UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

APR 12 2004

Mr. Jerry Wells
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419-8300

Dr. Mr. Wells:

Subject: Cyclone Concentrate/ Gramoxone Max
EPA Registration Number 100-1074
Application dated March 18, 2004

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 before you release the product for shipment.

-On page 3, under the statement about "Container Disposal", put in the headings "Recyclable/ Refillable Containers" and "Container Disposal-Recyclable/Refillable Containers", as well as the statements addressing to these headings.

Submit three (3) copies of your final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505C)

2134

PULL HERE TO OPEN

RESTRICTED USE PESTICIDE

DUE TO ACUTE TOXICITY

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

Herbicide

A Weed, Grass, and Harvest Aid Desiccant/Defoliant Herbicide

Active Ingredient:	
Paraquat dichloride (1,1'-dimethyl-4,4'-bipyridinium dichloride)	43.8%
Other Ingredients:	56.2%
Total:	100.0%

Contains 3.0 pounds paraquat cation per gallon as 4.143 pounds salt per gallon. Contains stench (odor) and emetic.

KEEP OUT OF REACH OF CHILDREN.

DANGER/ PELIGRO  ***POISON***

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.)

- ***NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS.***
- ***IF SWALLOWED, TAKE IMMEDIATE ACTION AS PRESCRIBED IN FIRST AID. SYMPTOMS ARE PROLONGED AND PAINFUL.***
- ***DO NOT USE OR STORE IN OR AROUND THE HOME.***
- ***DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE.***
- ***THE ODOR OF THIS PRODUCT IS FROM THE STENCHING AGENT WHICH HAS BEEN ADDED, NOT FROM PARAQUAT.***

EPA Reg. No. 100-1074
EPA Est. 100-TX-001

SCP 1074A-L2E 1003
169199

2.5 gallons
U.S. Standard Measure

syngenta

ACCEPTED
with COMMENTS
In EPA Letter Dated
APR 12 2004
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide registered under EPA Reg. No
100-1074

SCP 130-1074A-L2E

FIRST AID Contains Paraquat, a Bipyridylium Herbicide	
If swallowed	• SPEED IS ESSENTIAL. Immediate medical attention is required. If available, give an adsorbent such as activated charcoal, bentonite or Fullers Earth. • Call a poison control center or doctor immediately for treatment advice. • Do not give anything by mouth to an unconscious person.
If in eyes	• 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 eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• 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.
If inhaled	• Move person to fresh air. • The odor of this product is from the stenching agent, which has been added, not from the paraquat. • If person is not breathing, call 911 or an ambulance. • Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN

Refer to the booklet 'Paraquat Poisoning. A Practical Guide to Diagnosis, First Aid and Hospital Treatment'. (http://www.syngenta.com/pqmedguide/) Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an adsorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye spashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries are reviewed by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat, however contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

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

HOT LINE NUMBER
For 24-Hour Medical Emergency Assistance (Human or Animal)
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)
Call
1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER/ PELIGRO  **POISON**

May be fatal if swallowed. Fatal if inhaled. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Do not breathe spray mist. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

IMPORTANT: Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

Personal Protective Equipment (PPE)

Applicators and other handlers (other than Mixers and Loaders) must wear:

- Long-sleeve shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical Resistant Gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton).
- A dust mist NIOSH-approved respirator with any N, R, P, or HE filter.

Mixers and Loaders must wear:

- Long-sleeve shirt and long pants
- Shoes plus socks
- Protective eyewear plus a dust mist NIOSH-approved respirator with any N, R, P, or HE filter.
- Chemical Resistant Gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton).
- Chemical resistant apron
- Face Shield

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.

Engineering Controls

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

Wildlife: This product is toxic to wildlife. 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 cleaning equipment or disposing of equipment wash waters.

Drift: Gramoxone Max is a contact herbicide that desiccates all green plant tissue. Paraquat dichloride is toxic to nontarget crops and plants if off-target movement occurs. Extreme care must be taken to ensure that off-target drift is minimized to the greatest extent possible. 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 when weather conditions favor drift from treated areas. To avoid drift, do not make aerial applications during periods of thermal inversion. Refer to the local state laws, regulations, guidelines and spray drift information contained in the Directions for Use section for proper application to avoid off-target movement.

Physical and Chemical Hazards

This product is mildly corrosive to aluminum and produces hydrogen gas which may form a highly combustible gas mixture. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. This product is compatible with high density polyethylene and rubber lined steel containers.

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 SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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 the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA 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 SYNGENTA 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 SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA 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 SYNGENTA.

DIRECTIONS FOR USE

Restricted Use Pesticide

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.

DO NOT USE AROUND HOME GARDENS, SCHOOLS, RECREATIONAL PARKS, GOLF COURSES OR PLAYGROUNDS.

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.

For Preplant or Preemergence (Broadcast or Banded), Chemical Fallow, Postemergence Directed Spray, Early Postemergence Broadcast in Peanuts and Dormant Season Applications, and "Between Cutting" Applications in Alfalfa: Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

For Harvest Aid and Desiccation Applications: 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
- Shoes plus socks
- Protective eyewear
- Chemical Resistant Gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton).

NON-AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow others to enter the treated area until sprays have dried.

AVOID working in spray mist.

KEEP all unprotected persons out of operating areas or vicinity where there may be danger of drift.

Certain states may require more restrictive reentry intervals; consult your State Department of Agriculture for further information.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Store at temperatures above 32°F. For help with any spill, leak or fire involving this material, call **1-800-888-8372.**

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

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.

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

6134

GENERAL INSTRUCTIONS AND INFORMATION

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

When Gramoxone Max is applied at less than 10 gallons per acre finished spray volume, a drift control or spray deposition additive **SHOULD** be used. Refer to the additive label for use directions.

Spray Drift Information

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 and the grower are responsible for considering all these factors when making decisions.

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

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°.

Where states have more stringent regulations, they shall be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information.**

Aerial Drift Reduction Advisory Information

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

Information on Droplet Size

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**).

Controlling Droplet Size

- **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

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

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

Swath Adjustment

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 must 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

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

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

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.

Sensitive Areas

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

GENERAL INFORMATION

Gramoxone Max is a contact herbicide used to control or suppress a broad spectrum of emerged weeds. Gramoxone Max controls most small annual weeds - both broadleaves and grasses, and suppresses perennial weeds by destroying green foliage. Gramoxone Max can also be used as a desiccant/defoliant at harvest.

Gramoxone Max is formulated as a liquid which contains 3 lbs. of active ingredient per gallon. The formulation contains a nontoxic odor and an emetic (an agent which will induce vomiting if the product is swallowed). The odor is included in the formulation to help prevent accidental ingestion of Gramoxone Max.

Gramoxone Max is rapidly absorbed by green plant tissue and interacts with the photosynthetic process to produce superoxides which destroy the plant cells. Gramoxone Max requires actively growing green plant tissue to function. Thorough coverage of all green foliage is essential for effective weed control and for effective crop desiccation/defoliation. Gramoxone Max is not as effective on drought-stressed weeds, weeds with little green foliage (i.e., mowed or cut weeds), or mature woody bark of trees and vines.

Clay and organic matter rapidly tie up Gramoxone Max. As a result, Gramoxone Max has no residual soil activity to affect later-planted crops or later germinating weeds.

ROTATIONAL CROPS

All rotational crops may be planted immediately after the last application of Gramoxone Max.

RAINFASTNESS

Because Gramoxone Max is rapidly absorbed by the weed foliage, rain occurring 30 minutes or more after application will have no effect on the activity of Gramoxone Max.

APPLICATION

Since Gramoxone Max is a contact-type herbicide, it is essential to obtain complete coverage of target weeds to get good control. Improper application technique and/or application to large, stressed, or mown weeds will usually result in unacceptable weed control and unacceptable crop desiccation/defoliation. Complete coverage is also essential for good crop desiccation/defoliation. See details below for specific application instructions.

USE OF A NONIONIC SURFACTANT OR CROP OIL CONCENTRATE

Always add one of the following (Failure to use one of the following at recommended rates will result in reduced performance of Gramoxone Max.)

Nonionic Surfactant: Add nonionic surfactant containing 75% or more surface-active agent at 0.125% v/v (1 pt./100 gals.), **OR** add a nonionic surfactant containing 50-74% surface-active agent at 0.25% v/v (2 pts./100 gals.), of the finished spray volume for ground applications. For aerial applications, add a nonionic surfactant at 0.25% v/v (2 pts./100 gals.) of the finished spray volume.

Crop Oil Concentrate: Add a nonphytotoxic crop oil concentrate containing 15-20% approved emulsifier, at 1.0% v/v (1 gal./100 gals.) of the finished spray volume for ground applications. For aerial applications, add 1 pt. of crop oil concentrate per acre. Do not use crop oil concentrate when using Gramoxone Max for cotton harvest aid.

NOZZLE SELECTION

The use of flat-fan nozzles will result in the most effective application of Gramoxone Max. Flood nozzles are generally not as good as flat fans since they produce large uneven droplets. The use of flood nozzles may result in reduced weed control due to inadequate coverage.

WHEN SPRAYING LESS THAN 20 GALLONS OF SPRAY CARRIER PER ACRE, USE **ONLY** FLAT FAN NOZZLES AS RECOMMENDED IN THE CHART BELOW.

Table 1. Recommended Nozzles, Pressures and Setup

	Nozzle Type	
	Flat Fan	**Flood**
Maximum Size	8	15
Spray Pressure (at nozzle)	30-50 psi	30-50 psi
Maximum Nozzle Spacing	30"	40"
Direction of Spray Pattern	Down	Down
Maximum Speed	10 mph	10 mph
Spray Overlap (at each edge)	30%	50%

Flat-Fan Nozzles
30% (60% Total) Overlap

Flood Nozzles
50% (100% Total) Overlap

Using nozzles, pressures, or setups different from the above chart will result in reduced control.

SPRAY CARRIER

Always use clean water (free of mud or clay), clear liquid nitrogen, or complete clear liquid fertilizers as the carrier when spraying Gramoxone Max. Muddy water, or suspension-type fertilizers containing clay, can inactivate Gramoxone Max. Never use suspension-type fertilizers containing clay as the spray carrier. If using a complete clear liquid fertilizer containing high phosphate levels as the spray carrier, always use the higher rate of Gramoxone Max and surfactant.

Note: When using liquid fertilizers such as 28% N as a spray carrier, it is important that nonionic surfactant still be used with Gramoxone Max. Liquid fertilizer carriers cannot substitute for surfactant.

RATES OF GRAMOXONE MAX

Follow recommended rates listed with each use of Gramoxone Max. Use the higher label rates when weeds are dense or large. Also, use higher label rates for harvest aid when crop vegetation is dense. For broadcast applications of Gramoxone Max with backpack sprayers, the application rate should not exceed 0.50 lbs. a.i./A in a minimum of 30 gallons of spray solution per acre.

SPRAY VOLUME

Follow recommended minimum spray volumes listed with each use of Gramoxone Max. These are **minimum** volumes only, and spray volumes should be increased as necessary to obtain complete coverage of the target weed or plant without runoff from the foliage.

WHEN SPRAYING LESS THAN 20 GALLONS OF SPRAY CARRIER PER ACRE, TARGET WEEDS SHOULD NOT EXCEED 6 INCHES IN HEIGHT.

APPLICATION TIMING

Gramoxone Max should be applied to emerged weeds when they are small. Weeds 1-6 inches in height are the easiest to control. Larger weeds may be more difficult to control. When weeds have been grazed or mowed, thus removing much of the green foliage, allow the weeds to regrow to a height of 2-4 inches before spraying if possible. Similarly, when forage or grain crops have been harvested prior to spraying, weeds present in the field will also have been cut. To allow for adequate green foliage to remain on weeds in this situation, raise cutter bars as high as possible from the ground to cut stubble and weeds at a greater height.

BURNDOWN OF GRASS COVER CROPS OR VOLUNTEER CEREALS

When using Gramoxone Max for control of grass cover crops or volunteer cereals, best results are obtained when Gramoxone Max is applied **prior to tillering** or **after boot stage**. This is especially important with a wheat cover crop or volunteer wheat. Treatments made between tillering and boot stage will generally not provide complete control. Do not expect complete control of perennial cover crops.

ENVIRONMENTAL CONDITIONS

Gramoxone Max is active over a wide range of environmental conditions. Cool weather (below 55°) will slow the activity of Gramoxone Max, as will cloudy, overcast weather, but will not affect performance.

SPOT SPRAYING

When only small areas are to be sprayed with labeled applications, it is advantageous to mix small quantities of Gramoxone Max. To aid in mixing small quantities, the following table should be consulted.

If The Broadcast Rate Per Acre for Gramoxone Max is:	Add The Following Amount of Gramoxone Max to 1 Gallon of Water
1 1/2 pts.	1/3 fl. oz.
2 pts.	3/8 fl. oz.
2 1/2 pts.	1/2 fl. oz.
3 pts.	2/3 fl. oz.

Always add 1/3-1/2 fl. oz. of a nonionic surfactant for each gallon of spray. When spot spraying in this manner, spray to thoroughly wet the foliage, but not to the point of runoff.

TANK MIXING FOR IMPROVED BURNDOWN OF DIFFICULT WEEDS AND RESIDUAL WEED CONTROL

Photosynthetic Inhibitor Herbicides

Difficult weeds can often be controlled by tank mixing Gramoxone Max with other herbicides. The addition of herbicides which are also photosynthetic inhibitors (PSI) will slow the activity of Gramoxone Max, allowing Gramoxone Max to thoroughly distribute itself within the treated leaf. The resulting level of control is usually greater than if Gramoxone Max was applied alone.

Gramoxone Max may be applied in tank mixture with the following PSI herbicides:

- AAtrex® Herbicide
- Atrazine Herbicide
- Bicep MAGNUM® Herbicide
- Bicep Lite II MAGNUM® Herbicide
- Canopy® Herbicide
- Lariat® Herbicide
- Lexone® Herbicide
- Linex® Herbicide
- Lorox® Herbicides
- Lorox Plus™ Herbicide
- Princep® Herbicide
- Sencor® Herbicides

Refer to respective product label(s) for rates of application, directions for use, limitations, cautions and for a list of weeds controlled.

Improved Weed Control With PSI's

Control of difficult weeds listed below and annual grass control will be enhanced by the addition of a PSI herbicide. For best results a second application is needed.

- Barnyardgrass
- Broadleaf signalgrass
- Cheatgrass
- Cocklebur
- Fall panicum
- Giant ragweed
- Knotweed
- Kochia
- Lambsquarters
- Malva (cheeseweed)
- Marestail
- Morningglory
- Pennsylvania smartweed
- Perennial weeds (suppression only)
- Prickly lettuce
- Sedges
- Tansymustard
- Velvetleaf
- Volunteer wheat

Improved Control of Perennial and Annual Broadleaf Weeds

When perennial broadleaf weeds such as Canada thistle, bindweed, dandelion, etc. or difficult to control annual broadleaf weeds such as giant ragweed or morningglory are present, tank mixes with 2,4-D ester (Low Volatile), 2,4-DB or Banvel® herbicide, where labeled, will help improve control. Tank mixing the amine formulation of 2,4-D with Gramoxone Max may result in reduced grass control.

Order of Tank Mixing

In general, Gramoxone Max tank mixes with other products should be mixed as follows:

1. Fill spray tank 1/2 full with clean water or other approved carriers such as clear liquid fertilizer.
2. Begin tank agitation and continue throughout mixing and spraying.
3. Add dry formulations (WP, DF, etc.) to tank.
4. Add liquid formulations (SC, EC, L, etc.) to tank.
5. Add Gramoxone Max to tank.
6. Add nonionic surfactant to tank.
7. Fill remainder of spray tank.

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here.

Since many of the herbicides listed on this label are available in several types of formulations, it is advisable to perform a jar test to check physical compatibility.

GENERAL PRECAUTIONS AND RESTRICTIONS

EQUIPMENT/CONTAINER

Flush all spray equipment with water after use each day. Gramoxone Max is corrosive to aluminum. Aluminum spray equipment and aluminum aircraft structures that are exposed to spray solution or spray drift should be flushed thoroughly with water immediately after use.

In dry areas, dust stirred up by high winds or equipment tires can coat weed or plant leaves and reduce Gramoxone Max activity. Avoid applying Gramoxone Max in extremely dusty conditions.

LIMITATIONS AND PRECAUTIONS

- For Cotton Harvest Aid: Do not pasture livestock in treated fields or feed treated foliage.
- **DO NOT** use around home gardens, schools, recreational parks, or playgrounds.
- In preplant and preemergence (to the crop) uses, do not apply to soils lacking clay minerals, i.e., peat, muck, pure sand, artificial planting media.
- Seedbeds and plantbeds should be formed as far ahead of planting and treatment as possible to permit maximum weed and grass emergence prior to treatment.
- Seeding or transplanting should be done with a minimum amount of soil disturbance.
- Gramoxone Max used for preplant weed control over the top of plastic mulch may damage transplants which come in contact with the plastic. Sufficient rainfall or sprinkler irrigation to cause wash-off prior to planting may be needed to prevent damage to the crop.
- Weeds and grasses emerging after application of Gramoxone Max will not be controlled or suppressed.
- Unless otherwise indicated, crop plants emerged at time of application may be severely injured or killed if contacted by sprays of Gramoxone Max.

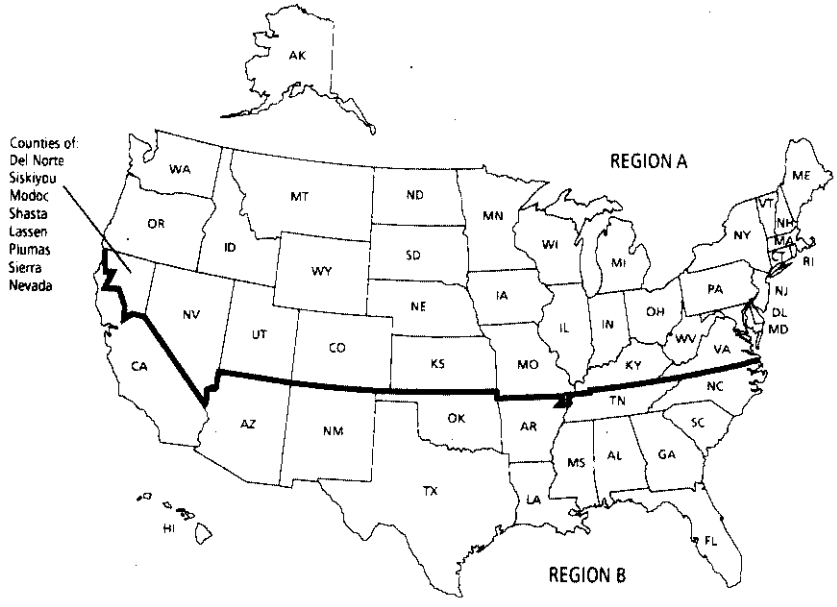
APPLICATION INSTRUCTIONS

The following tables indicate use patterns, rates, minimum spray volumes, preharvest intervals and other precautions, restrictions and comments specific to each crop. Read and follow directions carefully.

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
ALFALFA New seedlings (California only)	1	Broadcast	0.7-1.3 pts. See Table 2	Ground: 10 gals. Air: 5 gals.	70	• Apply during late winter or early spring. • Do not cut or harvest within 70 days after application. • Do not apply more than once during the first growing season. • Caution: Seedling alfalfa stands will be reduced and replanting may be necessary. • Not recommended for seedling alfalfa grown for seed. • Alfalfa foliage present at time of application will be burned.
ALFALFA (No-till or conventional planting)	2	Preplant or Preemergence Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply prior to emergence of the crop. • Crop plants emerged at time of application will be killed. • Seeding should be done with a minimum amount of soil disturbance.
ALFALFA Dormant season on established plantings Region A – See map at end of Alfalfa section	1	Broadcast	1.3-2.0 pts.	Ground: 10 gals. Air: 5 gals.	42	• For control of weeds, including bluegrass, chickweed, henbit, downy brome, ryegrass, cheatgrass, dogfennel, tansymustard, london rocket, sowthistle, rescue brome, wild oats, and other winter annuals; and suppression of perennial weeds. • Do not apply if **fall regrowth** following last fall cutting is greater than 6", or if **spring regrowth** is more than 2". • Apply to well-established stands (at least 1-year old) after the crop is dormant. • Alfalfa foliage present at the time of application will be burned which may reduce the yield of the first cutting. • Do not cut or harvest within 42 days of application. • Do not apply more than once per season. • Tank mix with metribuzin (Lexone or Sencor) for improved burndown of weed vegetation and residual weed control. Consult the metribuzin product label for a list of weeds controlled, rates of application, and precautions.

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
ALFALFA Dormant season Tank Mix with Velpar® L-Herbicide Region A – See map at end of Alfalfa section.	2	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 10 gals.	42	• For control of weeds such as chickweed, downy brome and tansymustard. • Use the 0.7 pt. rate of Gramoxone Max when weeds and grasses are less than 4" tall. • Mix with 1-2 qts. of Velpar L per acre. • Use the lower rate of Velpar L on loamy sands or sandy loams. Refer to Velpar L label for directions, limitations, cautions and for a list of weeds controlled. • Apply once to established alfalfa stands during the dormant season. • Do not apply if **fall regrowth** following last fall cutting is greater than 6", or if **spring regrowth** is more than 2". • Do not apply to alfalfa during the first season after seeding. • Temporary chlorosis may occur on alfalfa regrowth. • Stress which may be caused in part by low fertility, disease, insects, winterkill, over cutting, drought or frost may increase the chances of crop injury. • **DO NOT USE** on gravelly or rocky soils, exposed subsoils, hardpan, sand or poorly drained alkaline soils as crop injury, including mortality, may result. • Do not cut or harvest within 42 days of application.
ALFALFA Dormant Season On established plantings: Region B – See map at end of Alfalfa section.	1	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	• For desiccation of weeds, including London rocket, sowthistle, rescue brome, wild oats, chickweed, ryegrass, bluegrass, cheatgrass, dogfennel, tansymustard, henbit, downy brome, and other winter annuals; and suppression of perennial weeds. • Apply during late fall or winter months after the last fall cutting and before first spring cutting. • In the California counties of Orange, Riverside, and all counties north of these counties, do not apply if **spring regrowth** after grazing or cutting is more than 2". In all other areas within Region B, do not apply if **regrowth** after grazing or cutting is more than 2". • Do not harvest within 60 days of application. • CAUTION: Applications to alfalfa that is not dormant, or has broken dormancy, may result in stand and/or yield reductions. Replanting may be necessary. Green alfalfa foliage present at the time of application will be burned. • Total hay yield of first cutting may be reduced in alfalfa fields with severe weed infestation. This reduction will usually be directly proportionate to the loss of weed weight. • Do not apply more than once per season. • Tank mix with metribuzin (Lexone or Sencor) for improved burndown of weed vegetation and residual weed control in **dormant established** (at least 1-year old) alfalfa. Consult the metribuzin product label for a list of weeds controlled, rates of application, and precautions. • Do not apply tank mix with metribuzin on newly established (less than 1-year old) alfalfa. **California** • For desiccation of weeds including bluegrass, ryegrass, shepherdspurse, chickweed, tansy-mustard, foxtail, sowthistle and groundsel. • Use high rate if ryegrass, shepherdspurse, sowthistle or groundsel is present.
On fall-seeded, newly established stands less than 1-year-old: Region A – See map at end of Alfalfa section.	1	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	
On fall-seeded, newly established stands less than 1-year-old: Region B – See map at end of Alfalfa section.	1	Broadcast	0.5-0.8 pt.	Ground: 10 gals. Air: 5 gals.	60	

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
ALFALFA Between-cuttings treatment in established plantings. (Includes first year alfalfa) (All states East of the Rocky Mountains)	3	Broadcast	0.7 pt.	Ground: 10 gals.	30	• Weeds much beyond the seedling stage and the stubble of weeds cut off during harvest will be less affected by this treatment. • Apply immediately after alfalfa has been removed for hay or silage. • Do not treat more than 5 days after cutting. • CAUTION: First year alfalfa stands and yields may be reduced if alfalfa is allowed to regrow more than 2 inches. • Alfalfa foliage present at time of application will be burned. • In arid areas where moisture is limited, weed control may be reduced. • Do not cut or harvest within 30 days of application. • Make 1-3 applications, as needed, during the growing season. These sprays may be applied in addition to a dormant application. • For first-year alfalfa, do not apply more than twice during the first growing season.
ALFALFA (For use only in the following states: ID, MT, NV, OR, UT, WA, WY) Desiccation of alfalfa to facilitate harvest of alfalfa seed	2	Broadcast	1.7-2.7 pts.	Ground: 20-25 gals. Air: 5-10 gals.	See Precautions	• Do not harvest until at least 4 days after application. • Do not apply when weather conditions favor drift from treated areas. • Do not apply by ground equipment within 25 ft., or by air within 75 ft. of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries; and commercial fish farm ponds. • For use only on fields in production of alfalfa seed. Not for use on fields producing alfalfa for livestock feed. No portion of the treated field, including seed, seed screenings, hay forage, or stubble, may be used for human or animal feed. • Do not cut current year's treated alfalfa seed crop for hay or forage. Do not graze current year's treated alfalfa seed crops. • Treated alfalfa seed is not to be used for sprouting. All alfalfa seed treated with Gramoxone Max/Reglone tank mix is to be tagged at processing plants, "NOT FOR HUMAN CONSUMPTION". It shall be the grower's responsibility to notify the processing plants of any seed crop treated with Gramoxone Max/Reglone tank mix. • Screenings from alfalfa seed processing are prohibited from feed channels. ALL Gramoxone Max/Reglone treated alfalfa seed screenings must be removed from the feed market.
Gramoxone Max/ Reglone Tank Mix		Broadcast	1.3-2.7 pts. Gramoxone Max / 2 pts. Reglone	Ground: 20-25 gals. Air: 5-10 gals.	See Precautions	



Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
ALMONDS	5	Directed Spray	0.8-2.7 pts.	Ground: 10 gals.	–	• Do not allow spray to contact green stems (except suckers) or foliage. • Use a shield or wrap plant when spraying around young trees or vines. • Do not graze treated areas. • Do not feed cover crops grown in treated areas to livestock. • Do not apply when nuts to be harvested are on the ground. • For mature woody weeds, perennial weeds, late germinating weeds and green suckers, retreatment or spot treatments may be necessary.
ARTICHOKE (GLOBE)	3	Directed Spray	1.7-2.7 pts.	Ground: 20-100 gals.	1	• Up to 3 applications per season, do not exceed 8 pts. per season. • Applications at least 7 days apart. • Do not harvest within 24 hours of last application.
ASPARAGUS	3	Preplant or Preemergence Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply prior to emergence of the crop. • Crop plants emerged at time of application will be killed.
ASPARAGUS Preemergence to established plantings at least 2 years old	3	Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals.	6	• Apply prior to emergence of crop or after last harvest. • Crop plants emerged at time of planting will be killed.
BEANS, DRY Sweet lupin White sweet lupin White lupin Grain lupin Adzuki beans Asparagus beans Black beans Broad beans Field beans Garbanzo beans Kidney beans Lablab beans Lima beans Moth beans Mung beans Navy beans Pinto beans Rice beans Tepary beans Urd beans Blackeyed peas Chickpeas Cowpeas Crowder peas Southern peas Catjang Guar **PEAS, DRY**	2	Harvest-Aid	0.8-1.3 pts.	Ground: 20 gals. Air: 5 gals.	7	• Add spreader (nonionic) at 1 qt./100 gals. of spray mix. • For vining type beans or bush type with lush growth, use a single application of the higher rate. • May also be applied as a split application. **DO NOT** make more than 2 applications or exceed a total of 1.3 pts./A. The split application may improve vine coverage. • Apply when the crop is mature and at least 80% of the pods are yellowing and mostly ripe with no more than 40% (bush type peas or beans) or 30% (vine type peas or beans) of the leaves still green in color. • **DO NOT** apply when weather conditions favor spray drift. A drift control agent may be included to reduce spray drift. • NOT REGISTERED FOR USE ON DRY BEANS OR DRY PEAS IN CALIFORNIA
BERRIES Blackberries Blueberries Boysenberries Currant Elderberry Gooseberry Huckleberry Loganberry Raspberries	5	Postemergence Directed Spray	1.3-2.7 pts.	Ground: 50 gals.	–	• Apply before emergence of new canes or shoots as injury to those canes or shoots can occur. • Apply as a coarse spray to avoid crop injury from fine spray mist

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
CACAO	5	Directed Spray	1.3-2.7 pts.	Ground: 50-200 gals.	1	• Apply when weeds are succulent and growth is from 1-6". • For mature woody weeds, late-germinating weeds and grasses and for perennials; retreatment or spot treatment may be necessary. • Do not allow spray to contact cacao plants as injury may result. Use a shield for young trees. • Do not spray under windy conditions. • Do not graze treated areas or feed treated cover crops to livestock.
CASSAVAS, TANIERS & YAMS (Puerto Rico only)	3 3 2	Shielded Post Directed Spray	1.3 pts.	Ground: 50 gals.	90	• Apply when weeds are succulent and growth is 1-6". • On cassavas and taniers, do not make more than 3 applications per crop season. • On yams do not make more than 2 applications per crop season. • Do not allow spray to contact cassavas, tanier or yam plants as injury may result. • Do not spray under windy conditions. • Do not graze treated areas or feed treated forage to livestock.

CHEMICAL FALLOW General Information				Ground: 5 gals.
				
				Air: 5 gals.
				
				See Precautions, Restrictions, and Comments
					–	• Use higher spray volumes for better coverage as density of stubble, crop residue or weeds increase.
						• To control volunteer wheat or downy brome, fall-applied treatments generally work best with Gramoxone Max. If possible, tank mix with Atrazine for maximum burndown and residual control.
						• Apply from immediately after harvest up to emergence of the newly seeded crop as a broadcast or band treatment.
						• Cut wheat as high as possible to avoid cutting weeds too short, and allow the weeds to grow at least 2-3" after harvest before applying Gramoxone Max.
						• The addition of dicamba, (Banvel) or 2,4-D ester (Low Volatile) may aid in the suppression of emerged perennial broadleaf weeds and large annual broadleaf weeds.
						• Refer to 2,4-D ester (Low Volatile), Banvel, or residual herbicide label(s) for directions, limitations, cautions and for a listing of weeds controlled.
						• For extended weed control during the fallow period, tank mixes with registered residual herbicide combinations other than those listed on this label are permissible.
						• Weeds taller than 6" may not be controlled.
						• Weeds and grasses emerging after application will not be controlled.
						• Crop plants emerged at the time of application will be killed.
						• By ground application, apply 5-60 gallons of spray mix per acre. If applying at <10 GPA by ground, utilize the following additional precautions:
						  • Do not apply with floaters or exceed a speed of 10 mph.
						  • Apply with flat fan nozzles only at 30-40 psi.
						  • Apply only in a tank mix with atrazine at a minimum of 0.5 lb. a.i./acre.
						  • By air, apply in 5-10 gals. of spray mix per acre.

CHEMICAL FALLOW Continuous Wheat 2-3 Month Recropping Interval	3	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	–	• Make application at least 45 days prior to seeding. • Use at least 1.3 pts. of Gramoxone Max per acre with a PSI (see **Photosynthetic Inhibitor Herbicides** section) for volunteer wheat or downy brome control in the spring. • Refer to the Chemical Fallow General Information section.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
CHEMICAL FALLOW Wheat-Fallow-Wheat Rotations (Fall applied after harvest; seeded 12-14 months later)	3	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	–	• Spray before weeds produce seed. • Volunteer wheat and downy brome control are better with late August or early September applications. • Tank mix with Atrazine, Marksman® Herbicide, or Command® Herbicide for enhanced burndown and residual weed control. • Tank mix with metribuzin, (Sencor 75DF) for burndown and residual control of grass and broadleaf weeds. • Refer to the product labels for specific use rates for your soil type, use directions, cautions and a list of weeds controlled. • Refer to the Chemical Fallow General Information section.
CHEMICAL FALLOW Wheat-Fallow-Wheat Rotations (Spring applied; seeded 3-5 months later)	3	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	–	• Application should be made March 1 to April 15, prior to spring rains to conserve moisture. • Volunteer wheat is easier to control after the boot stage, but soil moisture loss will be greater. • Use at least 1.3 pts. of Gramoxone Max per acre with a PSI (see **Photosynthetic Inhibitor Herbicides** section) for volunteer wheat or downy brome control in the spring. • Refer to the Chemical Fallow General Information section. • Tank mix with metribuzin, (Sencor 75DF/Lexone) for burndown and residual control of grass and broadleaf weeds. • Refer to the metribuzin, (Sencor 75DF/Lexone) label for use rates for your soil type, use directions, cautions, and weeds controlled.
CHEMICAL FALLOW Wheat-Annual Crop[1]-Wheat Rotations (Fall applied in wheat stubble)	3	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	–	• Tank mix with Atrazine or Marksman for enhanced burndown and residual weed control. Refer to the labels for specific use rates for your soil type, use directions, cautions, and a list of weeds controlled. • Spray after wheat harvest and before weeds produce seed. If grasses such as foxtails or barnyardgrass recover, respray before they develop seed. • Volunteer wheat and downy brome are easier to control with late August to November applications. • Refer to the Chemical Fallow General Information section.
CHEMICAL FALLOW Wheat-Annual Crop-Wheat Rotations (Spring applied prior to planting an annual crop[1]) [1]Approved Annual Crops are grain sorghum, corn, wheat, or proso millet.	3	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	–	• Tank mix with Atrazine for enhanced burndown and residual weed control. Refer to the labels for specific use rates for your soil type, use directions, cautions, and a list of weeds controlled. • Use at least 1.3 pts. of Gramoxone Max per acre with a PSI (see **Photosynthetic Inhibitor Herbicides** section) for volunteer wheat or downy brome control in the spring. • Follow the Atrazine recommendations pertaining to soil pH and recropping intervals. • Refer to the Chemical Fallow General Information section.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
CLOVER AND OTHER LEGUMES[1] Dormant Season On established plantings: Region A- See map at end of Alfalfa section.	1	Broadcast	1.3-2.1 pts.	Ground: 10 gals. Air: 5 gals.	60	• For desiccation of weeds, including London rocket, sowthistle, rescue brome, wild oats, chickweed, ryegrass, bluegrass, cheatgrass, dogfennel, tansymustard, henbit, downy brome, and other winter annuals, and suppression of perennial weeds. • Apply during late fall or winter months after the last fall cutting and before first spring cutting. • Do not apply if **regrowth** after grazing or cutting is more than 2". • Do not harvest within 60 days of application. • CAUTION: Applications to clover or other legumes that is not dormant, or have broken dormancy, may result in stand and/or yield reductions. Replanting may be necessary. Green clover or other legumes foliage present at the time of application will be burned. • Clover or other legumes foliage present at the time of application will be discolored and temporarily stunted. • Total hay yield of first cutting may be reduced in clover or other legumes fields with severe weed infestation. This reduction will usually be directly proportionate to the loss of weed weight. • Do not apply more than once per season. **California** • For desiccation of weeds including bluegrass, ryegrass, shepherdspurse, chickweed, tansy-mustard, foxtail, sowthistle and groundsel. • Use high rate if ryegrass, shepherdspurse, sowthistle or groundsel is present. [1]Other legumes include velvetbean, lespedeza, lupine, sainfoin, trefoil, vetch, crown vetch, and milk vetch.
On established plantings: Region B- See map at end of Alfalfa section.	1	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	
On fall-seeded, newly established stands less than 1-year-old: Region A- See map at end of Alfalfa section.	1	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	
On fall-seeded, newly established stands less than 1-year-old: Region B- See map at end of Alfalfa section.	1	Broadcast	0.5-0.8 pt.	Ground: 10 gals. Air: 5 gals.	60	
CORN **FIELD CORN** **POPCORN** **SWEET CORN** **SEED CORN** (Used alone)	3	Preplant or Preemergence Broadcast or Banded Over Row	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Includes field, fresh, sweet, forage, fodder and popcorn. • Seedbeds should be formed as far ahead of planting and treatment as possible to permit maximum weed and grass emergence. • Seeding should be done with a minimum amount of soil disturbance. • Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application will be killed.
CORN Tank Mixes for No-till/Reduced Till	3	Preplant or Preemergence Broadcast or Banded Over Row	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.*	–	• Apply as a broadcast spray before, during or after planting, but before crop emergence. • For improved burndown or residual control, Gramoxone Max may be tank mixed with the following herbicides: 2,4-D Ester (Low Volatile) AAtrex/Atrazine Banvel Bicep MAGNUM Bicep Lite II MAGNUM Dual MAGNUM Frontier® Guardsman® Harmony® Extra Herbicide (Preplant Only) Harness® Harness® Xtra Lasso® Herbicide Linex Lorox Princep Prowl® Herbicide Simazine® Surpass® EC Surpass® 100 Topnotch® • Gramoxone Max may also be tank mixed with Ambush® insecticide. • Refer to respective product label(s) for rates of application, directions for use, limitations, cautions, and for a list of weeds or insects controlled. *Refer to respective product labels to determine if these products can be applied by air.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
FIELD CORN **POPCORN** **SWEET CORN** **SEED CORN**	3	Postemergence Directed Spray (Including Hooded or Shielded)	0.7-1.3 pts.	Ground: 10 gals.	–	• Apply when weeds are actively growing. • Use higher rate on larger or hard to control weeds. Weeds 6" or taller may not be controlled. • Severe damage and/or complete kill can occur if spray contacts corn plants. **HOODED OR SHIELDED SPRAYERS** • To avoid excessive crop phytotoxicity, use a hooded or shielded sprayer with skids or wheels on the spray boom to maintain spray height. • Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants. **DIRECTED SPRAY WITHOUT HOODED OR SHIELDED SPRAYERS** • Apply when corn is at least 10" tall with nozzles arranged to spray no higher than the lower 3" of corn stalks. • Corn plants shorter than 10" may be injured and not recover (corn height measured from soil surface to top of whorl). • For corn greater than 20" tall, arrange the nozzles to spray no higher than the lower 1/3 of the corn stalks. • Corn foliage sprayed will be injured, but the crop will recover and develop normally.
FIELD CORN, **POPCORN,** **SEED CORN**	1	Harvest Aid Broadcast	0.8-1.3 pts.	Ground: 20 gals. Air: 5 gals.	7	• Make ONE (1) application at least 7 days prior to harvest. • Apply after the corn is mature after the black layer has formed at the base of the kernels (this indicates maturity). Consult your local agricultural authority for help in identifying the black layer. • Add nonionic surfactant containing at least 75% surface active ingredient at 0.25% v/v. • Use 1.5 pts. to desiccate mature broadleaf weeds and grasses or broadleaf weeds and grasses that are taller than 18". • Drought stressed plants, especially broadleaf weeds, can be difficult to kill and desiccation may not be complete.
FIELD CORN ONLY (grain, fodder, forage)	3	Postemergence Directed Spray USDA Witchweed Eradication Program	1.3 pts.	Ground: 10 gals.	–	• Initiate sprays in late June to early July and repeat in early August if regrowth occurs. • Follow application instructions in post-emergence directed spray section above.
FIELD CORN ONLY (grain, fodder, forage) 2,4-D Amine Tank Mix	3	Postemergence Directed Spray USDA Witchweed Eradication Program	5.4 fl. oz. + 0.5 lb. 2,4-D Amine AE	Ground: 10 gals.	–	• Apply as a directed spray onto grassy weeds and witchweed before witchweed blooms. Reapply if regrowth occurs. • Follow application instructions in post-emergence directed spray section above.
COTTON (Used alone)	3	Preplant or Preemergence	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply prior to, during or after planting, but before crop emergence. • For fallow bed treatment, beds should be preformed to permit maximum weed and grass emergence prior to treatment. • Seeding should be done with a minimum of soil disturbance.
COTTON (California only; Used alone)	3	Preplant	5.4-10.7 fl. oz.	Ground: 10 gals. Air: 5 gals.	–	• For control of volunteer barley in preformed seedbeds.
COTTON Goal® Herbicide Tank Mix	3	Preplant or Fallow Bed Broadcast	1.7-2.7 pts.	Ground or Air: 10 gals.	–	• Refer to Goal label for specific use directions and restrictions, and weeds controlled.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
COTTON Other Tank Mixes	3	Preplant or Preemergence	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply as a broadcast spray before, during or after planting, but before crop emergence. • For improved burndown or residual control, Gramoxone Max may be tank mixed with the following herbicides: • Cotoran® Herbicide • Meturon® Herbicide • Cotton-Pro® Herbicide • Caparol® Herbicide • Diuron® • Harmony Extra (Preplant Only) • MSMA • Zorial® Herbicide • Dual MAGNUM • Prowl • When tank mixing with Cotoran DF or Meturon DF, follow mixing instructions in the **Order of Tank Mixing** section carefully and maintain constant agitation. • When tank mixing with any of the herbicides listed above, refer to that product's label for specific directions and restrictions and for a list of weeds controlled.
COTTON	4 (applies to all sections)	Harvest Aid			3	**Harvest Aid Use Precautions** (Applies to all sections) • Do not pasture livestock in treated fields or feed treated foliage. • Do not apply to cotton within 3 days before harvest. • Repeat application if necessary. Do not exceed a total of 1.3 pts./A as a harvest aid. • May be tank mixed with other cotton harvest aid materials known to be effective by the local expert. Unless otherwise instructed in this label, refer to tank mix product label for rates, directions, limitations and cautions. • Gramoxone Max can be applied in a tank mix with methyl parathion and/or Karate® insecticide. • Nodes above cracked bolls (NACB) timing is for guidance and is not intended to restrict the local expert in their use of the product.
SOUTHERN COTTON Harvest aid for boll opening and defoliation (Tank mix with phosphate and chlorate defoliants)	4	Broadcast	5.4 fl. oz. + 1 pt. phosphate or 1 gal. chlorate	Ground: 10 gals. Air: 5 gals.	7	• Development of immature bolls will be inhibited. • Apply when 80% or more of the bolls are open and the remaining bolls to be harvested are mature.
SOUTHERN COTTON Additional tank mixes for boll opening and defoliation	4	Broadcast	2.1-3.3 oz.	Ground: 10 gals. Air: 5 gals.	–	• To aid in defoliation and opening of mature bolls, Gramoxone Max may be tank mixed with the following products: Accelerate® Defoliant Def® Defoliant Dropp® Defoliant Ethephon® Plant Growth Regulant Folex® Defoliant Harvade® Harvest Growth Regulant Prep™ PGR • Apply when 60% or more of the bolls are open and the remaining bolls to be harvested are mature. • Development of immature bolls will be inhibited. • Refer to tank mix product label for rate, directions, limitations and cautions.
SOUTHERN COTTON Post Defoliation-To aid in opening of mature bolls and to desiccate green weeds	4	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	3	• Use higher rate if weed infestation is heavy or dense. • Apply when 75% or more of the bolls are open and remaining bolls to be harvested are mature. • Development of immature bolls will be inhibited. • After a defoliation or conditioning application has been made, delay desiccation application of Gramoxone Max approximately 3-7 days to minimize leaf sticking.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
WESTERN COTTON Harvest aid for boll opening and early defoliation	4	Broadcast	3.7-5.4 fl. oz. + phosphate or sodium chlorate; and/or other compatible harvest aid products.	Ground: 10 gals. Air: 5 gals.	7	• Use higher rate of Gramoxone Max on rank cotton. • Do not use more than 5.4 fl. oz. of Gramoxone Max for early defoliation as excessive desiccation may occur. • Early defoliation timing is when 60% or more of the bolls are open and the remaining bolls to be harvested are mature (approximately 4 NAC8). • Development of immature bolls will be inhibited. • Do not use more than 4.0 lbs. of actual sodium chlorate defoliant per acre at this early defoliation timing.
WESTERN COTTON Harvest aid for boll opening and mid-to-late defoliation	4	Broadcast	5.4-10.7 fl. oz. alone *or* tank mix with sodium chlorate *or* phosphate defoliant and/or other compatible harvest aid products		3 (Alone)	• In desert cotton areas or on rank vigorous cotton, use the 10.7 ft. oz. rate of Gramoxone Max. • Mid-to-late defoliation timing is when 75% or more of the bolls are open and remaining bolls to be harvested are mature (approximately 3 or fewer NACB) • Development of immature bolls will be inhibited.
COTTON **Stripper or Spindle Harvested** Harvest aid for defoliation and boll opening	4	Broadcast	2.1-7.5 fl. oz.	Ground: 10 gals. Air: 5 gals.	3	• IT IS ADVISABLE, BECAUSE OF EXTREMES IN ENVIRONMENTAL AND PLANT CONDITIONS, TO APPLY THE RANGE OF RATES ON A SMALL BLOCK OF COTTON TO DETERMINE THE RATE THAT BEST FITS YOUR NEEDS. • Apply when 75% of the bolls are open and the remaining bolls to be harvested are mature. • DEVELOPMENT OF IMMATURE BOLLS WILL BE INHIBITED. SLICE BOLLS AND INSPECT THE SEED FOR MATURITY. • Gramoxone Max may be applied alone or tank mixed with the following cotton harvest aids: Accelerate Defoliant — Folex Defoliant Def Defoliant — Harvade Dropp Defoliant — Harvest Growth Ethephon Plant Growth Regulant — Regulant Prep PGR • May be applied as a split application. Do not exceed a total of 1.3 pts./A. • To avoid leaf sticking, apply Gramoxone Max as a desiccant approximately 3-7 days after defoliation or a conditioning application and 7-14 days before harvest. • Cooler temperatures may cause a longer waiting period between application of Gramoxone Max as a desiccant and defoliation/condition. • Lower rates in the range may be necessary south of I-10 in Texas where temperatures are typically higher during defoliation.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
COTTON Late season desiccation	4	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	3	• IT IS ADVISABLE, BECAUSE OF EXTREMES IN ENVIRONMENTAL AND PLANT CONDITIONS, TO APPLY THE RANGE OF RATES ON A SMALL BLOCK TO DETERMINE THE RATE THAT BEST FITS YOUR NEEDS. • May be applied as a split application. Do not exceed a total of 1.3 pts./A. • Apply when 85% of the bolls are open and the remaining bolls to be harvested are mature (approximately 0 NACB). • Development of immature bolls will be inhibited. Slice bolls and inspect the seed for maturity. • Lower rates in the range may be necessary south of I-10 in Texas where temperatures are typically higher during defoliation. • If a defoliation or conditioning application has been made, delay desiccation application of Gramoxone Max approximately 3-7 days to minimize leaf sticking. • May be tank mixed with other harvest aid materials known to the local expert to be effective.
COTTON Desiccation of Regrowth	4	Broadcast	0.75-1.25 pts.	Ground: 10 gals. Air: 5 gals.	3	• Use to desiccate regrowth occurring after defoliation or desiccation. • Regrowth is difficult to control, therefore, thorough coverage with the full recommended rate is necessary. • Control is dependent on growing conditions and desiccation of small new regrowth may not always be complete. • Use higher rate if regrowth is excessive.
EASTER LILIES (Field grown)	2	Preemergence	1.7-2.7 pts.	Ground: 10 gals.	–	• Do not apply more than twice per season.
FALLOW LAND Prior to planting of any crops.	2	Preplant Broadcast to Fallow Land	1.0-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Fallow land may be between operations such as disking, ripping, plowing, leveling, irrigating or listing for ground preparation purposes. • Use for the control of weeds such as bluegrass, chickweed, henbit, downy brome, ryegrass, cheatgrass, dog fennel, tansy mustard, London rocket, sowthistle, rescue brome, wild oats, volunteer cereals and other winter annuals and for suppression of perennial weeds or sedges. • Use the higher rate for weeds approaching the maximum size of 6". • Do not make more than 2 applications during the fallow period. • Allow maximum weed emergence prior to application to maximize the benefit of this use. • Adhere to the preharvest intervals and other crop specific restrictions for planted crops elsewhere on this label.
GRASSES (For Seed) (For Use in Seedbed Preparation)	3	Preplant, At Planting, or Preemergence	1.3-2.7 pts.	Ground: 10 gals.	–	• Prepare the seedbeds and allow weeds to germinate. • Apply Gramoxone Max when weeds are at the 3-5 leaf stage. • Repeat applications as necessary prior to grass emergence. • Do not graze treated areas or use the seed or straw from treated areas for animal feed or bedding.
GUAR (Preharvest desiccation)	3	Preharvest	1.3 pts.	Ground: 10 gals.	4	• Apply after the pods are fully mature. • Do not graze treated areas or use the treated forage for animal feed.
GUAVA	4	Directed Spray	2.5 pts.	Ground: 10 gals.	–	• Do not allow spray to contact green stems, fruit or foliage. • Do not graze treated areas. • Do not feed cover crops grown in treated areas to livestock. • For mature woody weeds, late-germinating weeds and grasses, and perennials, retreatment or spot spraying may be necessary.

Gramoxone® Max

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HOPS (ID, OR, & WA only)	3	Directed Spray and/or Suckering and Stripping	1.3 pts.	Ground: 10 gals.	14	• Retreatment or spot treatment may be necessary. • Do not apply more than 3 times per season. • Do not allow spray to contact green stems, foliage, flowers, or cones as injury may result. • Do not allow animals to graze in treated hopyards. • Hop vine refuse and silage may be fed to livestock. • For suckering and stripping, spray only the basal 2 ft. of the vines. Repeat as necessary. • Experience with varieties other than Cascade, Yakima Cluster, and Bullion is limited. If using Gramoxone Max on other varieties than these, test the use pattern on a small number of vines of each variety to determine sensitivity to injury. Do not use on unlisted varieties if unacceptable crop injury occurs. • Chemical Pruning: To burn back existing vines and obtain even emergence of subsequent vines, spray when vines are less than 3 ft. tall. • APPLICATION TO HOP VINES LESS THAN 6 FT. TALL MAY CAUSE UNACCEPTABLE INJURY.
LENTILS	2	Harvest Aid	0.8-1.3 pts.	Ground: 20 gals. Air: 7 gals.	7	• Add nonionic surfactant at 0.25% v/v (2 pts./100 gals.) of the finished spray volume. • May also be applied as a split application. **DO NOT** make more than 2 applications or exceed a total of 1.3 pts./A. The split application may improve coverage. • Apply when crop is mature and at least 80% of the pods are yellowing and mostly ripe with no more than 30% of the leaves still green in color. • **DO NOT** apply when weather conditions favor spray drift. A drift control agent may be included to reduce spray drift. • NOT REGISTERED FOR USE ON LENTILS IN CALIFORNIA
MINT (Peppermint, Spearmint)	2	Dormant Season	1.3-2.0 pts.	Ground: 10 gals. Air: 5 gals.	–	• For suppression of weeds such as Italian ryegrass, prickly lettuce, groundsel, chickweed, downy brome and bluegrass. • Apply when crop is dormant before spring growth begins and when weeds are less than 6" tall. • Do not apply more than 2.0 pts./A per dormant season. • May be tank mixed with Sinbar® Herbicide (terbacil) weed killer for improved contact activity and residual control of Italian ryegrass, prickly lettuce and groundsel. Apply this tank mixture no more than once per season. Refer to the Sinbar label for rates, directions, and cautions and for a list of weeds controlled.
ONIONS (seeded) **AND GARLIC**	1	Preplant/ Preemergence	1.7-2.7 pts.	Ground: 10 gals.	60 200 (CA only)	• Use the higher rate for heavy weed infestations or wild oat control. Apply only one application per season at the 2.7 pts./A dosage. • Allow maximum weed and grass emergence prior to treatment but apply prior to crop emergence. • Apply a maximum of 2.7 pts./A per season.
PASSION FRUIT	5	Directed Spray	2.5 pts.	Ground: 10 gals.	–	• Use a shield or wrap vine if bark is still green at application time. • If application is to be made during harvest season, pick all fruit off the ground prior to application. • Do not allow animals to graze on treated areas. • Retreatment or spot treatment may be necessary.

Gramoxone® Max

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PEANUTS	2	Broadcast At Ground Crack Postemergence	5.4-10.8 fl. oz.	Ground: 10 gals.	–	• To control or suppress small (1-6") emerged annual grass and broadleaf weeds in peanuts at ground crack. A second application may be made up to 28 days after ground crack. • For at ground crack use, Gramoxone Max can be tank mixed with Pursuit® Herbicide or Dual MAGNUM for residual weed control. • Consult the Pursuit or Dual MAGNUM label for a list of weeds controlled, rates of application, and precautions. • Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per acre per season. • Crop foliage sprayed will be injured in the form of bronzing and crinkling but the crop will recover and develop normally. • Do not apply by air.
PEANUTS Basagran® Herbicide Tank Mix	2	Broadcast At Ground Crack Postemergence	5.4-10.8 fl. oz.	Ground: 10 gals.	–	• For improved control of weeds such as cocklebur, bristly starbur, smartweed and prickly sida, tank mix Gramoxone Max with Basagran at 1 pt./A. • This tank mix can be applied at the ground crack stage of peanuts. A second application may be made up to 28 days after ground crack. • Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per acre per season. • Crop foliage sprayed will be injured in the form of bronzing and crinkling but the crop will recover and develop normally. • Refer to the Basagran label for specific use directions, limitations, cautions and for a list of weeds controlled. • Do not apply this tank mix if peanuts show injury (leaf phytotoxicity and/or plant stunting) produced by any other herbicide treatment as injury may be enhanced and/or prolonged. • Do not apply this tank mix during prolonged periods of drought or unseasonably cold weather as unsatisfactory weed control may result. • Do not apply by air.
PEANUTS Butyrac® Herbicide or Butoxone® Herbicide 200 Tank Mix	2	Broadcast Postemergence	5.4-10.8 fl. oz.	Ground: 10 gals.	–	• For improved control of weeds such as cocklebur, sicklepod and morningglory tank mix Gramoxone Max with 8-16 oz. (0.125-0.25 lbs.) per acre of Butyrac or Butoxone 200. • Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per season. • Crop foliage sprayed will be injured in the form of bronzing and crinkling but the crop will recover and develop normally. • Refer to the complete Butyrac or Butoxone 200 label for specific use directions, limitations, cautions and for a list of weeds controlled. • Do not apply by air.
PERSIMMON	5	Directed Spray	2.5 pts.	Ground: 10 gals.	-	• Do not allow spray to contact green stems, fruit, or foliage. • Do not graze treated areas. • Do not feed cover crops grown in treated areas to livestock. • For mature woody weeds, late-germinating weeds and grasses, and perennials, re-treatment or spot spraying may be necessary.
PIGEON PEAS (Puerto Rico only)	1	Directed Spray	1.3 pts.	Ground: 10 gals.	60	• Avoid contact with pigeon pea foliage. • Do not make more than 1 application per season. • Do not graze treated areas or feed treated forage to livestock. • Cannery waste can be fed to livestock.
PINEAPPLE	3	Directed Spray	1.3-2.7 pts.	Ground: 10 gals.	20	• Retreatment may be necessary on more mature weeds. • Do not exceed 3 applications per season.

Gramoxone® Max

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POTATO	3	Preplant or Preemergence Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply up to ground cracking, before potatoes have emerged.
POTATO (California, Washington, Oregon, Idaho only; used alone)	3	Preplant Broadcast	0.4-0.7 pt.	Ground: 10 gals. Air: 5 gals.	–	• For control of volunteer barley in preformed seedbeds.
POTATO Fresh Market Only Preharvest vine killing and weed desiccation **For Use Only in the states of:** Colorado, Delaware, Idaho, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Utah, Washington, Wisconsin and Wyoming	2	Broadcast	0.7-1.3 pts.	Ground: 20 gals.	3	**For Fresh Market Potatoes Only.** (Fresh Market Potatoes include potatoes that are sent directly from the field to a consumer, grocery store, or processor for use.) • **DO NOT** use on potatoes that will be stored as tuber decomposition may result. • Potatoes must be harvested promptly after desiccation and consumed or processed immediately. • **DO NOT** apply to drought stressed potato vines. • **DO NOT** use to desiccate the vines of seed potatoes as seed pieces may fail to germinate and grow normally. • **DO NOT** pasture livestock in treated potato fields. • **DO NOT** exceed 2.7 pts./A per season. • Begin application when leaves begin to turn yellow. • Immature potato foliage is tolerant to Gramoxone Max. Desiccation will not be complete under this condition. • Use 1.3 pts./A rate where quick vine kill is desired. • Use 2 applications of 0.6 pt./A when vine growth is dense. Split applications must be applied a minimum of five days apart.
RICE	3	Preplant or Preemergence Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2.0 pts. Weeds 6": 2.0-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply as a broadcast spray before, during or after planting, but before crop emergence. Use higher rates and spray volumes when vegetation is dense. • Seeding should be done with a minimum amount of soil disturbance. • Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application will be killed. • For improved or extended weed control, Gramoxone Max may be tank mixed with other herbicides registered for this use. Refer to tank mix herbicide labels for specific directions, limitations, cautions and for a list of weeds controlled. • Do not flood/flush within 48 hours of application in order to ensure complete kill of vegetation. If cool, cloudy and/or wet weather delays speed of kill, do not flood/flush until complete kill is evident.
SAFFLOWER	3	Preplant or Preemergence Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply before, during, or after planting but before crop emergence.
SAFFLOWER (California only)	3	Preplant Broadcast	0.7 pt.	Ground: 10 gals. Air: 5 gals.	–	• For control of volunteer barley in preformed seedbeds.
SMALL GRAINS (Barley, wheat)	3	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	–	

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
SMALL GRAINS (Wheat Only) Hoelon 3EC Tank Mix	3	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• A tank mix with Hoelon 3EC will improve grass control. • Apply when weeds are actively growing and 1-6" in height. Weeds 6 inches or taller may not be controlled. • Do not apply this tank mix to barley as crop injury may result.
SORGHUM (Grain)	3	Preplant/ Preemergence Broadcast or Band	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	48 (grain) 20 (forage)	• Seedbeds should be formed as far ahead of planting as possible to allow maximum weed and grass emergence. • Seeding should be done with a minimum amount of soil disturbance.
SORGHUM (Grain) Atrazine & 2,4-D ester [Low Volatile] Tank Mix	3	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.		48 (grain) 20 (forage)	• Gramoxone Max may be tank mixed with Atrazine for improved preemergence or residual weed control. The addition of 2,4-D ester (Low Volatile) may aid in the suppression of perennial and annual broadleaf weeds emerged at the time of application. Refer to the specific tank mix herbicide label(s) for rates, directions, limitations, and cautions and a list of weeds controlled.
SORGHUM (Grain) Harmony® Extra Herbicide Tank Mix	3	Preplant	1.3-2.5 pts.	Ground: 10 gals.	48 (grain) 20 (forage)	• Gramoxone Max may be tank mixed with Harmony Extra for improved weed control. • Refer to the Harmony Extra label for rates, directions, limitations, and cautions and for a list of weeds controlled.
SORGHUM (Grain)	2	Postemergence Directed (Including Hooded or Shielded)	0.7-1.3 pts.	Ground: 10 gals.	48 (grain) 20 (forage)	• Apply when weeds are actively growing. • Use higher rate on larger or hard to control weeds. Weeds 6" or taller may not be controlled. • Severe damage and/or complete kill can occur if spray contacts sorghum plants. • Do not exceed 2 postemergence-directed applications or exceed a total of 5.3 pts. Gramoxone Max per season. **HOODED OR SHIELDED SPRAYERS** • To avoid excessive crop phytotoxicity, use a hooded or shielded sprayer with skids or wheels on the spray boom to maintain spray height. • Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants. **DIRECTED SPRAY WITHOUT HOODED OR SHIELDED SPRAYERS** • Apply when sorghum is at least 12" tall when naturally standing. • Do not exceed 30 psi nozzle pressure or spray under conditions which may cause excessive drift. • Use precision directed-spray application equipment adjusted so that no more than the lower 3" of the sorghum stalk is contacted by the application spray. • Some crop injury will occur. The degree of injury is related to the precision of application and spraying conditions.

Gramoxone® Max

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SOYBEANS	3	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Do not exceed a total of 4.0 pts. of Gramoxone Max per season. • Apply as a broadcast spray before, during or after planting, but before crop emergence. • For improved burndown or residual control, Gramoxone Max may be tank mixed with the following herbicides: 2,4-DB, Canopy, Dual MAGNUM, Goal, Harmony Extra (Preplant Only), Lasso, Lexone, Linex, Lorox, Lorox Plus, Prowl, Pursuit Herbicide, Scepter Herbicide, Sencor Herbicide, Surflan® Herbicide, Turbo Herbicide • The rate of Gramoxone Max to be used in these tank mixtures is dependent on weed height and growing conditions. Use the highest recommended rate of Gramoxone Max under dry conditions or where the weed canopy is dense. Refer to the specific tank mix herbicide label(s) for rates, directions, limitations, and cautions and for a list of weeds controlled. • The lower rate may be used when weeds are less than 4" tall and a selective postemergence spray or cultivation will be made within 3 weeks after planting. • Seeding should be done with a minimum amount of soil disturbance. • Do not graze or harvest for forage or hay before the R3 stage of soybean development (early pod).
SOYBEANS 2,4-D ester (Low Volatile) Tank Mix	3	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply 2,4-D ester (Low Volatile) at 0.35-0.475 lbs. a.i./A at least 7 days prior to planting. • Apply 2,4-D ester (Low Volatile) at 0.475-0.95 lbs. a.i./A at least 30 days prior to planting. • Do not apply 2,4-D ester (Low Volatile) prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield. • Do not use the amine formulation as Gramoxone Max activity may be reduced. • May be tank mixed with residual herbicides listed above. • Refer to the 2,4-D ester (Low Volatile) label for a list of rates, directions, limitations and cautions and for a list of weeds controlled.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
SOYBEANS	3	Postemergence Directed Spray (Includes Hooded or Shielded)	3.0-5.3 fl. oz.	Ground: 10 gals.	–	• Apply when weeds are actively growing. • For control of seedling johnsongrass, crabgrass, goosegrass, brachiaria, Texas millet and pigweed less than 2" tall, use the lower rate of Gramoxone Max. • For control of 2-4" red rice, *Brachiaria*, barnyard grass, crabgrass, goosegrass, seedling johnsongrass, giant foxtail, and fall panicum, use 5.3 fl. oz. of Gramoxone Max. • For control of 2-3" sicklepod, purslane, pigweed, cutleaf ground cherry, and common ragweed, use 5.3 fl. oz. of Gramoxone Max. • For control of 2-4" grasses in mixture with common cocklebur, morningglory, and red rice, apply Gramoxone Max at 5.3 fl. oz./A plus 0.2 lb. active ingredient per acre of a 2,4-DB formulation. • Refer to the 2,4-DB label for directions, limitations, and cautions. • Do not graze or harvest for forage or hay. • If needed make a second and final application 7-14 days later. **HOODED OR SHIELDED SPRAYERS** • Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants. • Use higher rate on larger (< 6") or hard to control weeds. Weeds 6" or taller may not be controlled. • Severe damage and/or complete kill can occur if spray intentionally or accidentally (including drift of fine droplets) contacts the plants. **DIRECTED SPRAY WITHOUT HOODED OR SHIELDED SPRAYERS** • Do not treat if soybeans are less than 8" tall. • Use precision directed spray application equipment adjusted so that no more than the lower 3" of the soybean plant is contacted by the application spray. • Do not exceed 30 psi nozzle pressure or spray under conditions which may cause excessive drift. • Some crop injury will occur. The degree of injury is related to the precision of application and spraying conditions.
SOYBEANS	3	Harvest Aid	5.4-10.7 fl. oz.	Ground: 20 gals. Air: 5 gals.	–	• Indeterminant varieties: Apply when at least 65% of the seed pods have reached a mature brown color or when seed moisture is 30% or less. • Determinant varieties: Apply when plants are mature, i.e, beans are fully developed, 1/2 of leaves have dropped, and remaining leaves are yellowing. • Immature soybeans will be injured. • Mature cocklebur, especially drought-stressed plants, are tolerant to Gramoxone Max and desiccation will not be complete. Always use the higher rate for cocklebur. • Do not apply within 15 days of harvest. • Do not graze or harvest for forage or hay.
STRAWBERRIES	3	Postemergence Directed Spray	1.3 pts.	Ground: 20 gals.	21	• Apply by directing spray between the rows and using shields to prevent spray contact with crop plants. • Do not allow spray to contact strawberry plants as injury or excessive residues may result. • Do not apply more than 3 times per season. • Do not graze livestock in treated areas.

Gramoxone® Max

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SUGAR BEETS	3	Preplant or Preemergence	1.3-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Use the higher rate for heavier weed infestations. • Seeding or transplanting should be done with a minimum amount of soil disturbance. • Crop plants emerged at time of application will be killed. • Can be used in fallow bed/stale seedbed for weed control. • Seedbeds or plantbeds should be formed as far ahead of treatment as possible to permit maximum weed emergence.
SUGARCANE	2	Postemergence Directed Spray (Includes Hooded or Shielded)			–	**General Comments** • Apply as a hooded, shielded or directed spray to avoid contact with cane foliage to prevent leaf burn and yield reduction. • Make a second and final application, if necessary, when new weed growth is 2-6" high. • Do not graze treated areas or feed treated forage to livestock.
— Florida —	2		1.3 pts.	Ground: 50 gals.	–	• For optimum results, apply in early spring (March-April) when weeds are small. • Do not apply after June 1 as cane growth may be stunted and yields reduced.
— Hawaii —	2		1.3 pts.	Ground: 20 gals.	–	• Do not apply after cane rows have closed in.
— Louisiana —	2		0.7-2.0 pts.	Ground: 20 gals.	30	• For tiller control, apply when tillers are less than 18" high. • Use the higher rate for heavier weed infestations or tiller growth.
— Florida & Texas —	1	Harvest Aid	0.4-0.7 pt.	Air: 5 gals.	–	• Use higher rate under cool, cloudy weather conditions. • Apply 3-14 days before burning and harvest.
SUNFLOWER	3	Preplant or Preemergence Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• Apply before, during, or after planting but before crop emergence.
SUNFLOWER	2	Preharvest Desiccation Broadcast	0.8-1.3 pts.	Ground: 10 gals. Air: 5 gals.	7	• Apply when sunflower seeds reach physiological maturity (when seed moisture is 35% or lower). For many varieties, this corresponds to the time when the back of the heads are yellow and the bracts are turning brown. • Do not graze treated areas or feed treated forage to livestock. • Use the higher rate when crop stands or weed infestations are heavy.
TARO, DRYLAND (Hawaii Only)	2	Postemergence Directed Spray	1.3-2.1 pts.	Ground: 10 gals.	180	• Do not allow spray to contact the taro plants as injury may result. • Make the first application when weed growth is 1-4" high. • Weeds emerging after the application will not be controlled. • A single re-treatment may be made; however, do not harvest dryland taro within 6 months of the last application.
TREE PLANTATION ESTABLISHMENT Deciduous and Conifers	3	Preplant Broadcast	1.3-2.7 pts.	Ground: 20 gals.	–	• Prepare ground early to allow maximum emergence of weeds. • Apply prior to planting. Plant with minimal soil disturbance. • Use the higher rate for heavier weed infestations. • For improved burndown or residual control, tank mix Gramoxone Max with other herbicides labelled for this use. • Refer to the specific tank mix herbicide label(s) for rates, directions, limitations, and cautions and for a list of weeds controlled. • Do not apply in less than 20 gals./A as weed control will be reduced.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
TREES AND VINES Orchards, Vineyards, Windbreak, Shade & Ornamental Trees Acerola Apples Apricots Avocados Bananas Beechnut Brazil Nut Butternut Calamondin Cashew Cherries Chestnut Chinquapin Citrus Citron Coffee Figs Filberts Grapefruit Grapes Hickory Nut Kiwi Fruit Kumquat Lemon Lime Macadamia Nuts Mandarin Nectarines Olives Orange (sour & sweet) Papayas Peaches Pears Pecans Pistachios Plums Prunes Pummelo Satsuma mandarin Walnuts Other shade and ornamental trees such as arborvitae, ash, elm, fir, oak, pine, etc.	5 except for: Apricots 3 Cherries 3 Kiwi Fruit 3 Nectarines 3 Olives 4 Peaches 3 Pistachios 5 (only 2 after shells split) Plums 3	Directed Spray	1.7-2.7 pts.	Ground: 10 gals.	Apricots 28 Cherries 28 Figs 13 Kiwi Fruit 14 Nectarines 28 Olives 13 Peaches 14 Pistachios 7 Plums 28	• Do not allow spray to contact green stems (except suckers), fruit or foliage. • Use a shield or wrap plant when spraying around young trees or vines. • Do not graze treated areas. • Do not feed cover crops grown in treated areas to livestock. • Do not apply when figs, nuts or olives to be harvested are on the ground. • For apricots - Do not harvest within 28 days after application and do not exceed 3 post-emergence directed applications per season. • For cherries - Do not harvest within 28 days after application and do not exceed 3 post-emergence directed applications per season. • For figs - Do not harvest within 13 days after application and do not exceed 5 post-emergence directed applications per season. • For grapes - treat when sucker growth is no more than 8" long. Late season applications to weeds should be made to avoid contact with desirable foliage. • For kiwi fruit - Do not treat more than 3 times per year. • For mature woody weeds, perennial weeds, late germinating weeds and green suckers, retreatment or spot treatment may be necessary. • For nectarines - Do not harvest within 28 days after application and do not exceed 3 post-emergence directed applications per season. • For olives - Do not harvest within 13 days after application and do not exceed 4 post-emergence directed applications per season. • For peaches - Do not harvest within 14 days after application and do not exceed 3 post-emergence directed applications per season. • For pistachios - Do not exceed 2 applications after shells split. • For plums - Do not harvest within 28 days after application and do not exceed 3 post-emergence directed applications per season.
TREES AND VINES Tank Mixes	5 except for: Apricots 3 Cherries 3 Kiwi Fruit 3 Nectarines 3 Olives 4 Peaches 3 Pistachios 5 (only 2 after shells split) Plums 3	Directed Spray	1.7-2.7 pts.	Ground: 10 gals.	Refer to other TM labels	• Gramoxone Max may be tank mixed with registered residual herbicides listed below for combined emerged and residual weed control. Always refer to other herbicide label(s) for respective precautions, limitations, restrictions, dates and directions for use and weeds controlled. • Gramoxone Max may be tank mixed with the following herbicides: Devrinol® Herbicide Goal Karmex® Krovar® I Herbicides Princep Sinbar Solicam® Herbicide Surflan
TYFON (New Hampshire only)	3	Preplant Preemergence	1.7-2.7 pts.	Ground: 10 gals.	–	• Seeding should be done with a minimum of soil disturbance. • Weeds and grasses emerging after treatment will not be controlled. • Crop plants emerged at time of application will be injured.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
VEGETABLES (Seeded or Transplanted) Beans (Lima, Snap) Broccoli Cabbage Cantaloupe Carrots Cauliflower Chayote Fruit Chinese Cabbage Chinese Waxgourd Citron Melon Collards Cucumber Eggplant Endive (Escarole) Gherkin Gourd, Edible Groundcherry Lettuce Momordica spp. Musk Melons Peas Pepino Peppers Pumpkin Squash Sweet Corn Tomatillo Turnips Tomatoes Watermelons	3	Preplant Preemergence	1.3-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	• Seedbeds or plantbeds should be formed as far ahead of treatment as possible to permit maximum weed emergence. • Applications can be made as a banded or broadcast treatment before, during or after planting but prior to the crop emergence. • Use the higher rate for heavier weed infestations. • Seeding or transplanting should be done with a minimum amount of soil disturbance. • Crop plants emerged at time of application will be killed. • Can be used in fallow bed/stale seedbed for weed control alone or tank mixed with Goal. Consult the Goal label for a list of weeds controlled, rates of application and precautions. • Do not harvest tomatoes within 30 days after application.
VEGETABLES Eggplant Tomatoes Peppers	3	Directed Spray	1.3 pts.	Ground: 10 gals.	-	• For control or suppression of emerged weeds between rows after crop establishment. • Use precision directed spray application equipment adjusted to prevent spray contact with crop plants. Do not exceed 30 psi nozzle pressure or spray under conditions which may cause excessive drift. • Apply when weeds are succulent and weed growth is less than 6". • Do not apply more than 3 applications per season. • Do not allow animals to graze in treated areas. • Do not harvest tomatoes within 30 days after application.
VEGETABLES Tomatoes	2	After Final Harvest	1.6-2.5 pts.	Ground: 40-120 gals.	-	• Apply in 40-120 gallons of water per acre (0.62 -0.93 lb. a.i./A). • Add NIS containing 75% or more surface active agent at 0.125 v/v (1 pt./100 gals. spray solution). • Thorough coverage of the tomato vines is required to ensure maximum herbicide burn-down. • Use of dirty or muddy water may deactivate Gramoxone Max. • To help facilitate removal of Sweet Potato Whitefly, burn tomato vines with propane burners as soon as possible after the vines have dried down sufficiently. • DO NOT apply more than a total of 3 lbs. active ingredient (paraquat) per acre per season. • To minimize drift, do not use nozzles or nozzle configurations which produce fine spray droplets (mist).

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
VEGETABLES (California, Washington, Oregon, Idaho only) Lettuce Melon Sugar Beets Tomatoes	2	Broadcast	0.4-0.7 pt.	Ground: 10 gals. Air: 5 gals.	–	• For control of volunteer barley in preformed seedbeds. • Do not harvest tomatoes within 30 days after application.
VEGETABLE Rhubarb	2	Dormant	1.7-2.7 pts.	Ground: 10 gals.	–	• Apply during dormant season before buds in crown begin to grow. • Do not make more than 2 applications per season.

ALFALFA

Table 2. New Seedlings – Suppression and control of broadleaf weeds and grasses in new alfalfa seedlings grown for hay (California only).

For Control of:	Rate/Acre	
	For Suppression	For Control
Spikeweed (4 inches tall or less)	5.4 fl. oz.	10.7-16.0 fl. oz.
Volunteer Small Grain (8 inches tall or less)	5.4-10.7 fl. oz.	21.3 fl. oz.
Fiddleneck (6 inches tall or less)	5.4-10.7 fl. oz.	21.3 fl. oz.
Shepherdspurse	10.7-21.3 fl. oz.	–
Annual Bluegrass	–	10.7-21.3 fl. oz.
Chickweed	–	10.7-21.3 fl. oz.
Red Maids (6 inches tall or less)	–	10.7-21.3 fl. oz.

Do not use the 5.4 fl. oz. rate unless the alfalfa has at least 3 trifoliate leaves; the 10.7 fl. oz. rate unless the alfalfa has 6 trifoliate leaves; or rates over 10.7 oz. unless there are 9 trifoliate leaves.

RESIN SOAKING

Pines (Loblolly, Shortleaf, Longleaf, Slash, Virginia, Pond, Pitch, and Spruce Pines).

Tree Selection – Select trees to be treated from stands on sites not subject to periods of extreme drought stress as the desiccating effect of Gramoxone Max to pines is accentuated during such periods, causing a reduction in the amount of oleoresin deposited in the xylem. Select trees to be treated from vigorous, nonstagnated stands, either natural or planted. In stagnated stands or commercial timber stands, plan treating with Gramoxone Max not sooner than three years after a commercial thinning.

Application Directions – Apply Gramoxone Max diluted in water to a suitable wound in the tree trunk to bring the treatment into contact with the xylem (sapwood).

Bark Streaks or Cuts: This type of wound is made using a standard or rotary bark hack or a chainsaw chipping tool employed in naval stores work to remove a single 1-inch wide streak of bark about 1-2 ft. from ground level. The total length should not exceed 1/3 of the tree circumference. Multiple streaks or cuts can result in serious girdling of the trunk and premature death of the tree. A coarse spray (about 1.7-5.0 ml.) Gramoxone Max solution (1-5% cation, wt./wt. basis) should be applied to runoff to the exposed xylem, using a low-pressure sprayer. The amount of spray required per cut depends on tree circumference and the length of cut or streak (1/3 of circumference). For a 9-inch diameter tree, 3 ml. of spray will cover the 1-inch wide streak. Using 3 ml. of a 2 or 4% Gramoxone Max solution will result in application of 60 or 120 mg. Gramoxone Max per streak.

Time of Treatment: Resin soaking can occur from treatments made any time of the year; however, cool season treatments under nondrought conditions usually result in less severe pine beetle infestations and longer tree life.

Interval Between Treatment and Tree Harvest: The interval between application of Gramoxone Max and tree harvest should be a minimum of 6 months and preferably from 12-24 months. Intervals of over 6 months may not be possible under conditions of drought or serious pine beetle attacks, which may make early harvest necessary. The Gramoxone Max treatment may encourage beetle attack, or may cause premature death of the tree. Desiccation of the xylem tissue, rather than the desired resin soaking, may occur, and is more likely at higher dosage rates.

Effect on Stem Growth: Gramoxone Max treatment can result in reduced stem growth during the interval between treatment and tree harvest.

Gramoxone® Max

Dilution Table for Gramoxone Max (3.0 lbs. cation per gallon)	
Concentration of Cation Desired (Wt./Wt. Basis)	**To 2/3 Gallon of Gramoxone Max Add the Following No. Gals. of Water**
0.2%	118.8
0.5%	46.8
1.0%	22.9
2.0%	10.9
3.0%	6.9
4.0%	4.9
5.0%	3.7

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
CONSERVATION RESERVE, FEDERAL SET-ASIDE, CONSERVATION COMPLIANCE PROGRAMS (For use in compliance with the Federal Conservation Reserve Program or Federal set-aside programs)	3	Broadcast	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	–	• For improved emerged weed control or extended weed control, Gramoxone Max may be tank mixed with other herbicides registered for this use. Refer to tank mix herbicide labels for specific directions, limitations, cautions and for a list of weeds controlled.
NONCROP USES	10	Broadcast or Spot Treatment	1.7-2.7 pts.	Ground: 10 gals.	–	• For use in noncrop areas such as public airports, electric transformer stations, pipeline pumping stations, around commercial buildings, storage yards and other installations, fence lines or similar noncrop areas. • Avoid contact with the foliage of ornamentals or desired plants. • Repeat as necessary.
PASTURE RESEEDING For suppression of existing sod and undesirable emerged broadleaf weeds and grasses prior to or at time of planting grasses or forage legumes	3	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	See specific geographic recommendation	**West of Cascade and Sierra Nevada Mountains** • Apply in October through December after first fall rains and after weeds have emerged and sod has started new growth. • For best seeding results, apply on moderately to heavily grazed areas. • Do not use in areas with heavy sod and weed growth. **East of Rocky Mountains** • Use the 1.3 pt. rate on vigorous or coarse sod species such as bromegrass. • Apply prior to, or at time of seeding grasses or forage legumes. • Apply only to grazed or mowed pastures not more than 3" in height at time of treatment. **Bermudagrass or Bahiagrass Sods** • Apply in late summer or early fall to sod not exceeding 3" in height. • For control of emerged Little Barley, apply in February or March before the mid-boot stage of Little Barley. **Bermudagrass and Coastal Bermudagrass Pastures** • Apply when bermudagrass is dormant. • For control of little barley, apply before the mid-boot stage. • Do not mow for hay until 40 days after treatment.
For Control of Endophyte-Fungus-Infected Fescue Forage Legume/Grass Mixture and Other Grass Pastures	2	Broadcast (Split Application)	0.7-1.3 pts. followed by 0.7-1.3 pts.	Ground: 10 gals.	–	• Use split applications of 10-21 days apart if necessary. • Do not exceed 2.6 pts./A total in preparation for reseeding. • For spring plantings, the initial application of 0.7-1.3 pts. may be made the previous fall. • Apply when fescue is actively growing and no more than 4" high. • To reduce the infestation of endophyte-infested grass, do not allow fescue to go to seed starting with the preceding year's crop.

Gramoxone® Max

Crop	Maximum Number of Applications Per Year	Use Pattern	Gramoxone Max Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Precautions, Restrictions and Comments
*For Prickly Pear Desiccation in Pastures	10	Spot Sprays	0.8 fl. oz. per gallon of water	Spray to wet weed foliage	–	*Not for use in California. • Knapsack, backpack sprayers, pump-up pressure sprayers, hand-guns, hand wands, and other hand-held equipment can be used to direct the spray onto weed foliage for spray to wet applications. • Mix 0.8 fl. oz. of Gramoxone Max and 1/3 fl. oz. of a nonionic surfactant per gallon of water. • Spray coverage should be uniform and provide complete cover of all green prickly pear foliage. • Apply in May through September for best desiccation results. • Do not use more than 1.6 pts. of Gramoxone Max per acre per year. • Apply only to pastures with no more than 3" of height at time of treatment. • For improved desiccation and perennial control of Prickly pear, tank mix with Grazon P+D Specialty herbicide at a rate of 1-2 fl. oz. per gallon of water. • Refer to the Grazon P+D Specialty herbicide label for directions, restrictions, and precautions.
*For Juniper Species leaf moisture reduction or desiccation prior to Prescribed burning of pastures	10	Broadcast	1.3 pts.	Air: 5 gals.	–	*Not for use in California. • Use only in conjunction with prescribed burning as recommended and monitored by local SCS or University and Extension Range Specialists. • Apply during hot, dry weather conditions (generally July and August). • Use 2% v/v nonionic surfactant in a minimum of 5 gpa spray solution. • Juniper leaf moisture content should be monitored; however, maximum leaf moisture reduction generally occurs 3-4 weeks after Gramoxone Max application. • Significant soil moisture and/or wet weather conditions prior to or after application will decrease the potential for Juniper Crown burns. • Cool or humid weather conditions also adversely affect leaf moisture reduction. • Do not graze livestock after application or prior to burning.
*Native Pastures	2	Broadcast	1.0-1.25 pts.	Ground: 10 gals. Air: 5 gals.	–	*Not for use in California. • Apply Gramoxone Max for control of Downy and Japanese Brome. • Apply in spring after 90% node formation of brome species, but before full bloom. • Emerged native perennial grasses will be burned by application, but application after 90% node formation will allow adequate time for native grasses to recover and attain maximum growth in the use season. • Do not apply more than 1.25 pts. Gramoxone Max per year. • Apply only to pastures with no more than 3" of height at time of treatment.

Conversion Table
Gramoxone Max to Be Applied

Ounces	Pints	Lb. a.i.	Acres/Gallon
2.50	0.16	0.06	51.3
4.80	0.30	0.11	26.7
5.28	0.33	0.12	24.2
5.52	0.35	0.13	23.2
10.00	0.63	0.23	12.8
11.00	0.69	0.26	11.6
11.20	0.70	0.26	11.4
12.00	0.75	0.28	10.7
16.00	1.00	0.38	8.0
20.00	1.25	0.47	6.4
20.80	1.30	0.49	6.2
24.00	1.50	0.56	5.3
28.00	1.75	0.66	4.6
32.00	2.00	0.75	4.0
40.00	2.50	0.94	3.2
43.20	2.70	1.00	3.0

For nonemergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP 1074A-L2E 1003
169199

RESTRICTED USE PESTICIDE

DUE TO ACUTE TOXICITY

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

GRAMOXONE® MAX

Herbicide

A Weed, Grass, and Harvest Aid Desiccant/Defoliant Herbicide

Active Ingredient:	
Paraquat dichloride (1,1'-dimethyl-4,4'-bipyridinium dichloride)	43.8%
Other Ingredients:	56.2%
Total:	100.0%

Contains 3.0 pounds paraquat cation per gallon as 4.143 pounds salt per gallon. Contains stench (odor) and emetic.

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1074 EPA Est. 100-TX-001

Syngenta Crop Protection, Inc.
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www.syngenta-us.com

SCP 1074A-L2E 1003
169199

KEEP OUT OF REACH OF CHILDREN.

DANGER/ PELIGRO POISON

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.)

2.5 gallons

U.S. Standard Measure

- **NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS.**
- **IF SWALLOWED, TAKE IMMEDIATE ACTION AS PRESCRIBED IN FIRST AID. SYMPTOMS ARE PROLONGED AND PAINFUL.**
- **DO NOT USE OR STORE IN OR AROUND THE HOME.**
- **DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE.**
- **THE ODOR OF THIS PRODUCT IS FROM THE STENCHING AGENT WHICH HAS BEEN ADDED, NOT FROM PARAQUAT.**

Precautionary Statements

Hazards to Humans and Domestic Animals

May be fatal if swallowed. Fatal if inhaled. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Do not breathe spray mist. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

IMPORTANT: Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

FIRST AID

If swallowed: SPEED IS ESSENTIAL. Immediate medical attention is required. If available, give an adsorbent such as activated charcoal, bentonite or Fullers Earth. Call a poison control center or doctor immediately for treatment advice. Do not give anything by mouth to an unconscious person.

If in eyes: 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 eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: 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.

If inhaled: Move person to fresh air. The odor of this product is from the stenching agent, which has been added, not from the paraquat. If person is not breathing, call 911 or an ambulance. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Refer to the booklet 'Paraquat Poisoning, A Practical Guide to Diagnosis, First Aid and Hospital Treatment'. (http://www.syngenta.com/pqmedguide/) Administer either activated charcoal (100g for adults or 2g/kg body weight in children) or Fuller's Earth (15% solution; 1 liter for adults or 15ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an adsorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye spashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries are reviewed by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat, however contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

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

HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call **1-800-888-8372.**

Environmental Hazards

Wildlife: This product is toxic to wildlife. 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 cleaning equipment or disposing of equipment wash waters.

Drift: Gramoxone Max is a contact herbicide that desiccates all green plant tissue. Paraquat dichloride is toxic to nontarget crops and plants if off-target movement occurs. Extreme care must be taken to ensure that off-target drift is minimized to the greatest extent possible. 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 when weather conditions favor drift from treated areas. To avoid drift, do not make aerial applications during periods of thermal inversion. Refer to the local state laws, regulations, guidelines and spray drift information contained in the Directions for Use section for proper application to avoid off-target movement.

Physical and Chemical Hazards

This product is mildly corrosive to aluminum and produces hydrogen gas which may form a highly combustible gas mixture. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. This product is compatible with high density polyethylene and rubber lined steel containers.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Do not contaminate water, food, or feed by storage or disposal. Store at temperatures above 32°F. For help with any spill, leak or fire involving this material, call **1-800-888-8372.**

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

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.

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

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