annual grasses have begun tillering. Whenever the grass and broadleaf weeds are not both in the proper stage of growth according to this tank mix label, a sequential application should be utilized. When Whip 360 Herbicide is applied first, a waiting period of 3 days is necessary before applying Blazer. When Blazer is applied first, a waiting period of 7 days is necessary before applying Whip 360 Herbicide.

<u>Special Note</u>: The mixture of Whip 360 Herbicide plus Blazer may only suppress velvetleaf, as additives cannot be used with this tank mix.

#### Tank Mix with Reflex 2LC Herbicide

# METHOD 1 Tank Mix Application Whip 360 Herbicide and Reflex 2LC Herbicide (Annual grasses and broadleaf weeds are at the proper stage of growth for treatment as per the respective labels.)

A tank mix of Whip 360 Herbicide and Reflex 2LC Herbicide may be applied at the recommended rates and growth stages to susceptible annual grass and broadleaf weed species in a manner consistent with respective labels. Whip 360 Herbicide should be applied at a rate of 1.1 - 1.4 pints per acre and Reflex 2LC Herbicide at 1.0 - 1.5 The choice of rates for Whip 360 Herbicide is pints per acre. dependent on the weed size and weed spectrum present. The Whip 360 Herbicide rate for tank mixing with Reflex 2LC Herbicide is 1.1 pints per acre when annual grassy weeds are 1-3 inches tall, and 1.4 pints per acre when annual grassy weeds are 4-6 inches tall or less than 2 tillers. For the control of shattercane 6-12 inches tall, tank mix Whip 360 Herbicide at a rate of 1.1 pints per acre The choice of rates for Reflex 2LC with Reflex 2LC Herbicide. Herbicide is dependent on the weed size, weed spectrum and Refer to the Reflex 2LC Herbicide label geographical locations. for specific rates, geographical restrictions, and for a list of weeds controlled.

Use crop oil concentrate in the tank mix at 1 v/v (1 quart per 25 gallons of spray solution.)

# Tank Mix with Reflex 2LC Herbicide (continued)

- DO NOT use this tank mix if perennial grasses such as rhizome Johnsongrass are the predominant grass species to be controlled.
- \* DO NOT use this tank mix if the annual grassy weeds have developed more than 2 tillers or are larger than 6 inches tall, as reduced annual grass control will occur.

#### <u>METHOD 2</u> Sequential Application Whip 360 Herbicide followed by Reflex 2LC Herbicide (Annual and/or perennial grass weeds are at the proper g

(Annual and/or perennial grass weeds are at the proper growth stage for treatment, prior to broadleaf weed treatment.)

Apply Whip 360 Herbicide to annual and/or perennial grass weeds at the recommended rate and growth stage listed on this label.

When treating annual grass weeds, allow at least 3 days, and when treating perennial grass weeds allow at least 5 days to elapse prior to a Reflex 2LC Herbicide application. After the appropriate time interval has elapsed, apply Reflex 2LC Herbicide with an approved adjuvant to actively growing weeds at the recommended rate and growth stage. Refer to the Reflex label for specific rates, geographical restrictions, and for a list of weeds controlled.

# <u>METHOD 3</u> Sequential Application Reflex 2LC Herbicide followed by Whip 360 Herbicide (Broadleaf weeds are at the proper growth stage for treatment,

prior to annual and/or perennial grass weed treatment.)

Apply Reflex 2LC Herbicide with an approved adjuvant to susceptible broadleaf weeds at the recommended rate and growth stage listed on the Reflex 2LC Herbicide label. Refer to the Reflex 2LC Herbicide label for specific rates, geographical restrictions, and for a list of weeds controlled.

A sequential application of Whip 360 Herbicide may be made following a Reflex 2LC Herbicide application when annual or perennial grass weeds resume active growth indicated by the development of a new leaf. Follow the recommended rates and growth stages listed on the Whip 360 Herbicide label.

SPECIAL NOTE: Tank mix applications can result in increases in crop injury as compared to either product used alone.

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## Tank Mix with Pinnacle Herbicide

Whip 360 Herbicide may be tank mixed with Pinnacle Herbicide for broader spectrum weed control. The application rate for Pinnacle Herbicide is 0.25 ounce per acre. Refer to the rate chart below for the Whip 360 Herbicide use rates. This tank mix application should be made to grasses in the 2-leaf to 2-tiller stage of growth. Sequential applications may be necessary if the stages of growth of the grass and broadleaf weeds are not within the recommended timing of application. It is recommended that a nonionic surfactant at a rate of 0.125-0.250° v/v be added to this tank mix. DO NOT add crop oil concentrate. Refer to the Pinnacle Herbicide label for additional information.

	Whip 360 Herbicide Rates (Pints/A)
<u>Species</u>	When Tank Mixed With Pinnacle (0.25 oz.)

Giant foxtail	0.8 pt.
Volunteer corn	0.8
Seedling Johnsongrass	0.8
Green foxtail	0.8
Wild proso millet	1.0
Shattercane	1.0
Barnyardgrass	1.0
Wooly cupgrass	1.0
Yellow foxtail	1.0

# Tank Mix with Pinnacle Herbicide Plus Classic Herbicide

Whip 360 Herbicide may be tank mixed with Pinnacle Herbicide plus Classic Herbicide for broader spectrum weed control. The application rate for Pinnacle Herbicide is 0.25 ounce per acre plus Classic Herbicide at 0.25 ounce per acre. Refer to the rate chart below for the Whip 360 Herbicide use rates. This tank mix application should be made to grasses in the 2-leaf to 2-tiller stage of growth. Sequential applications may be necessary if the stages of growth of the grass and broadleaf weeds are not within the recommended timing of application. Refer to the Pinnacle Herbicide and Classic Herbicide labels for additional information.

> Whip 360 Herbicide Rates (Pints/A) When Tank Mixed With Pinnacle plus Classic

<u>Species</u>	(0.25 + 0.25 oz.)	
Giant foxtail	1.1 pt.	
Volunteer corn	1.1	
Seedling Johnsongrass	1.1	
Green foxtail	1.1	
Wild proso millet	1.3	
Shattercane	1.3	
Barnyardgrass	1.4	
Wooly cupgrass	1.4	
Yellow foxtail	1.4	

# Tank Mix with Pursuit Herbicide

A tank mix of Whip 360 Herbicide and Pursuit Herbicide may be applied for annual grass and broadleaf weed control in soybeans. The recommended rate for Pursuit Herbicide is 4 oz./A when the broadleaf weeds are actively growing and before they exceed a height of 3 inches. Refer to the following rate chart for the Whip 360 Herbicide rates recommended for this tank mix. It is recommended that an EPA approved non-ionic surfactant at a rate of 0.25 v/v be added to this tank mix.

> Whip 360 Herbicide Rate When Tank Mixed with Pursuit Herbicide

Species	Stage of Growth	Pt/A	Fl Oz/A
Giant foxtail	3-6"	0.7	11.2
Volunteer corn	2-24"	0.7	11.2
Wild proso millet	5-10"	0.7	11.2
Seedling Johnsongrass	2-10"	0.7	11.2
Shattercane	4-12"	0.7	11.2
Green foxtail	3-6"	0.9	14.4
Barnyardgrass	3-6"	1.1	17.6
Wild oats	3-6"	1.4	22.4
Wirestem muhly	3-6"	1.4	22.4

When the annual grassy weed species and the broadleaf weeds are not in the proper growth stage for this tank mix treatment, a sequential application of Whip 360 Herbicide and Pursuit Herbicide is recommended.

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### Tank Mix with Fusilade 2000 Herbicide

For improved control of Johnsongrass and/or annual grass, Whip 360 Herbicide may be tank mixed with Fusilade 2000 Herbicide. When rhizome Johnsongrass is the predominant grassy weed, Whip 360 Herbicide should be applied at a rate of 8.2 fl.oz. per acre and Fusilade at 12.0 fl.oz. per acre. When annual grasses are the predominant grassy weeds, Whip 360 Herbicide should be applied at a rate of 9.8 fl.oz. per acre and Fusilade 2000 at 9.6 fl.oz. per acre. Tank mix applications are to be used only if both annual grass and rhizome Johnsongrass are at the proper stage of growth as specified on each respective label.

For all ground applications, use crop oil concentrate in the tank mix at 1% v/v (1 quart per 25 gallons of spray solution) or a nonionic surfactant at 1/4%-1/2% v/v. For aerial applications, use crop oil concentrate at 1 pint per acre.

The tank mix of Whip 360 Herbicide plus Fusilade 2000 Herbicide may be applied in combination with Reflex 2LC, Basagran, or Blazer herbicides as described on this and the Fusilade 2000 Herbicide labels. If there are any differences in labeling, the most restrictive labeling applies. DO NOT tank mix with Reflex 2LC, Basagran, or Blazer when rhizome Johnsongrass is the predominant grassy weed problem.

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#### SPECIAL NOTES FOR SOYBEANS

- 1. Annual ryegrass (Lolium sp.), quackgrass (Agropyron repens) and Bermudagrass (Cynodon dactylon) are not controlled by Whip 360 Herbicide.
- 2. Rainfall within one hour of an application may cause a reduction in grass control.
- 3. If a new flush of grass occurs, either a timely cultivation or a second application of Whip 360 Herbicide may be necessary. DO NOT make more than two applications of Whip 360 Herbicide per growing season and DO NOT apply more than 1.8 pints per acre per growing season.
- 4. DO NOT cultivate within four days before or after a Whip 360 Herbicide application.
- 5. ALWAYS clean sprayer thoroughly before and after any pesticide application.
- 6. As a spot treatment, apply Whip 360 Harbicide in a 0.89% v/v solution with water (e.g., 1 quart per 28 gallons of water). (See instructions for use in the Ground Application section.)
- 7. Whip 360 Herbicide should not be applied after the bloom stage of soybeans.
- 8. DO NOT graze or feed treated forage, hay, straw, or vines.
- 9. Application of Whip 360 Herbicide to grasses under stress (e.g., drought) may result in reduced control.
- 10. DO NOT plant any rotational crop in a Whip 360 Herbicide treated field for 30 days after application.
- 11. The period between last application and harvest should not be less than 90 days.
- 12. DO NOT apply this product through any irrigation system.
- 13. The application of any pesticide (other than those listed on this label) made within 7 days of the Whip 360 Herbicide application causing stress to the target grass may reduce the effectiveness of the Whip 360 Herbicide application.
- 14. Read and follow restrictions and limitations on the Basagran Herbicide, Reflex 2LC Herbicide, Blazer, Pinnacle Herbicide, Classic Herbicide, Pursuit Herbicide, and Fusilade 2000 Herbicide labels as applicable. The most restrictive labeling applies in tank mixes.

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Rice is tolerant to postemergence applications of Whip 360 Herbicide from the 4-leaf to the late tillering stage of rice development. See "Use Precautions for Rice" section, Note 16 to determine the rice varieties to which this product may be applied. Apply only to those varieties listed. Always plant high quality seed in order to obtain uniform germination and a good rice stand. Postemergence applications may result in temporary rice injury that appears as leaf chlorosis and stunting. The rice will normally recover from these symptoms in two to four weeks.

Use instructions, particularly water management, must be followed to minimize rice injury. Read and follow all label directions carefully.

## **APPLICATION INFORMATION:**

Rice fields should be level and free of large clods to obtain uniform germination of rice and grassy weeds and to insure uniform flood levels. If necessary, fields may be flushed prior to treatment. If fields are flushed prior to treatment, flush in sufficient time so that the rice and grass are actively growing at time of treatment. But allow sufficient time for water to drain from the paddy before the Whip 360 Herbicide application.

Do not apply Whip 360 Herbicide within 14 days following the activation of fertilizer or within 3 days prior to a fertilizer upplication.

- Α. Ground Application: Refer to the Rate and Grass Recommendation Chart for proper application rates. Whip 360 Herbicide should be applied in a minimum of 10 gallons of water per broadcast acre. Flat fan or hollow cone nozzles are recommended. Use a minimum pressure of 40 pounds per square Under dense weed/crop canopies, increase the spray inch. pressure to 50 pounds per square inch so that thorough spray coverage will be obtained.
- Β. Air Application: Apply aerially using a minimum of 10 gallons of water per broadcast acre. It is recommended to increase the gallonage to obtain thorough coverage when a dense weed canopy is present. Uniform spray coverage is essential when using aircraft, and is achieved by the use of a spray droplet size ranging from 150 to 300 microns. A hydraulic boom-nozzle system that will apply 10 gallons of water per acre with a minimum pressure of 20 pounds per square inch is recommended. Best results are obtained with D-8 nozzles. DO NOT USE Aerial applications with this product raindrop nozzles. should be made at a height which provides the most effective swath width for the aircraft, but no lower than 10 feet from the rice crop.

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# DO NOT APPLY by aircraft when wind speeds exceed 8 mph. Avoid all direct or indirect contact to neighboring fields.

### Special Notes for Aerial Application:

- 1. Thoroughly clean mixing vat and airplane by rinsing with clean water before Whip 360 Herbicide is added.
- 2. It is important to calibrate the spray equipment before applying Whip 360 Herbicide.
- 3. A flow meter is recommended to obtain proper water volume (gpa).

#### ENVIRONMENTAL INTERACTIONS OF WHIP 360 HERBICIDE ON RICE:

Whip 360 Herbicide is absorbed into the rice plant and then metabolized into an inactive components over a period of three to five days. This metabolism process is associated with rice plant growth. Rice plant growth, and the metabolism process are increased under sunny conditions with daily temperatures exceeding 65° F. If daily minimum temperatures fall below 65° F and/or rainy, foggy, cloudy or inclement weather persists, the growth and metabolism rate of the rice plant are reduced. In such situations, the ability of the rice plant to metabolize the Whip 360 Herbicide is decreased and could result in injury to the rice plant. To help prevent possible environmental/rice injury interactions, the following precautions should be taken.

- 1. When the daily minimum temperature is below 65° F or <u>is</u> <u>predicted to be</u> below 65° F for three consecutive days do not apply Whip 360 Herbicide. If grass pressure and stage of growth dictate that an application be made, then tank mix Whip 360 Herbicide at 0.7 pint per acre with Basagran Herbicide at 1.5 pints per acre; however, rice injury may occur under these cool conditions. This cool season tank mix should not be applied if the annual grasses are larger than the four leaf stage of growth or if the relative humidity is below 50%.
- 2. For applying the paddy flood, See "Water Management -Important Instructions" section 2.B.

#### TIMING OF APPLICATION:

For Arkansas, Louisiana, Mississippi, Missouri, and Texas.

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PREFLOOD

When recommended water management practices are followed (see Water Management section), optimal conditions for controlling grass usually occur when the rice is in the 4-leaf to late tillering stage of development (but prior to panicle initiation). However, applications should be made following the Rate and Grass Recommendation Chart for Rice.

Rate and Grass Recommendation				
Grass Species	Amount of Whip 360 per acre (pints) Relative to Stage of Annual Grass Weeds			
-	1-3 leaf	3 leaf - 2 Tiller	> 2 Tiller	
	or	or	or	
	1-4 inches	4-10 inches	> 10 inches	
Sprangletop				
(Leptochloa spp.)				
Barnyardgrass, watergrass				
( <u>Echinochloa</u> <u>crusgalli</u> )				
Broadleaf signalgrass				
( <u>Brachiaria</u> <u>platvphylla</u> )			0.7 pt/A	
Goosegrass			to	
( <u>Eleusine indica</u> )	0.7 pt/A	0.8 pt/A	1.0 pt/A	
Jungle rice			(suppression)	
<u>Echinochloa</u> <u>colonum</u> )				
Crabgrass			1	
( <u>Digitaria</u> spp.)				
Johnsongrass (10-15")				
( <u>Sorqhum halepense</u> ) Giant foxtail			ļ	
( <u>Setaria</u> <u>faberii</u> )				
Fall panicum				
( <u>Panicum</u> <u>dichotomiflorum</u> )			· ·	
Red rice*	0.7-1.0 pt/A	NOT PE	COMMENDED	
( <u>Oryza sativa</u> )	and the belief			
<u> </u>				

\*For suppression of red rice, apply Whip 360 Herbicide at 0.7-1.0 pint/A when the red rice is in the 4-leaf stage of growth.

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#### WATER MANAGEMENT - IMPORTANT INSTRUCTIONS

The following paddy flood program must be used:

#### PREFLOOD:

- 1. Rice fields must be level. If desirable, fields may be flushed prior to treatment. To expose existing grasses, allow sufficient time for water to drain from the field before the Whip 360 Herbicide application.
- 2. When to Apply the Paddy Flood:
  - A. When the daily minimum temperature is above 65° F:
  - (1) When the rice is less than 8 inches in height, do not flood fields for at least 7 days after the Whip 360 Herbicide application.
  - (2) When the rice is greater than 8 inches in height, the fields can be flooded in 4 - 5 days following the application.
  - B. When the daily minimum temperature is below 65° F:

Delay flushing or flooding the rice for 7 days after the daily minimum temperature returns to 65° F or above and the rice is actively growing.

3. The water depth (flush or flood) should not exceed 25% of the rice height for 21 days after the Whip 360 Herbicide application. A deep flood can be applied anytime after 21 days following treatment.

**<u>POST-FLOOD</u>:** Salvage Suppression Programs

Whip 360 Herbicide will **suppress** annual grasses after the second tiller stage and Johnsongrass at the 10 to 15 inch stage when applied at the rate of 0.7 to 1 pt. per acre post-flood. For postflood applications the rice plants should have at least two tillers and the water level should cover no more than 25% of the annual grass foliage. The flood may be increased to a normal depth 2 to 3 days after the application. Thorough spray coverage is essential.

For dense stands of barnyardgrass (watergrass), follow the Whip 360 Herbicide application in 7 to 10 days with 20-27 lbs. of Ordram 15G. Follow the Ordram 15G label for directions of use.

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#### CONTROL OF OTHER WEEDS:

Tank Mix Recommendations for Rice:

Sequential applications may be necessary if the growth stage of the grasses and broadleaf weeds are not within the tank mix label recommendations at the same time. When making sequential applications of rice herbicides other than Basagran, Bolero®, or Prowl®, wait 6 days before or after the application of Whip 360 Herbicide.

In preflood applications, a new flush of broadleaf and grassy weeds may occur under certain environmental conditions before the field receives permanent flood 5-7 days later; therefore, additional herbicide applications may be required. DO NOT make a second application of Whip 360 Herbicide within 14 days of the first application.

#### Tank Mix with Basagran

The Whip 360 Herbicide rates for tank mixes with Basagran are 0.8 pints per acre, when the annual grassy weeds are 1 to 3 leaf (1 - 4 inches) and 1.0 pint per acre when the annual grassy weeds are 4 leaf to 1 tiller (4 - 8 inches). Apply Basagran Herbicide at a rate of 1.5 pints per acre in this tank mix. Do not tank mix Whip 360 Herbicide and Basagran when the annual grassy weeds have developed more than 1 tiller or if the weeds are under drought stress or if the relative humidity is below 50% as grass control may be reduced. Sequential applications may be necessary if the growth stage of the grasses and broadleaf weeds are not within the tank mix label recommendations at the same time.

#### Tank Mix with Bolero®

A tank mix of Whip 360 Herbicide and Bolero Herbicide can be used for the control of annual grass and aquatic weed species. Apply 0.8 pint/acre of Whip 360 Herbicide plus 2-3 pints/acre of Bolero. Do not apply this tank mixture when annual grassy weeds have developed more than 1 tiller or if the weeds are drought stress as grass control will be reduced. Do not apply to stressed rice.

#### Tank Mix with Prowl®

Use a tank mix of Whip 360 Herbicide and Prowl 4E Herbicide for postemergence and residual control of annual grass species listed on the Whip 360 Herbicide label. Apply 0.8-1.0 pint/acre of Whip 360 Herbicide plus 1.5-2.0 pints/acre of Prowl 4E Herbicide. Do not apply this tank mixture when annual grassy weeds have developed more than 1 tiller or if the weeds are drought stressed as grass control will be reduced.

#### MIXING INSTRUCTIONS:

Fill the spray tank half full with water while the agitator is running. Add the recommended amount of Whip 360 Herbicide followed by the appropriate amount of the tank mix component. Then add the remaining amount of water.

#### USE PRECAUTIONS FOR RICE:

- 1. DO NOT add a crop oil concentrate to the spray solution when treating rice as rice injury may occur.
- 2. Rainfall within one hour of an application may reduce the grass control.
- 3. DO NOT make more than two applications of Whip 360 Herbicide per growing season and do not apply more than 2.0 pints per acre per growing season.
- 4. DO NOT make a second application of Whip 360 Herbicide within 14 days of the first application.
- 5. Whip 360 Herbicide should be applied only from the 4-leaf stage to the late tillering stage of the rice development. DO NOT apply after panicle initiation.
- 6. ALWAYS clean spray system thoroughly with clean water before and after any pesticide application.
- 7. DO NOT graze or feed rice straw to livestock.
- 8. DO NOT plant any rotational crop in a Whip 360 Herbicide treated field for 30 days after application.
- 9. DO NOT apply Whip 360 Herbicide in areas where catfish and crayfish are commercially cultured.
- 10. DO NOT use rice irrigation water to irrigate crops not registered for use with Whip 360 Herbicide within 14 days of the last application of this product.
- 11. DO NOT apply Whip 360 Herbicide within 65 days of harvesting rice.
- 12. DO NOT apply Whip 360 Herbicide within 14 days **following** the activation of fertilizer or within 3 days prior to a fertilizer application.
- Applications of Whip 360 Herbicide made during periods of low humidity (below 50%) or to grasses under drought stress may result in reduced control.

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- 14. DO NOT tank mix Whip 360 Herbicide with Blazer Herbicide, propanil herbicides, Ordram Herbicide, phenoxy herbicides, liquid fertilizers or methyl parathion.
- 15. DO NOT apply Whip 360 Herbicide within 7 days following a Furadan application or within 48 hours of an application of methyl parathion.
- 16. Whip 360 Herbicide can only be applied to the following rice varieties: Alan, Bond, CB-801, Cypress, Della, Gulfmont, Jasmine, Jackson, Katy, L-201, L-202, Lebonnet, Lemont, Maybelle, Millie, Newbonnet, Newrex, Rexmont, Rico 1, Skybonnet, Starbonnet, Tebonnet, Texmont.
- 17. Application of Whip 360 Herbicide to a field that has high alkalinity or salinity content may result in rice injury.

#### ACREAGE CONSERVATION RESERVE (SET-ASIDE)

Whip 360 Herbicide may be used to control annual grassy weeds in acreage conservation reserve (set-aside) acres. This acreage is often seeded to the following cover crops: clover, alfalfa, tall fescue, bromegrass, and ryegrass. Special note: Timothy and orchardgrass are sensitive to Whip 360 Herbicide. The cover crops listed above have excellent tolerance to Whip 360 Herbicide at 12-16 fluid ounces per acre. Select the proper rate from the Rate and Grass Recommendation Chart found in the Soybean Section of this label.

#### SPECIAL NOTES:

- 1. DO NOT harvest or graze cover crops treated with Whip 360 Herbicide.
- 2. DO NOT apply to cover crops such as oats, sorghum, sudangrass, and Timothy as injury may occur.

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