PM 23

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 2/3/98

FEB 3: 1998

Elizabeth J. Weibert Valent U.S.A. Corporation 1333 N. California Blvd., Ste. 600 Walnut Creek, CA 94596

Dear Ms. Weibert:

Subject: Revised Labeling - Additional Tank Mixes; Revised Application Instructions; Add Suppression of White Mold Stellar Herbicide EPA Registration No. 59639-92 Your Submissions Dated October 31 and November 3, 1997

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following provisions:

- 1) Add the general restriction "Do not apply by air."
- 2) In order to be consistent with the Roundup Ultra Herbicide label for use on Roundup Ready soybeans, add a pre-harvest interval of at least 14 days to the restrictions for the recommended tank mix with Roundup Ultra (Table S4).
- 3) In order to be consistent with the Firstrate Herbicide label for use on soybeans, revise the pre-harvest interval in the restrictions for the recommended tank mix with Firstrate (Table S8) to no less than 65 days.

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the referenced label, incorporating the above changes, before releasing the product for shipment.

Sincerely yours,

Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division (7505C)

Enclosure

SYMBOL +	-7546;148 75050	111923	CONCURRENCES			
SURNAME -	D. KENNY		 			
DATE	2/3/98		·			
EPA Form 132	0-1 (12-70)	·		OFFICIA	L FILE COPY	



ACCEPTED with COMMENTS In EPA Letter Dated

FEB 3 1998

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 59639-92

STELLAR[®] Herbicide

Active Ingredients	By Wt.
* Flumiclorac pentyl ester	7.6%
** Lactofen	26.6%
Inert Ingredients	65.8%
Contains petroleum distillates	

Contains 0.7 lb./gal. flumiclorac pentyl ester and 2.4 lbs./gal. lactofen

*pentyl [2-chloro-4-fluoro-5-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2<u>H</u>-isoindol-2-yl)phenoxy]acetate **1-(carboethoxy) ethyl 5-[2-chloro-4-(trifluoromethyl) phenoxy]-2-nitrobenzoate

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

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"PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

DANGER: CORROSIVE TO EYES. Causes irreversible eye damage. Harmful if swallowed or absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on skin or clothing. Avoid breathing vapor or spray mist.

This product contains lactofen, which has been determined to cause tumors in laboratory animals (mouse, rat). Risks can be reduced by closely following use directions and precautions, and by wearing the protective clothing specified elsewhere on this label.

STATEMENT OF PRACTICAL TREATMENT

- If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.
- If swallowed: Call a doctor or get medical attention. DO NOT INDUCE VOMITING. Contains petroleum distillates. Vomiting may induce aspiration pneumonia. Drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol.

If on skin: Wash with plenty of soap and water. Get medical attention.

If inhaled: If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Note To Physicians: Probable mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard. Emergency Information - call 1-800-892-0099.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

Applicators and other handlers must wear: long sleeved shirt and long pants, chemical-resistant gloves such as barrier laminate or viton ≥ 14 mils, shoes plus socks, and protective eyewear.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to shrimp and fish. Keep out of lakes, ponds or streams. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

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[®]Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

Do not apply during wind speeds of greater than 10 miles per hour or during inversions. Local regulations permitting, an inversion can be identified by discharging a column of smoke. During an inversion, the column of smoke will rise and then abruptly level off. Sometimes during an inversion, the smoke can be seen to drop below the height at which the leveling off occurred. In the absence of an inversion the smoke will continue to rise and disperse into the atmosphere.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. 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 workers entry into treated areas during the restricted-entry interval (REI) of 12 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, chemical-resistant gloves such as barrier laminate or viton ≥ 14 mils, shoes plus socks, and protective eyewear.

DISCLAIMER: CONDITIONS OF SALE, LIMITED WARRANTY AND LIMITATION OF LIABILITY

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IMPORTANT: Read the entire Label including this Disclaimer, Limited Warranty and Limitation of Liability before using this product. If the terms are not acceptable, return the unopened product within 15 days of purchase.

RISKS OF USING THIS PRODUCT

It is impossible to eliminate all risks associated with the use of this product. Such risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, moisture conditions, irrigation practices, presence of other materials, cultural practices or the manner of use or application, all of which are factors beyond the control of Valent. All such risks shall be assumed by the Buyer. Valent shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on the label. User assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

LIMITED WARRANTY

Valent warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product described above.

DISCLAIMER OF ALL OTHER WARRANTIES: VALENT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

LIMITATION OF LIABILITY

In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

NO AMENDMENTS

Valent and Seller offer this product, and Buyer and User accept it, subject to the foregoing Disclaimer, Conditions of Sale, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement. PROMPT NOTICE OF CLAIM

Valent must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from date of application) so that an immediate inspection of the affected property and growing crops can be made. Unless Buyer and Users shall promptly notify Valent of any claims, they shall be barred from obtaining any remedy.

TANK MIXES

NOTICE: Tank mixing of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

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GENERAL INFORMATION

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

STELLAR Herbicide is a selective herbicide for postemergence control of susceptible broadleaf weeds in soybeans. STELLAR is formulated as an emulsifiable concentrate containing 0.7 lb. of flumicloracpentyl ester and 2.4 lbs. of lactofen per gallon. In the upper North Central region of the midwest, postemergence applications of STELLAR Herbicide to soybeans (pre-bloom) has resulted in suppression of the soybean disease white mold caused by *Sclerotinia sclerotiorum*. Good coverage of actively growing weeds is essential for maximum weed control. Addition of an EPA approved spray adjuvant is required when STELLAR is applied as a stand-alone treatment and for most recommended tank mixes; see Tables S1 through S 13 for specific adjuvant recommendations.

For best results, STELLAR should be applied to actively growing weeds within the growth stages indicated in this label. Applying STELLAR under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply STELLAR when the crop or weeds are under stress due to drought, excessive water, extremes in temperature, or low humidity. Weeds under stress tend to become less susceptible to herbicidal action.

Soybean leaves which are open at the time of application may exhibit a temporary foliage burn (bronzing and speckling). Trifoliate soybean leaves which have emerged but are not open at the time of application may appear cupped at the tip and/or crinkled along the leaf margins. Under conditions favorable to growth, these phytotoxic symptoms are cosmetic, and the soybeans will quickly outgrow these effects.

Under conditions of normal weed growth, STELLAR is rainfast 1 hour after application.

When STELLAR is used as directed, soybean yield will not be adversely affected.

STELLAR may be applied in tank mix combination with SELECT[®] 2 EC Herbicide. This tank mix combination should be applied for control of the weeds listed and at the rates recommended in Table S2. Crop oil concentrate or methylated seed oil must be used as an adjuvant.

BROADCAST APPLICATION

Apply STELLAR Herbicide and STELLAR Herbicide tank mixes with ground equipment using standard commercial sprayers equipped with flat fan (including split-nozzle systems_which spray in opposite directions) or hollow cone nozzles designed to deliver the desired spray pressure and spray volume. DO NOT USE flood_nozzles. Thorough weed coverage is required for optimum control. Special attention should be given to preparing and operating the spray equipment to assure proper coverage of weed leaf surfaces.

Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

BAND APPLICATION

When banding, use proportionately less water and STELLAR Herbicide per acre. Banding equipment should be adjusted to provide maximum coverage of weeds in the row. A minimum of two nozzles per row is required to provide optimum coverage of weed foliage.

MIXING INSTRUCTIONS

- 1. Fill spray tank with water 1/2 to 1/2 of desired level.
- 2. While agitating, add the required amount of STELLAR Herbicide. If tank mixing STELLAR with other labeled herbicides, add dry formulations first, followed by flowables, emulsifiable concentrates, and then solutions.
- 3. Add any required adjuvants.
- 4. Add any required nitrogen source, unless ammonum sulfate (AMS) is being used. If AMS is being used as the nitrogen source, it should be added after the water soluable bags and before dry herbicides.
- 5. Fill spray tank to desired level with water. Agitation should continue until spray solution has been applied.

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"USE RESTRICTIONS AND LIMITATIONS

Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.

- Do not apply within 60 days of harvest.
- Do not graze animals on green forage or stubble.

Do not utilize hay or straw for animal feed or bedding.

Do not apply during periods when soybeans and weeds are under severe stress conditions such as drought, excessive water, extremes in temperature, or low humidity.

Do not apply when conditions do not favor active weed growth.

Do not apply if rain is expected within 1 hour of application or unsatisfactory weed control may result. Do not apply more than 7 fl. oz./A of STELLAR Herbicide per application.

Do not apply more than 10 fl. oz./A of STELLAR Herbicide per season.

Sequential applications of STELLAR Herbicide should be made at least 10 days apart.

DIRECTIONS FOR USE IN SOYBEANS

Identify your weed species as early as possible and determine the stage of growth by counting the true leaves. Ignore the cotyledon (seed leaves) when you count. Use Tables S1 through S14 to determine rate(s), species, and the maximum weed stage at which you may apply STELLAR Herbicide alone, or in tank mixes.

A temporary crop response may be expected following a postemergence application of STELLAR. Soybean leaves which are open at the time of application may show some burn or spotting. Soybeans quickly outgrow all initial herbicide effects. When STELLAR is used as directed, soybean yields will not be adversely affected.

ADDITIVES:

Control of weeds by STELLAR Herbicide is enhanced by the addition of an adjuvant to the spray mixture. Adjuvants are specified in Table S1and S2 (for STELLAR alone) or in Tables S3 through S13 (for STELLAR in tank mixes). If crop oil concentrate or methylated seed oil is the specified adjuvant, use one that contains at least 15% emulsifier. If a non-ionic surfactant is specified, use one that contains at least 90% active surfactant ingredient. Mixing and compatibility qualities should be verified by a jar test.

A spray grade nitrogen fertilizer solution (28-32% N) or spray grade ammonium sulfate may further enhance weed control with STELLAR applications (UAN at approximately 1 to 2 qts./A or ammonium sulfate at approximately 2.0 to 2.5 lbs./A). The addition of a nitrogen source may increase crop response.

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STELLAR HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist; a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly mix STELLAR Herbicide in water, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the STELLAR.

.		Leaf St	age
Product	Weeds Controlled	STELLAR 5 fl. oz./A*	STELLAR 7 fl. oz./A**
STELLAR (3.1 EC)	Cocklebur, Common Copperleaf	up to 2	up to 4
	Hophombeam		up to 4
	Virginia	_ ;	up to 4
	Jimsonweed	-	up to 4
	Nightshade		
	Eastern Black	up to 3	up to 4
	Figweeds		
	Palmer Amaranth		up to 4
	Redroot	up to 6	up to 6
	Smooth	up to 3	up to 4
	Ragweeds 1		-
	Common	up to 6	up to 6
	Giant	up to 2	up to 4
	Velvetleaf	up to 6	up to 6
	Waterhemp	up to 4	up to 6
	Common	up to 4	up to 6
	Tall	•	- -
	Weeds Suppressed	Leaf St	age
	Copperleaf		
	Hophornbean	up to 4	up to 4
	Virginia	up to 4	up to 4
	Hemp Sesbania	up to 2	up to 2
	Lambsquarters,		
	Common	up to 2	up to 2
	Morningglories,	up to 2	up to 2
	Annual	up to 3	up to 3
	Prickly Sida	up to 3	<u>up to 3</u>

Table S1.

methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

Equivalent to approximately 0.027 lb./A flumiclorac pentyl ester and 0.1 lb./A lactofen.

Equivalent to approximately 0.038 lb./A flumiclorac pentyl ester and 0.14 lb./A lactofen.

<u>.</u>

STELLAR HERBICIDE FOR SUPRESSION OF WHITE MOLD IN SOYBEANS

 Table S2.

 STELLAR Herbicide - White Mold Suppression - Soybeans - Rates and Time of Application

Product	Product Rate	Diseases Suppressed	Crop Growth Stage
STELLAR (3.1 EC)	5 to 7 fl. oz./A	White Mold (Sclerotinia stem rot)	Applications of STELLAR Herbicide for white mold suppression in soybeans must be made at or near bloom.

* The soybean disease white mold is caused by Sclerotinia sclerotiorum.

** The addition of crop oil concentrate or methylated seed oil at the rate of 1 to 2 pt/A is required.

NOTE: It has been shown that this is not a fungicidal response but one that involves Systemic Acquired Resistance (SAR).

STELLAR HERBICIDE TANK MIX COMBINATIONS IN SOYBEANS

Crop response from STELLAR tank mixes may be greater than that which occurs from STELLAR applied alone. Crop response from STELLAR is temporary and does not adversely affect crop yield when applied according to the label use directions.

TANK MIX WITH SELECT® 2 EC HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF AND GRASS WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly mix STELLAR Herbicide in water, add SELECT 2 EC Herbicide, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the STELLAR.

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Table S3.		
STELLAR Herbicide plus SELECT 2 EC Her	bicide Tank Mix -	- Soybeans - Rates and Time of
Application		

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Deeduct*	Woods Controlled	Leaf	Stage	
Product*	Weeds Controlled	STELLAR 5 fl. oz./A*	STELLAR 7 fl. oz./A**	
STELLAR (3.1 EC)	Cocklebur, Common Copperleaf	up to 2	up to 4	
plus	Hophornbeam Virginia	-	up to 4 up to 4	
SELECT 2 EC	Jimsonweed Nightshade	-	up to 4	
(6 to 8 fl. oz./A)	Eastern Black Pigweeds	up to 3	up to 4	
	Palmer Amaranth Redroot Smooth Ragweeds	up to 6 up to 3	up to 4 up to 6 up to 4	
	Common Giant Velvetleaf Waterhemp	up to 6 up to 2 up to 6	up to 6 up to 4 up to 6	
	Common Tall	up to 4 up to 4	up to 6 up to 6	
	Weeds Suppressed	Leaf Stage		
	Copperleaf Hophornbeam Virginia Hemp Sesbania Lambsquarters, Common Morningglories, Annual Prickly Sida	up to 4 up to 4 up to 2 up to 2 up to 3 up to 3	up to 2 up to 2 up to 3 up to 3	
	Annual Grasses Controlled	Grass Height (inches)		
	Barnyardgrass Broadleaf Signalgrass Crabgrasses (lateral growth) Fall Panicum	2 t 2 t	to 8 to 6 to 6	
	Field Sandbur Foxtail Giant Green	2 t	to 6 o 12 to 8	
	Yellow Goosegrass (lateral growth) Seedling Johnsongrass	2 1 2 1 4 t	to 8 to 6 o 10 o 18	
	Shattercane Volunteer Cereals Volunteer Corn Witchgrass Wooly Cupgrass	2 to 6 4 to 24 2 to 8 2 to 8		

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Adjuvant: STELLAR Herbicide plus SELECT 2 EC tank mix must be applied with 1 to 2 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

Equivalent to approximately 0.027 lb./A flumiclorac pentyl ester, 0.1 lb./A lactofen and

0.094 to 0.125 lb./A clethodim. Equivalent to approximately 0.038 lb./A flumiclorac pentyl ester, 0.1 4 lb./A lactofen and 0.094 to 0.125 lb./A clethodim. ŧ ŧ

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TANK MIX WITH SELECT 2 EC HERBICIDE AND ADDITIONAL TANK MIX PARTNERS FOR POSTEMERGENCE CONTROL OF BROADLEAF AND GRASS WEEDS IN SOYBEANS

Directions for three and four way tank mixes of STELLAR Herbicide plus SELECT 2 EC:

- 1. STELLAR plus SELECT 2 EC may be tank mixed with either Basagran, Classic, Cobra, Firstrate, Pinnacle, Pursuit, Raptor, Reliance, or Synchrony.
- Use the SELECT 2 EC high rate, as indicated in the individual tank mix use directions (S3-S15), under heavy grass pressure and/or when grasses are approaching maximum controllable height. A second application of SELECT 2 EC may be necessary in some situations.
- 3. If SELECT 2 EC is included in this tank mix, the SELECT 2 EC should be added last, just prior to application.
- 4. A spray grade nitrogen fertilizer solution (28-32% N) at 1 to 2 qts./A or spray grade ammonium sulfate at 2.0 to 2.5 lbs./A may be added to enhance weed control. The addition of a nitrogen source may increase crop response. The spray grade fertilizer does not replace the requirement for crop oil concentrate or methylated seed oil.
- 5. Refer to the SELECT 2 EC label for a list and growth stages of annual grasses controlled, precautions, restrictions, information on antagonism and other information.
- 6. For control of perennial grasses, such as rhizome johnsongrass, it is recommended that SELECT 2 EC be used as a sequential application at least 1 day before or 7 days after the STELLAR tank mix. Refer to the SELECT 2 EC label for perennial grasses controlled, growth stages, rates and adjuvants recommended.

TANK MIX WITH ROUNDUP ULTRA HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN ROUNDUP READY SOYBEANS ***FOR USE ON ROUNDUP READY SOYBEANS ONLY***

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 35 to 40 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and pressure of 40 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate.

Recommended Mixing Order: Thoroughly disperse ammonium sulfate in water, add STELLAR Herbicide, add ROUNDUP ULTRA, and if required, add adjuvant.

Table	S4.
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STELLAR Herbicide plus ROUNDUP ULTRA Herbicide Tank Mix - Soybean - Rates and Time of Application

Product	Product Rates	Weeds Controlled	Leaf Stage	Adjuvant (see ammonium sulfate statement in adjuvant section below.)		
STELLAR (3.1 EC) plus ROUNDUP ULTRA	3 fl. oz./A plus 1.5 to 3 pt./A	Velvetleaf Velvetleaf Velvetleaf	up to 4 up to 5 up to 6	None .25% NIS 1 pt./A COC or MSO		
STELLAR (3.1 EC) plus ROUNDUP ULTRA	4 fl. oz./A plus 1 to 3 pt./A	Velvetleaf Velvetleaf Velvetleaf	up to 5 up to 6 up to 7	None .25% NIS 1 pt./A COC or MSO		
STELLAR (3.1 EC) Plus ROUNDUP ULTRA	5 fl. oz./A* plus 1 to 3 pt./A	Velvetleaf Velvetleaf Velvetleaf	up to 6 up to 7 up to 8	None .25% NIS 1 pt./A COC or MSO		
		* Tall, ivy, and entireleaf morningglory control is enhanced by the addition of STELLAR to ROUNDUP ULTRA. Refer to ROUNDUP ULTRA label for additional weeds				
		Claimed. COUNDUP ULTRA tar spray grade ammon				

"Use Restrictions for STELLAR Herbicide plus ROUNDUP ULTRA Herbicide Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Read and observe all precautions, restrictions and conditions on the ROUNDUP ULTRA label.
- Do not apply the STELLAR plus ROUNDUP ULTRA tank mix to ROUNDUP READY soybeans after bloom.
- 4. Do not apply more than a total of 10 fl. oz./A of STELLAR to ROUNDUP READY soybeans during a single growing season.
- 5. Do not apply the STELLAR plus ROUNDUP ULTRA tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.
- Do not apply during low level inversion conditions, when winds are gusty, or any other condition which favors drift. Drift to sensitive vegetation may cause serious injury appropriate buffer zones must be maintained.
- Carefully select proper nozzle and spray pressure to avoid spraying a fine mist, twinjet nozzles are NOT recommended.
- 8. Applications made when the crop or weeds are under stress from moisture, cold, heat, high humidity, disease, insects, or prior herbicide applications may result in excessive crop response and/or reduced weed control.
- 9. A sequential application of the STELLAR plus ROUNDUP ULTRA tank mix may be required when additional weed flushes germinate after the initial STELLAR plus ROUNDUP ULTRA application.
- 10. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 11. Use the Roundup Ultra plus STELLAR tank mix only on soybean varieties that are lawfully designated as soybeans with the Roundup Ready gene. Do not use on "brown bag" or farmer saved seed (bin run).

TANK MIX WITH BASAGRAN® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly mix STELLAR Herbicide in water, add BASAGRAN, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the STELLAR.

SELECT 2 EC Herbicide may be added to the STELLAR plus BASAGRAN tank mix at 8 to 10 fl. oz./A for control of annual grasses. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

Table S5.

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STELLAR Herbicide plus BASAGRAN Herbicide Tank Mix - Soybeans - Rates and Time of Application

Product	Product Rate	Broadleaf Weeds	Leaf	Stage
		Controlled	STELLAR 5 fl.oz./A	STELLAR 7 fl. oz./A
STELLAR (3.1 EC) BASAGRAN (4 L)	5 to 7 fl. oz./A plus 1 to 1½ pt./A	Black Nightshade Cocklebur, Common Copperleaf Hophornbeam Virginia Jimsonweed Lambsquarters,Comm on* Pennsylvania Smartweed Pigweeds Redroot Smooth Prickly Sida Ragweeds Common Giant Sunflower, Common Velvetleaf	5 fl.oz./A up to 3 up to 4 - - up to 6 up to 6 up to 3 up to 3 up to 3 up to 6 up to 2 up to 8 up to 8 up to 4	7 fl. oz./A up to 4 up to 4 up to 4 up to 4 up to 4 up to 4 up to 6 up to 4 up to 6 up to 4 up to 5 up to 4 up to 6 up to 6
		Waterhemp Common Tall Refer to BASAGRAN label for additional weeds claimed.	up to 4	up to 6

Adjuvant: STELLAR Herbicide plus BASAGRAN tank mix must be applied with 1 to 2 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

^{*}Due to environmental conditions and other factors influencing the growth, development and physiological condition of lambsquarters, control may be partial or inconsistent.

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"Use Restrictions for STELLAR Herbicide plus BASAGRAN Herbicide Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Read and observe all precautions, restrictions and conditions on the BASAGRAN label.
- 3. Do not apply the STELLAR plus BASAGRAN tank mix within 60 days of harvest.
- 4. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 5. Do not apply STELLAR plus BASAGRAN tank mix if rain is expected within 4 hours of application; otherwise unsatisfactory weed control may result.

TANK MIX WITH CLASSIC® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse CLASSIC in water, add STELLAR Herbicide, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the CLASSIC.

SELECT 2 EC Herbicide may be added to the STELLAR plus CLASSIC tank mix at 8 to 10 fl. oz./A for control of annual grasses. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

Product	Product	Broadleaf Weeds	Leaf :	Stage
	Rate	Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A
STELLAR (3.1 EC) plus CLASSIC (25 DF)	5 to 7 fl. oz./A plus ½ to ¾ oz./A	Black Nightshade Cocklebur, Common Copperleaf Hophornbean Virginia Jimsonweed Morningglory, Annual Pigweeds Palmer Amaranth Redroot Smooth Ragweed Common Giant Sunflower, Common Velvetleaf Waterhemp Common Tall	up to 3 up to 6 - - 1 to 2 in. - - up to 6 up to 3 up to 6 up to 4 2 to 5 in. up to 6 up to 4 2 to 5 in. up to 6 up to 4 up to 4	up to 4 up to 6 up to 4 up to 4 up to 4 1 to 2 in. up to 4 up to 6 up to 6 up to 6 2 to 5 in. up to 6 up to 6 up to 6
		Refer to CLASSIC label for additional weeds claimed.		

 Table
 S6.

 STELLAR Herbicide plus CLASSIC Herbicide Tank Mix - Soybeans - Rates and Time of Application

Adjuvant: STELLAR Herbicide plus CLASSIC tank mix must be applied with 1 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

'Use Restrictions for the STELLAR Herbicide plus CLASSIC Herbicide Tank-Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the STELLAR plus CLASSIC tank mix within 60 days of harvest.
- 3. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 4. Do not apply the STELLAR plus CLASSIC tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.
- 5. Refer to the CLASSIC label for restrictions on soil pH, minimum recropping interval, and rotational guidelines.

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TANK MIX WITH COBRA® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly mix COBRA in water, add STELLAR Herbicide, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the COBRA.

SELECT 2 EC Herbicide may be added to the STELLAR plus COBRA tank mix at 6 to 8 fl. oz./A for control of annual grasses. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

Product	Product Rate	Broadleaf	Leaf Stage	
		Weeds Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A
STELLAR (3.1 EC)	5 to 7 fl.	Black	up to 3	up to 4
plus	oz./A	Nightshade	up to 4	up to 4
COBRA (2 EC)	plus	Cocklebur,		-
	2 to 4 fl.	Common	-	up to 4
	oz./A	Copperleaf	-	up to 4
		Virginia	up to 4	up to 4
		Hophornbeam		
		Jimsonweed	up to 4	up to 6
		Pigweeds	up to 6	up to 6
		Palmer	up to 3	up to 4
	,	Amaranth	up to 4	up to 4
	ें है	Redroot		
		Smooth	up to 8	up to 8
		Prickly Sida	up to 4	up to 6
		Ragweeds	up to 6	up to 6
		Common		,
		Giant	up to 6	up to 6
		Velvetleaf	up to 6	up to 6
		Waterhemp		-
	1	Common		Ì
		Tall		1
		Broadleaf Weeds Suppressed	Leaf \$	Stage
		Hemp Sesbania	up to 2	up to 2
		Lambsquarters	up to 2	up to 2
-				UP LO Z
		Common Morningglories Annual	up to 3	up to 3

STELLAR Herbicide plus COBRA Herbicide Tank Mix - Soybeans - Rates and Time of Application

Table S7.

Adjuvant: STELLAR Herbicide plus COBRA tank mix must be applied with 1 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

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"Use Restrictions for the STELLAR Herbicide plus COBRA Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the STELLAR plus COBRA tank mix within 60 days of harvest.
- 3. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 4. Do not apply STELLAR plus COBRA tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.

TANK MIX WITH FIRSTRATE[®] HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: The recommended order of mixing is to thoroughly disperse FIRSTRATE in water, add STELLAR Herbicide, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the FIRSTRATE.

SELECT 2 EC Herbicide may be added to the STELLAR plus FIRSTRATE tank mix at 8 to 10 fl. oz./A for control of annual grasses. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

 Table
 S8.

 STELLAR Herbicide plus FIRSTRATE Herbicide Tank Mix - Soybeans - Rates and Time of Application

Product	Rate	Broadleaf	Leaf Sta	ge
		Weeds Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A
STELLAR (3.1 EC) plus	5 to 7 fl. oz./A	Black Nightshade	up to 3	up to 4
FIRSTRATE (84 DF)	plus .3 oz./A	Cocklebur Common	up to 6	up to 8
2.7		Copperleaf	-	up to 4 up to 4
		Hophornbeam Virginia		up to 4
		Jimsonweed Morningglory Entireleaf	1 to 2 in. 1 to 2 in.	1 to 2 in. 1 to 2 in.
		lvyleaf Pigweeds Palmer	up to 6 up to 3	up to 4 up to 6 up to 4
		Amaranth Redroot	up to 6	up to 8
		Smooth Ragweed	up to 6	up to 8
		Giant Common Sunflower	2 to 5 in. up to 6	2 to 6 in. up to 6
		Common Velvetleaf Waterhemp Common Tall	up to 4 up to 4	up to 6 up to 6
		Refer to FIRSTRATE label for additional weeds claimed.		

Adjuvant: STELLAR Herbicide plus FIRSTRATE tank mix must be applied with 1 to 2 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

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"Use Restrictions for STELLAR Herbicide plus FIRSTRATE Herbicide Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Read and observe all precautions, restrictions, and conditions on the FIRSTRATE label.
- 3. Do not apply the STELLAR plus FIRSTRATE tank mix within 60 days of harvest.
- 4. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 5. Do not apply STELLAR plus FIRSTRATE tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.
- 6. Refer to the FIRSTRATE label for restrictions on soil pH minimum, recropping interval, and rotational guidelines.

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TANK MIX WITH PINNACLE® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse PINNACLE in water, add STELLAR, add nonionic surfactant, COC, or MSO, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the PINNACLE.

SELECT 2 EC Herbicide may be added to the STELLAR plus PINNACLE tank mix at 6 to 8 fl. oz./A for control of annual grasses when the PINNACLE rate is .125 oz./A. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

Table S9.

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STELLAR Herbicide plus PINNACLE Herbicide	Tank Mix -	Soybeans	- Rates and Time of
Application			

Product		Broadleaf Weeds	Weed Size Inches	
		Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A
STELLAR (3.1 EC) PINNACLE (25 DF) or PINNACLE (25 DF)	plus mon .25 oz./A* Pennsylvania or Smartweed .125 Pigweed oz./A** Palmer Amaranth Redroot Smooth Velvetleaf Waterhemp Common Tall Wild Mustard	Lambsquarters,Com mon Pennsylvania Smartweed Pigweed Palmer Amaranth Redroot Smooth Velvetleaf Waterhemp Common Tall	2 to 4 2 to 6 2 to 6 2 to 8 2 to 6 2 to 6 2 to 6 2 to 6 2 to 6 2 to 6 up to 4" dia.	up to 4 leaf 2 to 4 2 to 6 2 to 6 up to 4" dia.
		Broadleaf Weeds Controlled	Leaf St	tage
		Black Nightshade Common Cocklebur Copperleaf Hophornbeam	up to 3 up to 2	up to 3 up to 4 up to 4 up to 4 up to 4
		Virginia Ragweed Common Giant	up to 6 up to 2	up to 6 up to 4
		Weeds Suppressed	Leaf S	tage
		Hemp Sesbania Morningglories, Annual Prickly Sida Sunflower, Common	up to 2 up to 3 up to 3 up to 4	up to 2 up to 3 up to 3 up to 4

*Adjuvant: STELLAR Herbicide plus PINNACLE at 0.25 oz./A tank mix must be applied with non-ionic surfactant at 0.25% v/v plus a spray grade nitrogen fertilizer solution (28-32% N) at 1 to 2 qts./A.

**Adjuvant: STELLAR Herbicide plus PINNACLE at 0.125 oz./A tank mix must be applied with crop oil concentrate or methylated seed oil at 1 pt./A plus a spray grade nitrogen fertilizer solution (28-32% N) at 1 to 2 gts./A.

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"Use Restrictions for STELLAR Herbicide plus PINNACLE Herbicide Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Carefully read and observe all restrictions, precautions, and conditions on the PINNACLE label.
- 3. Do not apply the STELLAR plus PINNACLE tank mix within 60 days of harvest.
- 4. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 5. Do not apply the STELLAR plus PINNACLE tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.
- 6. Do not use DASH^{*} HC spray adjuvant.

PINNACLE SEQUENTIAL TREATMENTS

Sequential applications of PINNACLE following postemergent PURSUIT^{*} treatments are not recommended because:

- 1. Crop injury from sequential postemergence applications of PINNACLE following PURSUIT is greater than from the use of either product applied alone. The 1st application interferes with the soybean's ability to metabolize the 2nd herbicide treatment. Sequential applications may result in severe crop injury.
- Any weeds not controlled by the PURSUIT application will be stressed at the time of the sequential treatment. This will result in unsatisfactory weed control, particularly for stress sensitive weeds such as lambsquarters.

Even though not recommended for sequential application, a minimum interval of at least 14 days between applications of PINNACLE following PURSUIT is required to reduce the potential for crop injury and unsatisfactory weed control. The soybeans should be free from stress (herbicide or environmental) and actively growing. Weeds should be free from stress and not exceed the labeled size (height) at the time of PINNACLE application.

TANK MIX WITH PURSUIT® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse PURSUIT in water, add STELLAR, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the PURSUIT.

Table S10. STELLAR Herbicide plus PURSUIT Herbicide Tank Mix - Soybeans - Rates and Time of Application

Product	Product	Broadleaf Weeds	Leaf	Leaf Stage	
	Rate	Controlled	STELLÁR 5 fl. oz./A	STELLAR 7 fl. oz./A	
STELLAR (3.1	5 to 7 fl.	Black Nightshade	up to 4	up to 4	
EC) plus	oz./A plus	Cocklebur, Common Copperleaf	up to 8	up to 8	
PURSUIT (70	1.44 oz./A	Hophornbeam	-	up to 4	
DG)		Virginia	-	up to 4	
		Jimsonweed	-	up to 4	
		Pigweeds			
		Palmer Amaranth	up to 6	up to 6	
		Redroot	up to 8	up to 8	
		Smooth	up to 8	up to 8	
A		Ragweeds			
		Common	up to 6	up to 6	
		Giant	up to 4	up to 4	
		Velvetleaf	up to 6	up to 6	
		Waterhemp			
		Common	up to 4	up to 6	
1		Tall	up to 4	up to 6	
		Refer to PURSUIT label for additional weeds claimed.			

Adjuvant: STELLAR Herbicide plus PURSUIT tank mix must be applied with 1 qt./A crop oil concentrate or methylated seed oil plus 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer such as 28-32% N or 2.0 to 2.5 lbs./A of a spray grade ammonium sulfate.

Use Restrictions for the STELLAR Herbicide plus PURSUIT Herbicide Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the STELLAR plus PURSUIT tank mix within 85 days of harvest.
- 3. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 4. Do not apply the STELLAR plus PURSUIT tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.
- 5. Refer to the PURSUIT label for geographic restrictions as to where PURSUIT may be used.

TANK MIX WITH RAPTOR® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN SOYBEANS

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse RAPTOR in water, add STELLAR, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the RAPTOR.

Table	S11.
STELL	AR Herbicide plus RAPTOR Herbicide Tank Mix - Soybeans - Rates and Time of
Annlic	ation

Product	Product	Broadleaf Weeds	Leaf	Leaf Stage	
	Rate	Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A	
STELLAR (3.1	5 to 7 fl.	Black Nightshade	up to 4	up to 4	
EC)	oz./A	Cocklebur, Common	up to 8	up to 8	
plus	plus	Copperleaf			
RAPTOR (1 AS)	4 fl. oz./A	Hophornbeam	-	up to 4	
		Virginia		up to 4	
		Jimsonweed	- 1	up to 4	
		Pigweeds			
		Palmer Amaranth	up to 6	up to 6	
		Redroot	up to 8	up to 8	
		Smooth	up to 8	up to 8	
		Ragweeds			
		Common	up to 4	up to 6	
		Giant	up to 4	up to 4	
		Velvetleaf	up to 6 -	up to 6	
		Waterhemp			
		Common	up to 4	up to 6	
		Tall	up to 4	up to 6	
	* *	Refer to RAPTOR			
		label for additional			
		weeds claimed.			

Adjuvant: STELLAR Herbicide plus RAPTOR tank mix must be applied with 1 to 2 pt./A crop oil concentrate or methylated seed oil plus 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer such as 28-32% N or 2.0 to 2.5 lbs./A of a spray grade ammonium sulfate.

Use Restrictions for the STELLAR Herbicide plus RAPTOR Herbicide Tank Mix:

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 2. Do not apply the STELLAR plus RAPTOR tank mix within 85 days of harvest.
- 3. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 4. Do not apply the STELLAR plus RAPTOR tank mix if rain is expected within 1 hour of application; otherwise unsatisfactory weed control may result.

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5. Refer to the RAPTOR label for geographic restrictions as to where RAPTOR may be used.

TANK MIX WITH SCEPTER® HERBICIDE

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse SCEPTER in water, add STELLAR, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the SCEPTER

Table	S12.
STELL	AR Herbicide plus SCEPTER Herbicide Tank Mix - Soybeans - Rates and Time of
Applic	ntion

Product	Product Rate	Broadleaf Weeds	Leaf S	Leaf Stage	
		Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A	
STELLAR (3.1 EC) plus SCEPTER (70 DG)	5 to 7 fl. oz./A plus	Black Nightshade, E. Cocklebur,	up to 4 up to 8	up to 4 up to 8	
	1.4 oz./A	Common	.	up to 4	
		Copperleaf		up to 4	
		Hophornbeam Virginia	-	up to 4	
		Jimsonweed	up to 6	up to 6	
		Pigweeds	up to 4	up to 4	
		Redroot Smooth	up to 6	up to 6	
		Palmer	up to 6	up to 6	
		Ragweed	up to 2	up to 4	
		Common	up to 4	up to 4	
		Giant Sunflower,	up to 6	up to 6	
		Common	up to 4	up to 6	
		Velvetleaf Waterhemp Tall Common	up to 4	up to 6	
		Broadleaf Weeds Suppressed	Leaf	Stage	
		Hemp Sesbania Lambsquarters Common	up to 2 up to 2	up to 2 up to 2	
		Morningglory,	up to 3	up to 3	
		Annual Prickly Sida	up to 3	up to 3	
		Refer to SCEPTER label for additional weeds claimed.			

Adjuvant: STELLAR Herbicide plus SCEPTER tank mix must be applied with 1 to 2 pt./A crop oil concentrate or methylated seed oil plus 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer such as 28-32% N or 2.0 to 2.5 lbs./A of a spray grade ammonium sulfate.

- "Use Restrictions for the STELLAR Herbicide plus SCEPTER Herbicide Tank Mix:
 - 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
 - 2. Do not apply the STELLAR plus SCEPTER tank mix within 90 days of harvest.
- 3. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 4. Do not apply the STELLAR plus SCEPTER tank mix if rain is expected within 2 hours of application; otherwise unsatisfactory weed control may result.
- 5. Refer to Scepter 70 DG label for all rotational crop restrictions.

TANK MIX WITH SYNCHRONY® STS® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN STS SOYBEANS **FOR USE ON STS SOYBEANS ONLY**

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse **SYNCHRONY** in water, add STELLAR, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the SYNCHRONY.

SELECT 2 EC Herbicide may be added to the STELLAR plus SYNCHRONY tank mix at 8 to 10 fl. oz./A for control of annual grasses. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

Table S13.

STELLAR Herbicide plus SYNCHRONY Herbicide Tank Mix - Soybeans - Rates and Time of Application

Product	Product Broadleaf Weeds		Weed Size	Inches
	Rate	Controlled	STELLAR	STELLAR
	·		5 fl. oz./A	7 fl. oz./A
STELLAR (3.1 EC)	5 to 7 fl.	Black Nightshade	3 leaf	4 leaf
plus	oz./A	Burcucumber	2 to 3	2 to 3
SYNCHRONY STS	plus	Cocklebur, Common	up to 6	up to 6
or	опе	Copperleaf		
SYNCHRONY STS	pack/4A	Hophombeam	-	4 leaf
SP	or	Virginia	-	4 leaf
or	one	Hemp Sesbania	2 to 5	2 to 5
SYNCHRONY STS	pack/4A	Jimsonweed	√2 to 5 .	2 to 5
DF	or	Lambsquarters,Com	2 to 4	2 to 4
	0.5 oz./A	mon	1 to 3	1 to 3 '
		Morningglories,	2 to 8	2 to 8
		Annual		
		Penn: Smartweed	up to 6	up to 6
		Pigweed	up to 8	up to 8
1		Palmer Amaranth	up to 8	up to 8
		Redroot	-	3 leaf
		Smooth		
		Prickly Sida	4 leaf	6 leaf
1	1	Ragweed	4 leaf	6 leaf
		Common	2 to 8	2 to 8
]	1	Giant	up to 8	up to 8
1	1	Sunflower, Common		
1		Velvetleaf	up to 4	up to 6
1	1 .	Waterhemp	up to 4	up to 6
1		Common	up to 5"	up to 5"
1	ł	Tall	dia.	dia.
		Wild Mustard		
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Adjuvant: STELLAR Herbicide plus SYNCHRONY tank mix must be applied with 1 to 2 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.

Use Restrictions for the STELLAR Herbicide plus SYNCHRONY Herbicide Tank Mix:

- 1. FOR USE ONLY ON SOYBEAN VARIETIES DESIGNATED AS "STS".
- 2. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 3. Do not apply the STELLAR plus SYNCHRONY tank mix within 60 days of harvest.
- 4. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 5. Do not apply the STELLAR plus SYNCHRONY tank mix if rain is expected within 1 hours of application; otherwise unsatisfactory weed control may result.
- 6. For rotational crop intervals for SYNCHRONY, refer to the SYNCHRONY label.
- 7. Refer to the SYNCHRONY label for soil restrictions.

TANK MIX WITH RELIANCE® STS® HERBICIDE FOR POSTEMERGENCE CONTROL OF BROADLEAF WEEDS IN STS SOYBEANS **FOR USE ON STS SOYBEANS ONLY**

Ground Application: Apply on a broadcast basis in 15 to 20 gals. water per acre and at a spray pressure of 40 to 60 PSI at the nozzle to actively growing weeds. A spray volume of 20 GPA and minimum pressure of 50 PSI should be used when one or more of the following conditions exist: a) weeds are in the upper size range of the recommended leaf stage, b) weed populations are moderate to heavy, or c) if the crop canopy is difficult to penetrate. Apply using flat fan or hollow cone nozzles designed to deliver the desired spray pressure and spray volume.

Recommended Mixing Order: Thoroughly disperse RELIANCE in water, add STELLAR Herbicide, add crop oil concentrate or methylated seed oil, and then add nitrogen source (if required). If ammonium sulfate is used as the nitrogen source, it should be added to the spray tank before the RELIANCE.

SELECT 2 EC Herbicide may be added to the STELLAR plus RELIANCE tank mix at 8 to 10 fl. oz./A for control of annual grasses. See use directions under "Directions for three and four way tank mixes of STELLAR plus SELECT 2 EC Herbicide".

Table S14.

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STELLAR Herbicide plus RELIANCE Herbicide Tank Mix - Soybeans - Rates and Time of Application

Product		Broadleaf Weeds	Weed Size Inches	
		Controlled	STELLAR 5 fl. oz./A	STELLAR 7 fl. oz./A
STELLAR (3.1 EC) Plus RELIANCE STS SP	5 to 7 fl. oz./A plus one pack/4A	Black Nightshade Common Cocklebur Copperleaf Hophornbeam Virginia Hemp Sesbania Jimsonweed Lambsquarters, Common Morningglories,An nual Mustard, Wild Penn. Smartweed Pigweed Palmer Amaranth Redroot Smooth Prickly Sida Ragweed Common Giant Sunflower, Common Velvetleaf Waterhemp Common Tall	3 leaf up to 6 - 2 leaf 2 to 5 2 to 4 3 leaf up to 4" dia. 2 to 8 up to 12 up to 3 up to 4 up to 4	4 leaf up to 6 4 leaf 2 leaf 2 to 5 2 to 4 3 leaf up to 4" dia. 2 to 8 up to 12 up to 5 2 to 8 up to 6 up to 6 up to 6
Adjuvant: STELLAR Herbicide plus RELIANCE tank mix must be applied with 1 to 2 pts./A crop oil concentrate or methylated seed oil. To enhance weed control, 1 to 2 qts./A of a spray grade nitrogen based liquid fertilizer, such as, 28, 30, or 32% N or 2.0 to 2.5 lbs. ammonium sulfate/A may be added.				

* * * Use Restrictions for the STELLAR Herbicide plus RELIANCE Herbicide Tank Mix: 1. USE ONLY ON SOYBEAN VARIETIES DESIGNATED AS "STS".

- 2. Always read and follow all label directions when using any pesticide alone or in tank mix combinations. The most restrictive labeling applies when using a tank mix.
- 3. Do not apply the STELLAR plus RELIANCE tank mix within 60 days of harvest.
- 4. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding.
- 5. Do not apply the STELLAR plus RELIANCE tank mix if rain is expected within 1 hours of application; otherwise unsatisfactory weed control may result.
- 6. For rotational crop intervals for RELIANCE, refer to the RELIANCE label.
- 7. Refer to RELIANCE label for soil restrictions.

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. **STORAGE**

Store in a cool dry place.

Keep pesticide in original container.

Keep container closed when not in use.

Do not put concentrate or dilute into food or drink containers.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099. **PESTICIDE DISPOSAL**

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

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Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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