



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
264-845

Date of Issuance:
OCT 18 2005

Term of Issuance:
Conditional

Name of Pesticide Product:
ASULOX® XP Herbicide

NOTICE OF PESTICIDE:

Registration
Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Bayer CropScience
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Add the phrase "EPA Registration No.264-845" to the label before you release the product for shipment.

COMMENTS CONTINUED ON PAGE 2 OF THIS NOTICE OF REGISTRATION

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product under the enclosed stamped copy of the label constitutes acceptance of these conditions.

Enclosure

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

Signature of Approving Official:

Joanne I. Miller

Date:

OCT 18 2005

2. Submit the following data required for the registration of this pesticide product within 1 year from the date of this Notice of Registration:

<u>EPA Guideline Data Number</u>	<u>Guideline Descriptor</u>
830.6317	Storage Stability Study
830.6320	Corrosion Characteristics Study

3. Revise the ingredient statement to reflect the Chemical Abstract name for asulam, i.e., "methyl [(4-aminophenyl)sulfonyl]carbamate. Alternatively, revise the ingredient statement as described in PR Notice 97-5, if you wish not to use the chemical name in the ingredient statement.
4. Submit one (1) copy of the final printed labeling before you release this product for shipment.
5. Submit and/or cite all data required for the registration of this product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of this product under FIFRA, section 4. A stamped copy of the label is enclosed for your records.

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ASULOX[®] XP Herbicide

**FOR AGRICULTURAL OR COMMERCIAL USE ONLY
NOT FOR USE BY HOMEOWNERS**

For Postemergent Weed Control in Sugarcane, Turf, Ornamentals, Christmas Tree Plantings and Non-Cropland

ACTIVE INGREDIENT: Sodium salt of asulam (methyl sulfanylylcarbamate)* 34.3%
INERT INGREDIENTS: 65.7%

*Equivalent to 31.8% asulam or not less than 3.12 lbs. per gallon.

EPA Reg. No. 264-XXX

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN CAUTION

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

ACCEPTED
with COMMENTS
In EPA Letter Dated:

FIRST AID

IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. 	<p>OCT 18 2005 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-845</p>
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice. 	

For **MEDICAL** Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

PRECAUTIONARY STATEMENTS

CAUTION HAZARD TO HUMANS AND DOMESTIC ANIMALS

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate), and shoes plus socks. Follow manufacturer's instructions for cleaning /maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

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 leave the treated area, remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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.

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ENVIRONMENTAL HAZARDS

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination. Surface water contamination may occur in areas with poorly draining soils and little or no buffers or in areas where drainage systems flow directly to surface water.

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 clean equipment or dispose of equipment washwater in a manner that will contaminate resources. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

DIRECTIONS FOR USE

**It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read entire label before using this product.**

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 expectations pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 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, and shoes plus socks.

STORAGE AND DISPOSAL

STORAGE

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Store at temperatures above 20° F.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Triple rinse or equivalent. Puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

RETURNABLE/REFILLABLE CONTAINERS

After use, return the container to the point of purchase or designated locations. This container must only be refilled with ASULOX® Herbicide. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Prior to refilling, inspect thoroughly for damage such as cracks, punctures, abrasions and damaged or worn out threads on closure devices. Do not refill or transport damaged or leaking containers. Check for leaks after refilling and before transportation. For information on the disposal of unused, unwanted product, contact Bayer CropScience at 1-800-334-9745. For information on cleanup of spills, contact Bayer CropScience at 1-800-334-7577. If the container is not being refilled, return it to the point of purchase.

GENERAL INSTRUCTIONS AND INFORMATION

APPLICATION INSTRUCTIONS

Do not apply ASULOX® XP Herbicide through any type of irrigation systems.

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 regulations.

When a rate range is indicated, use the higher rate for larger weeds and higher weed pressure.

SPRAY DRIFT

SENSITIVE AREAS: This herbicide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulation.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

INFORMATION ON DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions below).

CONTROLLING DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH: (This section is advisory in nature and does not supersede the mandatory label requirements)

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT: (This section is advisory in nature and does not supersede the mandatory label requirements)

Applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT: (This section is advisory in nature and does not supersede the mandatory label requirements)

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator should compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

WIND: (This section is advisory in nature and does not supersede the mandatory label requirements)

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY: (This section is advisory in nature and does not supersede the mandatory label requirements)

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS: (This section is advisory in nature and does not supersede the mandatory label requirements)

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

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SUGARCANE

ASULOX® XP Herbicide can be applied to either plant cane or cane grown from stubble. Apply ASULOX® XP as a water mix spray for ground applications. Use 15 to 100 gallons of water per acre, depending on local practice. For aerial application, ASULOX® XP Herbicide should be mixed in 3 to 5 gallons of water per acre, except in Hawaii, where 5 to 10 gallons of water per acre should be used.

Addition of an adjuvant cleared for use on growing crops to the ASULOX® XP Herbicide water mix spray will improve weed control when environmental conditions are not optimal. Use either a non-ionic surfactant containing a minimum of 80% active ingredient at the rate of 1 to 2 quarts per 100 gallons (0.25 to 0.5% V/V) of water mix spray or a crop oil concentrate containing 80 to 85% paraffin based petroleum oil and 15 to 20% non-ionic surfactant at the rate of 4 quarts per 100 gallons (1% V/V) of water mix spray.

The rates of ASULOX® XP Herbicide given below are for broadcast applications. For banded application, reduce the rate proportionally to the width of the band according to the following formula:

$$\frac{\text{Band width(inches)}}{\text{Row width(inches)}} \times \text{Broadcast Rate} = \text{Band Rate/Acre}$$

For spot treatments, use a 5% v/v ASULOX® XP spray (1 gallon per 20 gallons of water). Do not exceed 8.5 pints of ASULOX® XP per acre per treatment.

Single Application Per Growing Season

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE (pints/acre)
Itchgrass or Raoulgrass (<i>Rottboellia exaltata</i>)	Apply when the grass is 8 inches tall or less (addition of surfactant is necessary).	8.0 to 8.5
Johnsongrass (<i>Sorghum halepense</i>)	Apply when the grass is between 12 to 18 inches tall. Johnsongrass should be actively growing and the average air temperature should be at least 60°F or higher.	
Paragrass or Californiagrass (<i>Brachiaria mutica</i> or <i>Panicum purpurascens</i>)	Apply when the grass is 6 to 8 inches tall or less.	
Crabgrass (<i>Digitaria spp.</i>)	If treatment is made before the grass reaches seed head formation then the lower rate should be used. If the grass is in early seed head formation then the higher rate should be used.	6.0 to 8.5
Alexandergrass (<i>Brachiaria plantaginea</i>) Foxtail (<i>Setaria spp.</i>) Goosegrass (<i>Eleusine indica</i>) Broadleaf Panicum (<i>Panicum adspersum</i>) Barnyardgrass (<i>Echinochloa crusgalli</i>)	If treatment is made when the grass is 6 to 8 inches tall or less, then the lower rate should be used. If the grass is greater than 8 inches tall, then the higher rate should be used.	

Two Applications Per Growing Season

This may be required when initial weed infestations are heavy and/or when rhizome Johnsongrass is present. Two applications may also be used when treating weed species which germinate at different times during one growing season.

WEED SPECIES	SPECIAL INSTRUCTIONS	1ST APPLICATION (pints/acre)	2ND APPLICATION (pints/acre)
Crabgrass (<i>Digitaria spp.</i>)	At each application the grass should be treated before seed head formation.	6.0 to 8.5	6.0 to 8.5
Itchgrass or Raoulgrass (<i>Rottboellia exaltata</i>)	At each application the grass should be 8 inches tall or less (Addition of surfactant is necessary).	8.0 to 8.5	8.0 to 8.5
Johnsongrass (<i>Sorghum halepense</i>)	At each application the grass should be between 12 and 18 inches tall.	8.0 to 8.5	8.0 to 8.5

RESTRICTIONS AND PRECAUTIONS: Sugarcane

- ASULOX® XP Herbicide should be used when the weeds are actively growing.
- Cover crops may be planted if plowed under and not grazed.
- The following pre-harvest intervals for ASULOX® XP Herbicide applications to sugarcane must be observed: 1) Mainland U.S.A (except Louisiana) – 140 days; 2) Louisiana only – 100 days; 3) Hawaii – 400 days.
- Do not graze or feed sugarcane fodder and forage to livestock.

- Cultivation and/or fertilizer applications or any other cultural practice that disturbs the root system of targeted weed species may result in less than optimum control when applying ASULOX® XP Herbicide. These practices are not recommended within 7 days prior to or within 7 days after applications of ASULOX® XP Herbicide.
- Differences in crop tolerance to ASULOX® XP among Sugarcane varieties has been reported in Louisiana. Contact your local County Agent or University Extension Specialist for further information.

NON-CROPLAND

ASULOX® XP Herbicide may be used as a postemergent treatment to control weeds on non-cropland areas such as:

- | | |
|------------------------------------|--|
| Boundary fences | Railroad rights-of-way and yards |
| Fence rows | Storage areas and industrial plant sites |
| Highway and roadside rights-of-way | Utility rights-of-way and yards |
| Lumberyards | Warehouse lots |
| Pipeline rights-of-way | |

A surfactant may be added to the spray solution at 0.25% by volume. (Use an approved non-ionic surfactant.)

Apply ASULOX® XP as a single water-mix spray for ground applications using 20 to 100 gallons of solution per acre, depending on local practice, to control the following weed species. Apply one application per season. Aerial application is prohibited.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE (pints/acre)
Crabgrass (<i>Digitaria spp.</i>)	Apply before the grass reaches seed head formation.	8.0 to 8.5
Johnsongrass (<i>Sorghum halepense</i>)	Apply when the grass is 18 inches or taller. Use the higher rate in well established heavy infestations. For spot treatment in Hawaii, use the higher rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Paragrass or Californiagrass (<i>Brachiaria mutica</i> or <i>Panicum purpurascens</i>)	Apply before the grass reaches seed head formation. For spot treatment in Hawaii, use the same rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Western Bracken (<i>Pteridium aquilinum</i> var. <i>pubescens</i>)	Apply when the fern is in full frond.	7.0 to 8.5

CHRISTMAS TREE PLANTINGS

ASULOX® XP Herbicide may be used as a postemergent treatment in Christmas Tree Plantings where Douglas Fir, Grand Fir, Nobel Fir or Scotch Pine are grown. Do not graze or feed foliage from treated areas to livestock.

ASULOX® XP Herbicide should be applied as a water mix spray. For ground application, use a minimum of 20 gallons of solution per acre. Do not use a wetting agent with ASULOX® XP Herbicide. Apply one application per season. Aerial application is prohibited.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE (pints/acre)
Western Bracken (<i>Pteridium aquilinum</i> var. <i>pubescens</i>)	Apply after bud break and hardening or firming of new tree growth. Bracken should be in full frond prior to treatment.	8.0 to 8.5

**TURF
(Sod Farms Only)**

ASULOX® XP Herbicide can be applied on St. Augustinegrass and Tifway 419 Bermudagrass turf. Apply one application per season postemergence to the weeds listed below. Use 20 to 50 gallons of water per acre in the spray solution.

TURF SPECIES	WEED SPECIES	RATE (pints/acre)
St. Augustinegrass	Bullgrass (<i>Paspalum supinum</i>), Crabgrass (<i>Digitaria sp.</i>), Goosegrass (<i>Eleusine indica</i>)	5.0 to 5.4
Tifway 419 Bermudagrass	Sandbur (<i>Cenchrus sp.</i>)	

Do not use a surfactant. Do not apply to turf which is under stress or freshly mowed.

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ORNAMENTALS

ASULOX® XP Herbicide can be applied as a single, postemergent, broadcast application on the following ornamentals:

JUNIPERS		YEWS
Juniperus andorra	Juniperus horizontalis	Taxus cuspidata
Juniperus chinensis	Juniperus litoralis	Taxus media
Juniperus conferta	Juniperus sabina	Podocarpus macrophyllus

Treatment should be made with a minimum of 20 gallons of water per acre. Do not use a surfactant.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE (pints/acre)
Barnyardgrass (<i>Echinochloa crusgali</i>)	Apply when the weeds are between the stages of early seedling and early seed head formation.	8.0 to 8.5
Crabgrass (<i>Digitaria sp.</i>)		
Fall Panicum (<i>Panicum dichotomiflorum</i>)		
Foxtails (<i>Setaria sp.</i>)		
Goosegrass (<i>Eleusine indica</i>)		
Horseweed (marestail) (<i>Conyza canadensis</i>)		

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station weed specialists for specific recommendations for local weed problems and for information on possible lower dosages.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

ASULOX is a registered trademark of Bayer.

NET CONTENTS: 2.5 GALLONS



Bayer CropScience

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Research Triangle Park, North Carolina 27709
1-866-99BAYER (1-866-992-2937)

ASULOX® XP Herbicide (PENDING) Submitted 02/04/05, Resubmitted 10/18/05