

PM 23

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

10182-418

9/10/97

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SEP 10 1997

Ms. Sandra M. O'Bryan
Zeneca Inc., Zeneca Ag Products
1800 Concord Pike, P.O. Box 15458
Wilmington, DE 19850-5458

Dear Ms. O'Bryan:

SUBJECT: Label Amendment: Alternate Brand Name; General Information Text Changes;
Directions Further Defined for Regions and Target Weeds; Addition of
Preplant/Preemergence Applications; Revised Rotational Crop Restrictions;
Weeds added, and Other Minor Changes
Flexstar HL Herbicide
EPA File Symbol: 10182-418
Your Submission Dated August 22, 1997

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

1. Delete the following statement on page 10: "For preemergence band applications, the maximum rate allowed per broadcast acre may be applied in the band (see Regional Use Maps for maximum rates allowed)."
2. Delete the statement on page 11 which is related to the one discussed above in item 1: "To avoid rotational crop injury, soils should be thoroughly tilled before planting rotational crops if FLEXSTAR was previously concentrated in a preemergence band at any level above that which would occur from the maximum allowed broadcast rate."

A decision on the acceptability of the label statements discussed above would require additional scientific review to determine if residues in the crop following the proposed concentrated band application would be within the established tolerance for soybeans. You may resubmit your request to add these statements; however, please be aware that the request would not qualify for a fast-track review.

RD:STANTON:PM Team 23:Rm. 237:CM-2:305-5218:Disk #6:S529167.LET

CONCURRENCES							
SYMBOL >	7505C						
SURNAME >	S. Stanton						
DATE >	Sep 10, 1997						

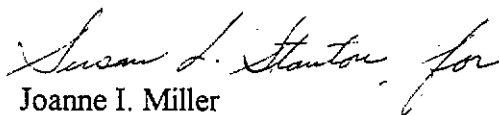
EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

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A stamped copy is enclosed for your records. Please submit one copy of the final printed labeling, incorporating the above changes, before you release the product for shipment.

Sincerely yours,

A handwritten signature in cursive script, reading "Susan L. Stanton for".

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

Enclosure

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FLEXSTAR® HL
Herbicide

For Postemergence Control of Broadleaf Weeds in Soybeans

COMPLETE DIRECTIONS FOR USE

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

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.)

ACTIVE INGREDIENT:

Sodium salt of fomesafen	
5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide	22.1%*
INERT INGREDIENTS	<u>77.9%</u>
TOTAL	100.0%

*Equivalent to 21.0% fomesafen or 1.88 pound fomesafen active ingredient per gallon.

EPA Reg. No. 10182-418

Made in U.S.A.
ZENECA Ag Products
ZENECA Inc.
Wilmington, DE 19850-5458

ACCEPTED
with COMMENTS
In EPA Letter Dated

SEP 10 1997

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
10182-418

**CONDITIONS OF SALE
AND LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ZENECA or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ZENECA and Seller harmless for any claims relating to such factors.

ZENECA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. 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 or beyond the control of Seller or ZENECA, and Buyer and User assume the risk of any such use. ZENECA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall ZENECA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ZENECA AND 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 ZENECA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ZENECA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ZENECA.

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STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center. Do not induce vomiting. 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: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

IF IN EYES: Flush with plenty of water. Call a physician if irritation persists.

NOTE TO PHYSICIANS: Probable mucosal damage may contraindicate the use of gastric lavage.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

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

CAUSES EYE AND SKIN IRRITATION. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. Do not get on skin or on clothing. Avoid breathing vapor or spray mist. Avoid contact with eyes. Prolonged or repeated skin contact may cause allergic reactions in some individuals. **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 E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton.
- Chemical resistant footwear plus socks.
- Chemical resistant apron when cleaning equipment, mixing or loading.

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

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 washwaters. Do not apply when weather conditions favor drift from target area.

This chemical is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

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DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency 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 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 over short-sleeved shirt and short pants.
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton.
- Chemical resistant footwear plus socks.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

STORAGE: Store above 45°F in original containers only. If product solidifies, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

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.

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CONTAINER DISPOSAL:

Metal Containers: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Plastic Containers: Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Glass Containers: Triple rinse (or equivalent); then dispose of in a sanitary landfill or by other approved state and local procedures.

FOR BULK AND MINI-BULK CONTAINERS:

Container Disposal: Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

Container Precautions: Before refilling, inspect thoroughly for damage, such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.

REFILL ONLY WITH FLEXSTAR® H₂O. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than FLEXSTAR H₂O will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

GENERAL INFORMATION

Read all label directions before using.

FLEXSTAR is a selective herbicide which may be applied preplant, preemergence and/or postemergence for control and suppression of broadleaf weeds, grasses and sedges in soybeans. Soybean plants are tolerant to FLEXSTAR when applied according to labeled rates and uses.

FLEXSTAR is generally most effective and consistent when used postemergence, working through contact action. Therefore, emerged weeds must be thoroughly covered with spray. Some bronzing, crinkling or spotting of soybean leaves may occur following postemergent applications, but soybeans soon outgrow these effects and develop normally.

Optimum broadspectrum weed control is achieved by postemergent applications of FLEXSTAR to young actively growing broadleaf weeds that are not under stress from moisture, temperature, low soil fertility, mechanical or chemical injury.

Certain germinating broadleaf weeds, grasses and sedges may be controlled or suppressed by soil residual activity from either preplant, preemergent or postemergent applications if rainfall occurs shortly after application. The extent and consistency of soil activity is dependent upon soil type, ground cover at time of application, amount of rainfall and the rate of FLEXSTAR used.

FLEXSTAR HL is a selective postemergence herbicide for control of broadleaf weeds in soybeans. Soybean plants are tolerant to FLEXSTAR HL when applied at recommended rates. Some bronzing, crinkling or spotting of soybean leaves may occur, but soybeans soon outgrow these effects and develop normally.

FLEXSTAR HL is effective through contact action, therefore weeds must be thoroughly covered with spray. Optimum weed control is achieved when young actively growing weeds are treated that are not under stress from moisture, temperature, low soil fertility, mechanical or chemical injury.

Secondary flushes of certain weeds may be controlled by soil residual activity if rainfall occurs shortly after application. The extent of soil activity is dependent upon soil type, ground cover at time of application, amount of rainfall and the rate of FLEXSTAR HL used.

APPLICATION DIRECTIONS

TIMING: Best broadspectrum postemergence control of susceptible broadleaf weeds is obtained when FLEXSTAR HL is applied early to actively growing weeds. This usually occurs 14 to 28 days after planting. Refer to the weed tables for specific recommendations on weed growth stages, rates, and regions.

SPRAY ADDITIVES: Only spray additives cleared for use on growing crops under 40 CFR 180.1001 may be used in spray mixture.

For best broadspectrum postemergence control of susceptible broadleaf weeds in Regions 2, 3, 4 and 5 (see Regional Use Maps), FLEXSTAR should be used with a minimum of 2.5% liquid nitrogen (28% or similar) or a minimum of 10 pounds ammonium sulfate per 100 gallons of spray volume.

In Regions 2, 3 and 4 (see Regional Use Maps), FLEXSTAR HL should be used with a minimum of 1.0% of liquid nitrogen (28% or similar) or a minimum of 4 pounds ammonium sulfate per 100 gallons of spray volume.

For Postemergence Applications Always Add One of the Following:

Nonionic Surfactant (NIS) - Use NIS containing at least 75% surface active agent at 0.25%-0.5% ($\frac{1}{2}$ - 1 pint per 25 gallons) of the finished spray volume (Region 1 Only); and East of Interstates 79 and 77 for Regions 2 and 3).

Crop Oil Concentrate (COC) - Use a nonphytotoxic COC or a once refined vegetable oil concentrate (VOC, MSO) containing 15-20% approved emulsifier at 0.5%-1% (1-2 pints per 25 gallons) of finished spray volume. COC can improve weed control but may slightly reduce crop tolerance.

Other Adjuvants - Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with FLEXSTAR HL on the target crop through proven field trials and through university and extension recommendations.

Note: no adjuvants are needed for preplant or preemergence applications unless FLEXSTAR is being used in a burndown.

Recommended Mixing Order:

1. Half required amount of water, begin agitation.*
2. Dry pesticide formulations.
3. FLEXSTAR HL herbicide.
4. Liquid pesticide formulation.
5. Adjuvant (COC or NIS) and fertilizer.

*Compatibility agent, 1 gallon/500 gallons of water or 0.2% v/v, may be added as needed.

GROUND APPLICATION: Use sufficient spray volume and pressure to ensure complete coverage of the target weeds. A minimum spray volume of 10-20¹⁵ gallons per acre and 30-60 psi at the nozzle tip is recommended. When weed foliage is dense On large weeds and/or dense foliage, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

Use only hollow cone or flat fan nozzles. The sprayer must be calibrated to provide the proper volume and rate per acre. In addition, the boom and nozzle height must be adjusted to provide complete coverage of all weeds the target.

DO NOT USE FLOOD TYPE OR OTHER SPRAY NOZZLES, WHICH DELIVER COARSE, LARGE DROPLET SPRAYS.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

BAND APPLICATIONS: Thorough weed coverage is important for postemergent control. Best coverage is obtained with a minimum of two nozzles, one directed to each side of the planted

row. Application with a single nozzle directed over the top of the row is not recommended for postemergence applications but is suitable for preemergence applications. Cultivation of untreated areas may be needed following band applications. When making postemergence band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept spray, reducing weed coverage, resulting in less than adequate weed control.

Calculate the amount of herbicide and water volume needed for postemergence band treatment by the following formulas:

$$\frac{\text{Band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{Band herbicide rate per acre}$$

$$\frac{\text{Band width in inches}}{\text{row width in inches}} \times \text{broadcast volume per acre} = \text{Band water volume per acre}$$

For preemergence band applications, the maximum rate allowed per broadcast acre may be applied in the band (see Regional Use Maps for maximum rates allowed).

AERIAL APPLICATION: Use sufficient spray volume and pressure to ensure complete coverage of the target weeds. A minimum of 5 gallons per acre of spray mixture should be applied with a maximum of 40 PSI pressure. When broadleaf weed foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

CULTIVATION: Cultivation prior to application is not recommended. Cultivation may put weeds under stress, reducing weed control. Timely cultivation 1-3 weeks after applying FLEXSTAR HL may assist weed control.

GENERAL USE PRECAUTIONS

- A maximum of 1.6 pints of FLEXSTAR HL herbicide (or a maximum of 0.375 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre per year in Region 1 (see Regional Use Map).
- A maximum of 1.6 pints of FLEXSTAR HL herbicide (or a maximum of 0.375 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in alternate years in Region 2 (see Regional Use Map).
- A maximum of 1.3 pints of FLEXSTAR HL herbicide (or a maximum of 0.313 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in alternate years in Region 3 (see Regional Use Map).
- A maximum of 1 pint of FLEXSTAR HL herbicide (or a maximum of 0.25 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in alternate years in Region 4 (see Regional Use Map).
- A maximum of 0.75 pint of FLEXSTAR HL herbicide (or a maximum of 0.1875 lb ai/A of fomesafen from any product containing fomesafen) may be applied per acre in alternate years in Region 5 (see Regional Use Map).
- Apply FLEXSTAR HL herbicide before soybeans bloom.

- Thoroughly clean the spray system with water and a commercial tank cleaner before and after each use.
- Tankmixes of FLEXSTAR HL herbicide with other pesticides, fertilizers or any other additives except as specified on this label or other approved ZENECA supplemental labels may result in tankmix incompatibility, unsatisfactory performance and/or unsatisfactory crop injury.
- FLEXSTAR HL herbicide requires a 1-hour rain-free period for best results when applied postemergence.
- Apply postemergence to actively growing weeds. Avoid applying FLEXSTAR HL to weeds or soybeans which are under stress from moisture, temperature, low soil fertility, mechanical or chemical injury, as reduced weed control and/or increased crop injury may result.
- Avoid overlapping spray swaths, as injury may occur to rotational crops.
- To avoid rotational crop injury, soils should be thoroughly tilled before planting rotational crops if FLEXSTAR was previously concentrated in a preemergence band at any level above that which would occur from the maximum allowed broadcast rate.
- Avoid drift to all other crops and nontarget areas. Crops other than soybeans may be severely injured by drift. Do not apply when wind velocity exceeds 15 mph. Do not make ground or aerial application during temperature inversions.
- To provide adequate coverage, it is recommended that ground speed not exceed 10 MPH during application.
- Do not graze treated areas or harvest for forage or hay.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying FLEXSTAR HL at recommended rates in soybeans:

<u>Crop To Be Planted</u>	<u>Minimum Rotation Interval (Months After Last FLEXSTAR HL Application)</u>
Small grains such as wheat, barley, rye	4
Alfalfa, Beans & peas, corn*, cotton, peanuts, rice, seed corn	10
To avoid crop injury do not plant alfalfa, sunflowers, sugar beets, sorghum** or any other crop within	18

Do not graze rotated small grain crops or harvest forage or straw for livestock. In the event of a crop loss due to weather conditions soybeans can be replanted.

* Use 18 month minimum rotation interval for sweet corn in the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont and Region 5.

** Sorghum may be planted back after 10 months in Region 1.

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FLEXSTAR HL IN SOYBEANS - USE RATES AND WEEDS CONTROLLED

REFER TO MAP FOR DEFINITION OF SPECIFIED GEOGRAPHIC REGIONS

REGION 1

(Maximum Rate 1.6 pints per acre per year)

REGION 1 - Includes the following states or portion of states where FLEXSTAR HL herbicide may be applied: Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri (Counties of Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Perry, Ripley, Scott, Stoddard and Wayne), North Carolina, Oklahoma (East of U. S. Highway 75 and East of Indian Nation Parkway), South Carolina, Tennessee and Texas (all areas East of U.S. Highway 77 to State Road 239, including all of Calhoun County).

REGION 2

(Maximum Rate 1.6 pints per acre, alternate years)

REGION 2 - Includes the following states or portion of states where FLEXSTAR HL may be applied: Delaware, Kentucky, Maryland, Virginia and West Virginia; and South of Interstate 70 in the following states: Illinois, Indiana and Ohio and all areas South of Interstate 80 to the intersection of U.S. Highway 15 and East of U.S. Highway 15 and U.S. Highway 522 in Pennsylvania.

REGION 3

(Maximum Rate 1.3 pints per acre, alternate years)

REGION 3 - Includes the following states or portion of states where FLEXSTAR HL may be applied: Connecticut, Iowa, Maine, Massachusetts, Missouri (all counties except for those listed in Region 1), New Hampshire, New Jersey, New York, Pennsylvania (all areas except those listed in Region 2), Rhode Island, Vermont, and Wisconsin (South of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 between Madison and Milwaukee) and North of Interstate 70 in the following states: Illinois, Indiana and Ohio.

REGION 4

(Maximum Rate 1 pint per acre, alternate years)

REGION 4 - Includes the following states or portion of states where FLEXSTAR HL may be applied: Kansas (all areas east of U.S. Highway 75), Michigan (all areas south of State Road 55), Minnesota (all areas south of U.S. Highway 212), Nebraska (all areas east of U.S. Highway 81), and Wisconsin (North of U.S. Highway 18 between Prairie Du Chien and Madison, and South of Interstate 94 from Hudson to Madison).

REGION 5
(Maximum Rate 0.75 pint per acre, alternate years)

REGION 5 - Includes the following states or portion of states where FLEXSTAR HL may be applied: North Dakota (all areas East of Interstate 29 from Fargo South to the South Dakota State line), South Dakota (all areas East of Interstate 29 from North Dakota State line to Watertown, all areas East of U.S. Highway 81 from Watertown to Madison and all areas East and South of State Road 34 and U.S. Highway 281 to the Nebraska State line) and Minnesota (all areas North of U. S. Highway 212 and South of Interstate 94).

APPLICATION RATES FOR WEED GROWTH STAGES

Weed	FLEXSTAR HL Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 Pt/A # of True Leaves	1 Pts/A # of True Leaves	1.25 Pts/A # of True Leaves	1.5 Pts/A # of True Leaves
Anoda, Spurred	—	2*	2	4
Balloonvine	—	—	2	4
Carpetweed	—	8" Diameter Size	Unlimited Size	Unlimited Size
Citron (Wild Watermelon)	—	2	4	4
Cocklebur, Common	—	4	6	8
Copperleaf, Hophornbeam	—	4	4	6
Copperleaf, Virginia	—	4	4	6
Crotalaria, Showy	—	6	6	8
Croton, Tropic	—	4	4	6
Cucumber, Volunteer	—	4	6	8
Eclipta	—	2	4	4
Groundcherry, Cutleaf	—	4	6	8
Hemp	—	4	6	6
Horsenettle	—	2*	4*	4*
Jimsonweed	4	6	8	8
Ladysthumb	2*	2	4	6
Lambsquarters, Common	—	2*	2*	2*
Mexicanweed	—	2*	2	4
Morningglory				
Cypressvine	2	4	6	6
Entireleaf var.	3*	3	4	5
Ivyleaf	3*	3	4	5

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Weed	FLEXSTAR HL Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 Pt/A # of True Leaves	1 Pts/A # of True Leaves	1.25 Pts/A # of True Leaves	1.5 Pts/A # of True Leaves
Purple Moonflower	3*	3	5	6
Red (Scarlet)	3*	3	6	6
Smallflower	3*	3	4	6
Pitted (Smallwhite)	4*	4	6	6
Tall (Common)	2*	2	3	5
Palmleaf (Willowleaf)	3*	3	6	6
Mustard, Wild	4	6	8	8
Nightshade, Black	2	4	6	6
Nutsedge, Yellow	—	—	*	*
Pigweed, spp.				
Amaranth, Palmer	4*	4	6	6
Amaranth, Spiny	2*	2	4	6
Redroot	4*	4	6	8
Smooth	4*	4	6	6
Waterhemp, Common	2*	2	4	6
Waterhemp, Tall	2*	2	4	6
Poinsettia, Wild	--	2	4	6
Purslane, Common	—	Multi-Leaf 6" Diameter	Multi-Leaf 8" Diameter	Multi-Leaf 8" Diameter
Pusley, Florida	--	2	2	4
Ragweed, Common	4*	4	6	8
Ragweed, Giant	4*	4	6	8
Redweed	--	—	2*	3*
Sesbania, Hemp	--	8	12	12
Sicklepod	--	—	Cotyledon*	Cotyledon*
Sida, Prickly	—	2*	2	4
Smartweed, Pennsylvania	4*	4	6	6
Smellmelon	--	2	2	4
Spurge, Prostrate	--	—	1" Diameter*	2" Diameter*
Spurge, Spotted	—	--	2*	2*

Weed	FLEXSTAR HL Rate (Pts/A)			
	Maximum Growth Stage Controlled At			
	3/4 Pt/A # of True Leaves	1 Pts/A # of True Leaves	1.25 Pts/A # of True Leaves	1.5 Pts/A # of True Leaves
Starbur, Bristly	—	4	4	6
Sunflower, Common	—	—	2	4
Velvetleaf	—	—	4	4
Venice Mallow	4	6	6	8
Witchweed	—	Multi-leaf Up to 7"	Multi-leaf Up to 10"	Multi-leaf Up to 10"
Yellow Rocket	4	4	6	8

*Suppression Only

SPECIAL USE DIRECTIONS FOR ADDITIONAL WEED PROBLEMS

Suppression of Annual Grasses:

The grasses listed below may be suppressed by postemergence applications and controlled or suppressed by preemergence applications of FLEXSTAR HL at 1-1.5 pints/acre. Consult Use Rate Table for maximum rate in each region. For full-season broad-spectrum annual grass control, FUSILADE® DX or FUSION® herbicide should be used alone or in tankmix with FLEXSTAR HL. Consult tankmix section.

Barnyardgrass
Broadleaf Signalgrass
Crabgrass
Foxtail
Giant
Green
Yellow
Goosegrass
Johnsongrass, Seedling
Panicum, Fall
Panicum, Texas

Suppression of Perennial Weeds:

Use of FLEXSTAR HL at postemergence rates of 1-1.5 pints/acre will aid in suppressing the above-ground portions of the weeds listed below until crop canopy can assist in suppression. Perennial weeds continue to regrow from underground rootstocks even if above-ground foliage is temporarily controlled or retarded. Even though FLEXSTAR HL and crop competition can suppress perennial weeds for a growing season, the rootstocks will continue to live and reestablishment will occur in subsequent years.

Milkweed, Climbing
Milkweed, Honeyvine
Bindweed, Field
Bindweed, Hedge
Trumpet creeper

TANKMIX AND SEQUENTIAL APPLICATIONS FOR SOYBEANS

FLEXSTAR HL can be used sequentially or in tankmix with one or more of the following products: FUSILADE® DX, FUSION®, GRAMOXONE® EXTRA TOUCHDOWN®, Assure II®, Basagran®, Bugle™, Butyrac®, Classic®, Concert®, Poast®, Poast Plus®, Pursuit®, Option® II, Pinnacle®, Raptor®, Reliance™, STS® SP, Resource®, Roundup®, Roundup® Ultra, Scepter®, Select®, and Synchrony® STS®.

Under certain conditions, the mixture of FLEXSTAR HL with one or more of the above mentioned broadleaf herbicides may cause a reduction in activity of any postemergence grass herbicide in the mixture.

For sequential applications allow 2-3 days after the application of the grass herbicide before applying FLEXSTAR HL or FLEXSTAR HL mixtures. In case FLEXSTAR HL or the FLEXSTAR HL mixture is applied first, apply the grass herbicide when the grass weeds begin to develop new leaves (generally around 7 days).

- Tankmix applications can result in increases in crop injury as compared to either product used alone.
- Do not exceed 1 fluid ounce of Butyrac per acre in mixture with FLEXSTAR HL.

Always read and follow the recommendations, restrictions and limitations for all products whether used alone, sequentially or in a tankmix. The most restrictive labelling of any product used applies.

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APPENDIX

Scientific names are listed for those weeds referred to in the FLEXSTAR HL label.

COMMON NAME	SCIENTIFIC NAME
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, Spiny	<i>Amaranthus spinosus</i>
Anoda, Spurred	<i>Anoda cristata</i>
Balloonvine	<i>Cardiospermum halicacabum</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bindweed, Field	<i>Convolvulus arvensis</i>
Bindweed, Hedge	<i>Calystegia sepium</i>
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>
Carpetweed	<i>Mollugo verticillata</i>
Citron (Wild Watermelon)	<i>Citrullus vulgaris</i>
Cocklebur, Common	<i>Xanthium strumarium</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryifolia</i>
Copperleaf, Virginia	<i>Acalypha virginica</i>
Crabgrass	<i>Digitaria spp.</i>
Crotalaria, Showy	<i>Crotalaria spectabilis</i>
Croton, Tropic	<i>Croton glandulosus</i>
Cucumber, Volunteer	<i>Cucumis sativas</i>
Eclipta	<i>Eclipta prostrata</i>
Foxtail, Giant	<i>Setaria faberi</i>
Foxtail, Green	<i>Setaria viridis</i>
Foxtail, Yellow	<i>Setaria glauca</i>
Goosegrass	<i>Eleusine indica</i>
Groundcherry, Cutleaf	<i>Physalis angulata</i>
Hemp	<i>Cannabis sativa</i>
Horsenettle	<i>Solanum carolinense</i>
Jimsonweed	<i>Datura stramonium</i>
Johnsongrass, Seedling	<i>Sorghum halepense</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>

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COMMON NAME	SCIENTIFIC NAME
Mexicanweed	<i>Caperonia castaniifolia</i>
Milkweed, Climbing	<i>Sarcostemma cyanchoides</i>
Milkweed, Honeyvine	<i>Ampelamus albidus</i>
Morningglory, Cypressvine	<i>Ipomoea quamoclit</i>
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea</i> var. <i>hederacea</i>
Purple Moonflower	<i>Ipomoea turbinata</i>
Red (Scarlet)	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Pitted (Smallwhite)	<i>Ipomoea lacunosa</i>
Tall (Common)	<i>Ipomoea purpurea</i>
Palmleaf (Willowleaf)	<i>Ipomoea wrightii</i>
Mustard, Wild	<i>Brassica kaber</i>
Nightshade, Black	<i>Solanum nigrum</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Ragweed, Giant	<i>Ambrosia trifida</i>
Redweed	<i>Melochia corchorifolia</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Sicklepod	<i>Cassia obtusifolia</i>
Sida, Prickly	<i>Sida spinosa</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Smellmelon	<i>Cucumis melo</i>
Spurge, Prostrate	<i>Euphorbia humistrata</i>
Spurge, Spotted	<i>Euphorbia maculata</i>

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COMMON NAME	SCIENTIFIC NAME
Starbur, Bristly	<i>Acanthospermum hispidum</i>
Sunflower, Common	<i>Helianthus annuus</i>
Trumpet creeper	<i>Campsis radicans</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Venice Mallow	<i>Hibiscus trionum</i>
Waterhemp, Common	<i>Amaranthus rudis</i>
Waterhemp, Tall	<i>Amaranthus tuberculatos</i>
Witchweed	<i>Striga asiatica</i>
Yellow Rocket	<i>Barbarea vulgaris</i>

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