62719-323		2002	<sup>1</sup> /7
<b>EDA</b> Environmental F	rorm. Form of States Protection Agency on, DC 20460	Approved. OMB No. 2070-0066 Registration Amendment X Other	OPP Identifier Number
Ар	plication for Pesticide -	Section I	
. Company/Product Number Dow AgroSciences/62719-323	2. EPA Produc	- 0.1	Proposed Classification
Company/Product (Name)		ames A. Tompkins PM/25	None Restricted
Dow AgroSciences/Glyphomax* Name and Address of Applicant (Include ZIP Code)	6. Expedited	Review. In accordance with	FIFRA Section 3(c)(3)
Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268		duct is similar or identical in C NOTIFICATION	omposition and labeling
Check if this is a new address	Product Na	me OCT 1 8 2002	2
	Section - II		
Amendment - Explain below.	Final	printed labels in response to cy letter dated	
Resubmission in response to Agency letter dat	ed *Me 1	Foo" Application.	
Notification - Explain below.	Other	- Explain below.	
	Section - III		······
Material This Product Will Be Packaged In:			
Pild-Resistant Packaging       Unit Packaging         Yes*       Yes         No       No         Certification must       If "Yes"         e submitted       Init Packaging	Vater Soluble Packagir Yes No No. per If "Yes" No ontainer Package wgt cor	Der Metal Plastic Glass Paper	
Location of Net Contents Information 4.	Size(s) Retail Container	5 Location of Label Direct On Label On Labeling acco	ions mpanying product
Manner in Which Label is Affixed to Product	Lithograph Paper glued Stenciled	Other	······································
	Section - IV		
Contact Point /Complete items directly below for i	dentification of individual to be cont		
me Steve A. McMaster	Title Regulatory Manag		Include Area Code)
I certify that the statements I have made on this I acknowledge that any knowing false or misles both under applicable law.	Certification s form and all attachments thereto a	re true, accurate and complete.	R. Date Application Beceived (Stamped)
Signature Alm A.M. Mast	3. Title Regulatory Manager		
	5. Date		
Typed Name Steve A. McMaster		ptember 18, 2002	

E8A / Glyphomax / Notification With Edits / 09-16-02 File: Glyphomax-323 16Sep02N W-Ed.doc

## **Glyphomax\***

EPA Reg. No. 62719-323

## **Registration Notes:**

Source label text based on EPA accepted copy dated March 29, 2001, with conditions of acceptance.

## Proposed Changes by Notification (09-16-02):

The following changes are being made at the request of California Department of Pesticide Regulation as a condition of acceptance of this label:

- 1. Specific Crop Listings on Page 39: The term "Mustard" has been clarified to read "Mustard (Greens and Seed" (Latest EPA-accepted copy for Roundup Ultra is referenced).
- 2. Grain Sorghum (Hooded Sprayers): Added precautionary text from EPA-accepted copy for Roundup Ultra relating to use of hooded sprayers in tillering grain sorghum.
- Soybeans with Roundup Ready Gene: Because of the potential for crop injury, Dow AgroSciences has chosen not to include the section from the supplemental label for Roundup Original, allowing use of additional non-ionic surfactants, in the label for Glyphomax. (See CDPR-accepted copy for Roundup Original (EPA Reg. No. 524-445-ZF) dated July 3, 2002.)

## [Editor's Note: Added text is underlined and deleted text is denoted by strike-through.]

\*Trademark of Dow AgroSciences LLC Roundup Ready® is a registered trademark of Monsanto Company

NOTIFICATION

E8A / Glyphomax / Notification With Edits / 09-16-02 File: Glyphomax-323 16Sep02N W-Ed.doc

## Glyphomax\*

(Formerly NAF-546) EPA Reg. No. 62719-323



## **Registration Notes for Previous Labeling Actions:**

**Final printed labeling** based on EPA accepted copy dated March 29, 2001, with the following conditions of acceptance:

As a condition of EPA-acceptance, the statement "waterproof gloves" in the Agricultural Use Requirements box, was revised to read "Chemical resistant gloves, such as butyl rubber  $\ge$  14 mils, or natural rubber  $\ge$  14 mils, or neoprene rubber  $\ge$  14 mils, or nitrile rubber  $\ge$  14 mils"

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In addition, revised storage and disposal statements EPA-accepted on January 22, 2001, were incorporated into the final printed labeling.

### Changes by Amendment EPA-accepted 03/29/01:

- 1. Sale Copy (front panel of base label and label booklet): "Avoid contact..." statement modified to account for Roundup Ready® crops (edits as shown).
- 2. Referral statements to Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies were revised per EPA correspondence from Joanne I. Miller dated August 31, 2000 and Dow AgroSciences response to Donald R. Stubbs dated November 20, 2000.
- 3. Weeds Rate Tables: (1) Added use recommendations for control of perennial sowthistle; and (2) Minor changes to application rates per EPA-accepted copy for Roundup Ultra dated 13Jan99.
- 4. Moved the maximum use rate statement, which takes into account glyphosate and sulfosate containing products to the non-crop and crop sections, respectively, immediately following maximum use rate statements for each category of use. This statement, required as a condition of acceptance in stamped-accepted copy dated March 23, 2000, had previously been added to the General Information section of the label.

### **Cropping Systems**

- Preemergence to direct seeded crops and prior to transplanting of listed crops: (1) Added canola, crambe, mustard, and flax to listing for row crops; (2) Added chick peas to listing for vegetables; (3) Added durian, mangosteen and rambutan to listing for tropical crops.
   (Crop Specific Directions)
- 6. Grain Sorghum: Added option for application with hooded sprayers.
- 7. Roundup Ready<sup>®</sup> Crops: Added supplemental labeling for Roundup Ready corn and Roundup Ready soybeans EPA-accepted 08/31/99.

**Roundup Ready Corn:** (1) Deleted state-specific limitations on aerial application; and (2) Added options for tank mix partners for postemergence application (Current edits are as shown). **Roundup Ready Soybeans:** DAS supplemental labeling EPA-accepted 08/31/00 was edited to match the RR soybeans section in the current EPA-accepted label for Roundup Ultra (Current edits as shown).

## **Conservation Tillage, Minimum Tillage and No-Till Systems**

- 8. **Preharvest Applications:** (1) Added preharvest use on corn (based on Roundup Ultra Max); and (2) Added corn and grain sorghum to crops listed in first paragraph of section and minor edits for clarity to grain sorghum section.
- 9. **Supplemental labeling:** Separate supplemental labeling prepared for use of Glyphomax for forestry site preparation and conifer release.

Final printed labeling based on EPA accepted copy dated March 23, 2000, with conditions of acceptance and notification coded "E8A / Glyphomax / Notif / 04-19-00".

E8A / Glyphomax / Notification With Edits / 09-16-02 File: Glyphomax-323 16Sep02N W-Ed.doc

#### Changes by Notification (04-19-00):

 At the request of California Dept. of Pesticide Regulation, the following restriction was added as a footnote to directions for tank mixing Tordon 22K with Glyphomax: "<sup>†</sup>Tordon 22K is not registered for use in California." (page 46 this draft)

**Final printed label** based on EPA accepted copy dated March 23, 2000, with the following conditions of acceptance:

 General Information: Added the statement "The maximum use rate stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated use rate.

#### Changes by Amendment: (03/23/00)

1. **Precautionary Statements:** Revised statement of hazard and First Aid consistent with Cat III Acute Oral LD 50.

**Final printed labeling** based on EPA accepted copy dated September 13, 1999, with the following conditions of acceptance:

- 1. Added the phrase "EPA Registration No. 62719-323".
- 2. As requested, added new First Aid statements developed by EPA as part of the Consumer Labeling Initiative.
- 3. As requested, added Spray Drift Management text to label.

Note: 11/15/1999 took out what appeared to be some type of macros on page 20. kc

Labeling for Section 3 registration based on Monsanto's Roundup Original and Roundup RT herbicides.

#### Editor' note: On Aug. 3, 1999:

- 1. Revised label to reflect proposed brand name, Glyphomax.
- 2. Revised signal word and precautionary statements to match NAF-545.

\*Trademark of Dow AgroSciences LLC

(Base Label):

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Page 1

(logo) Dow AgroSciences

## **Glyphomax\***

For control of annual, perennial weeds and woody plants in various cropping systems, fallow cropland, CRP acres, and farmsteads, and other noncrop areas.

Avoid contact of herbicide with foliage, green stems, exposed non-woody roots or fruit of crops, (except crops with the Roundup Ready<sup>®</sup> herbicide tolerant gene), desirable plants and trees, because severe injury or destruction may result.

Active Ingredient(s):	
Glyphosate <sup>†</sup> N-(phosphonomethyl)glycine,	
isopropylamine salt	41.0%
Inert Ingredients	59.0%
Total Ingredients	100.0%

<sup>†</sup>Contains 4 pounds per gallon glyphosate, isopropylamine salt Acid Equivalent: glyphosate acid – 30.4% (3 lb/gallon)

# Keep Out of Reach of Children CAUTION PRECAUCION

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.)

## **Precautionary Statements**

Hazards to Humans and Domestic Animals

Causes Eye Irritation • Harmful If Swallowed

Avoid contact with eyes or clothing.

Personal Protective Equipment (PPE) Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). 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 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.

#### First Aid

**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. Call a poison control center or doctor for treatment advice.

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor.

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

**Domestic Animals:** This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

## **Environmental Hazards**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

## **Physical or Chemical Hazards**

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

Do not mix, store or apply the product or spray solutions of this product in galvanized steel or unlined steel (except stainless steel) containers or spray tanks. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

#### Agricultural Use Requirements

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

#### Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read "Warranty Disclaimer," inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

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Superscripts correspond to places 7 & 8 of lot number 900-000000 / 00000000

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Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

## Herbicide

[Insert Bar Code FPO] [Insert DOT shipping classification and diamond(s)]

Lot

Net Contents \_\_ gal

3

Page 4

(Label Booklet):

(logo) Dow AgroSciences

## Glyphomax\*

For control of annual, perennial weeds and woody plants in various cropping systems, fallow cropland, CRP acres, and farmsteads, and other noncrop areas.

Avoid contact of herbicide with foliage, green stems, exposed non-woody roots or fruit of crops, (except crops with the Roundup Ready<sup>®</sup> herbicide tolerant gene), desirable plants and trees, because severe injury or destruction may result.

<sup>†</sup>Contains 4 pounds per gallon glyphosate, isopropylamine salt Acid Equivalent: glyphosate acid – 30.4% (3 lb/gallon)

# Keep Out of Reach of Children CAUTION PRECAUCION

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.)

## Agricultural Use Requirements

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

Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before using this product, read "Warranty Disclaimer," Inherent Risks of Use," and "Limitation of Remedies" at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-323

XX XX EPA Est. Superscripts correspond to places 7 & 8 of lot number 900-000000 / 00000000

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## Herbicide

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Net Contents \_\_\_ gal

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**Precautionary Statements** 

## Hazards to Humans and Domestic Animals

## CAUTION

Causes Eye Irritation • Harmful If Swallowed

Avoid contact with eyes or clothing.

#### Personal Protective Equipment (PPE) Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). 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 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.

## First Aid

**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. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor.

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

**Domestic Animals:** This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

## Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

## **Physical or Chemical Hazards**

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

Do not mix, store or apply this product or spray solutions of this product in galvanized steel or unlined steel (except stainless steel) containers or spray tanks. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

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## **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

- Coveralls
- Chemical resistant gloves, such as butyl rubber ≥ 14 mils, or natural rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils, or nitrile rubber ≥ 14 mils
- Shoes plus socks
- Protective eyewear

## **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.

Keep people and pets off treated areas until spray solution has dried to prevent transfer of this product onto desirable vegetation.

## Storage and Disposal

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

**Pesticide Disposal:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container contains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

**Refillable Portable Containers:** Do not reuse this container except to refill in accordance with a valid Dow AgroSciences Repackaging agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then 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.

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Bulk Containers: Triple rinse emptied bulk container. Then offer for recycling or reconditioning, or dispose of in a manner approved by state and local authorities.

**Plastic 1-Way Container Disposal:** Do not reuse this container. Triple rinse (or equivalent). Then 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.

**Drums:** Do not reuse container. Return container per any Dow AgroSciences container return program. If not returned, triple rinse container, then 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.

## General Information

Glyphomax\* herbicide is a water soluble liquid which mixes readily with water to be applied as a foliar spray for the control or destruction of most herbaceous plants. It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water in accordance with label instructions.

## Do not apply Glyphomax using aerial spray equipment except under conditions as specified within this label.

The active ingredient in Glyphomax moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of Glyphomax and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise specified on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the "Weeds Controlled" section of this label. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow. For this reason, best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of Glyphomax per acre within the recommended range when (1) weed growth is heavy or dense, or (2) weeds are growing in an undisturbed (noncultivated) area.

Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.

Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required.

Glyphomax does not provide residual weed control. For subsequent residual weed control, follow a labelapproved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of Glyphomax with herbicides or other materials that are not expressly recommended in this

labeling. Mixing Glyphomax with herbicides or other materials not recommended on this label may result in reduced performance.

For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

**Domestic Animals:** Glyphomax is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of Glyphomax or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

## Attention

## Avoid drift. Extreme care must be used when applying Glyphomax to prevent injury to desirable plants and crops.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of Glyphomax can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of Glyphomax is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. Avoid applying at excessive speed or pressure.

**NOTE:** Use of Glyphomax in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

## **Spray Drift Management**

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 degrees. Where states have more stringent regulations, they should be observed.

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

**Importance of 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 Inversion section of this label).

#### **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**-Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. 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 backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the 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 larger droplets than other nozzle types.

**Boom Length-For some use patterns, reducing the effective boom length to less than** <sup>3</sup>/<sub>4</sub> of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application**-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 applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:** When applications are made with a cross-wind, 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 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, presence of an inversion 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 connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

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**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).

## Mixing; Additives; and Application Instructions

Apply these spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes. Do not apply when wind or other conditions favor drift. Hand-gun applications should be properly directed to avoid spraying desirable plants. NOTE: Reduced results may occur if water containing soil is used, such as water from ponds and unlined ditches.

Mixing

Glyphomax mixes readily with water. Mix spray solutions of Glyphomax as follows: Fill the mixing or spray tank with the required amount of water. Add the recommended amount of Glyphomax (see the "Directions for Use" and "Weeds Controlled" sections of this label) near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

#### **Tank Mixtures**

Always predetermine the compatibility of labeled tank mixtures of Glyphomax with water carrier by mixing small proportional quantities in advance.

Mix labeled tank mixtures of Glyphomax with water as follows:

- 1. Place a 20 to 35 mesh screen or wetting basket over filling port.
- 2. Through the screen, fill the spray tank one-half full with water and start agitation.
- 3. If a wettable powder is used, make a slurry with the water carrier, and add it **slowly** through the screen into the tank. Continue agitation.
- 4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture **slowly** through the screen into the tank. Continue agitation.
- 5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
- 6. Continue filling the spray tank with water and add the required amount of Glyphomax near the end of the filling process.
- 7. Where nonionic surfactant is recommended, add this to the spray tank before completing the filling process.
- 8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water soluble liquid followed by surfactant.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles.

### Clean the entire sprayer after application of Glyphomax.

Failure to clean the sprayer thoroughly may result in injury to desirable crops which are subsequently sprayed.

- 1. Add clean water to the tank and thoroughly rinse the entire sprayer system.
- 2. Fill the tank with water and ammonia. Add I quart of household ammonia per 25 gallons of water. Pump enough solution through the hoses, boom and nozzles to fill these parts completely.
- 3. Then fill the tank, close and leave for 24 hours before draining and rinsing thoroughly with water.

Application or use of other agricultural chemicals with the equipment used for Glyphomax may result in injury to desirable vegetation.

Additives

## Surfactants

Nonionic surfactants which are labeled for use with herbicides may be used. Do not reduce rates of Glyphomax when adding surfactant. When adding additional surfactant, use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants which contain at least 70 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 70 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

## **Ammonium Sulfate**

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of Glyphomax, and Glyphomax plus 2,4-D, dicamba or residual herbicide tank mixtures on annual and perennial weeds. The improvement in performance may be apparent where environmental stress is a concern. Low-quality ammonium sulfate may contain material that will not readily dissolve, which could result in nozzle tip plugging. To determine quality, perform a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If undissolved sediment is observed, predissolve the ammonium sulfate in water and filter prior to addition to the spray tank. If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet line. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides or surfactant. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

**NOTE:** The use of ammonium sulfate as an additive does not preclude the need for additional surfactant. Do not use herbicide rates lower than recommended in this label.

## Colorants or Dyes

Agriculturally-approved colorants or marking dyes may be added to Glyphomax. Colorants or dyes used in spray solutions of Glyphomax may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's recommendations.

## Application Equipment and Techniques

Chemigation: Do not apply Glyphomax through any type of irrigation system.

Glyphomax may be applied with the following application equipment:

Aerial: Fixed Wing and Helicopter

#### **Broadcast Spray**

**Controlled Droplet Applicator (CDA):** Hand-held or boom-mounted applicators which produce a spray consisting of a narrow range of droplet sizes.

**Hand-Held and High-Volume Spray Equipment:** Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, hand wands, mistblowers <sup>1</sup>, lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage.

<sup>1</sup> Glyphomax is not registered in California or Arizona for use in mistblowers.

Selective equipment: Recirculating sprayers, shielded sprayers and wiper applicators.

See the appropriate part of this section for specific instructions and rates of application.

## **Aerial Equipment**

Use the recommended rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. See the "Weeds Controlled" section of this label for specific rates. Unless otherwise specified, do not exceed 1 quart per acre. Aerial applications of Glyphomax may be made in annual cropping conventional tillage systems, fallow and reduced tillage systems and preharvest applications. Refer to the individual use area sections of this label for recommended volumes and application rates.

AERIAL APPLICATION IN CALIFORNIA: Refer to the Federal supplemental label for aerial applications in that state for specific instructions, restrictions and requirements.

Avoid direct application to any body of water.

AVOID DRIFT. Do not apply during low-level inversion conditions, when winds are gusty or under any other condition which favors drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

**Ensure uniform application:** To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of Glyphomax accumulated during spraying or from spills. **Prolonged exposure of Glyphomax to uncoated steel surfaces may result in corrosion and possible failure of the part. Landing gear are** 

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**most susceptible.** The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

Glyphomax plus tank mixtures of Banvel (dicamba) herbicide or 2,4-D tank may not be applied by air in California.

## **Broadcast Equipment**

For control of annual or perennial weeds listed on this label using broadcast equipment: Use the recommended rates of Glyphomax in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified on this label. See the "Weeds Controlled" section of this label for specific rates. As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select proper nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

## **Controlled Droplet Application (CDA)**

The rate of Glyphomax applied per acre by vehicle-mounted CDA equipment must not be less than the amount recommended in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3 to 15 gallons of water per acre.

For the control of labeled annual weeds with hand-held CDA units, apply a 20 percent solution of Glyphomax at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 MPH (1 quart per acre). For the control of labeled perennial weeds, apply a 20 to 40 percent solution of Glyphomax at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph (2 to 4 quarts per acre).

Controlled droplet application equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

## Hand-Held and High-Volume Equipment (Use coarse sprays only.)

Mix Glyphomax in clean water and apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff.

For control of annual weeds listed on this label, apply a 0.5 percent solution of Glyphomax plus nonionic surfactant to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. Allow three or more days before tillage or mowing.

For annual weeds over 6 inches tall, or when not using additional surfactant, or unless otherwise specified, use a 1 percent solution. For best results, use a 2 percent solution on harder-to-control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

When using application methods that result in less than complete coverage, use a 5 percent solution for annual and perennial weeds and a 5 to 10 percent solution for woody brush and trees.

Prepare the desired volume of spray solution by mixing the amount of Glyphomax in water as shown in the following table:

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Desired	Amount of Glyphomax					
Volume	1/2%	1%	1 1/2%	2%	5%	10%
1 gal	2/3 fl oz	1 1/3 fl oz	2 fl oz	2 2/3 fl oz	6 1/2 fl oz	13 fl oz
25 gal	1 pt	1 qt	1 1/2 qt	2 qt	5 qt	10 qt
100 gal	2 qt	1 gai	1 1/2 gal	2 gal	5 gal	10 gal

#### **Spray Solution**

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the recommended amount of Glyphomax be mixed with water in a larger container. Fill sprayer with the mixed solution.

## **Selective Equipment**

Glyphomax may be applied through a recirculating spray system, a shielded applicator, or a wiper applicator after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on this label and only when specifically recommended in cropping systems.

A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation, while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.

A shielded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.

A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

#### NOTE: Avoid contact with desirable vegetation.

Contact of the herbicide solution with the desirable vegetation may result in damage or destruction. Applicators used above desired vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

Applications made above the crops should be made when the weeds are a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatment may be necessary.

#### **Shielded Applicators**

When applied as directed under conditions described for shielded applicators, Glyphomax will control those weeds listed in the "Weeds Controlled" section of this label.

Use the following equation to convert from a broadcast rate per acre to a band rate per acre.

Band width	Herbicide		Herbicide
<u>in inches</u> X	Broadcast	=	Band RATE
Row width	RATE		per acre
in inches	per acre		

Band width	Broadcast		Band
in inches X	VOLUME of	=	VOLUME
Row width	solution		of solution
in inches	per acre		per acre

Use nozzles that provide uniform coverage within the treated area. Keep shields on shielded sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid contact with desirable vegetation.

For specific rates of application and instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

#### Wiper Applicators

Wiper applicators are devices that physically wipe appropriate amounts of Glyphomax directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 2 applications are made in opposite directions.

Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a 1-day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using Glyphomax by thoroughly flushing with water.

Do not add surfactant to the herbicide solution.

For Rope or Sponge Wick Applicators: Mix 1 gallon of Glyphomax in 2 gallons of water to prepare a 33 percent solution. Apply this solution to weeds listed in this "Wiper Applicators" section.

**For Porous-Plastic Applicators:** Solutions ranging from 33 to 100 percent of Glyphomax in water may be used in porous-plastic wiper applicators.

The following weeds are CONTROLLED when Glyphomax is applied as recommended under the conditions described for " Wiper Applicators ":

Common Name	Scientific Name		
(Annual Grasses)			
Corn	Zea mays		
Panicum, Texas	Panicum texanum		
Rye, common	Secale cereale		
Shattercane	Sorghum bicolor		
(Annual Broadleafs)			

Sicklepod Cassia obtusifolia

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Spanishneedles	Bidens bipinnata
Starbur, bristly	Acanthospermum hispidum

The following weeds are SUPPRESSED when Glyphomax is applied as recommended under the conditions described for " Wiper Applicators ":

Common Name	Scientific Name
(Annual Broadleafs)	
Beggarweed, Florida	Desmodium tortuosum
Dogfennel	Eupatorium capilliflorium
Pigweed, redroot	Amaranthus retroflexus
Ragweed, common	Ambrosia artemisiifolia
Ragweed, giant	Ambrosia trifida
Sunflower	Helianthus annuus
Thistle, musk	Carduus nutans
Velvetleaf	Abutilon theophrasti

#### (Perennial Grasses) Bermudagrass

BermudagrassCynodon dactylonGuineagrassPanicum maximumJohnsongrassSorghum halepenseSmutgrassSporobolus poiretiiVaseygrassPaspalum urvillei

### (Perennial Broadleafs)

Dogbane, hemp Milkweed Nightshade, silverleaf Thistle, Canada Apocynum cannabinum Ascelepias syriaca Solanum elaeagnifolium Cirsium arvense

## Weeds Controlled

This herbicide controls many annual and perennial grasses and broadleaf weeds.

## Annual Weeds

Apply to actively growing grass and broadleaf weeds.

Allow at least 3 days after treatment before tillage.

For maximum agronomic benefit, apply when weeds are 6 inches or less in height.

To prevent seed production, applications should be made prior to seedhead formation.

Glyphomax does not provide residual control; therefore, delay application until maximum weed

emergence. Repeat treatments may be necessary to control later germinating weeds.

## Low-Volume Broadcast Application (Low Rate Technology)

## When applied as directed under the conditions described, Glyphomax will control the weeds listed below when:

- 1. Water carrier volumes of 3 to 10 gallons per acre for ground applications and 3 to 5 gallons per acre for aerial applications are recommended. (See the "Aerial Application" section of this label for approved sites.)
- 2. A nonionic surfactant is added at 0.5 to 1 percent by total spray volume. Use 0.5 percent surfactant concentration when using surfactants which contain at least 70 percent active ingredient or a 1 percent surfactant concentration for those surfactants containing less than 70 percent active ingredient.

## NOTE:

The addition of 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water may increase the performance of Glyphomax on annual weeds. The improvement in performance may be apparent where environmental stress is a concern. Refer to the "Mixing, Additives and Application Instructions" section of this label.

Do not tank-mix with soil residual herbicides when using these rates unless otherwise specified. For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment. Refer to the **"Tank Mixtures"** portion of this section for control of additional broadleaf weeds.

	Maximum	Rate per Acre <sup>1</sup>
Weed Species	Height/Length	(fi oz)
Chickweed, jagged	12"	8 oz
Holosteum umbellatum		
Foxtail		
Setaria spp		
Barnyardgrass <sup>2</sup>	6"	12 oz
Echinochloa crus-galli	0 to 4"	16 oz ²
Bluegrass, annual	4 to 6"	24 oz ²
Роа аппиа		
Brome, downy <sup>3</sup>		
Bromus tectorum		
Mustard, blue		
Chorispora tenella		
Mustard, tansy		
Descurainia pinnata	ļ	
Mustard, tumble		
Sisymbrium altissimum		
Mustard, wild		
Sinapis arvensis		
Spurry, umbrella		
Holosteum umbellatum		
Barley	12"	
Hordeum vulgare		
Rye	}	
Secale cereale	1	
Sandbur, field		
Cenchrus spp.		
Shattercane		i

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Comburn bigglor	·····	1
Sorghum bicolor		)
Stinkgrass		
Eragrostis cilianensis		
Wheat	18"	12 oz
Triticum aestivum		
Morningglory	2"	16 oz.
Ipomoea spp.		
Sicklepod		(
Cassia obtusifolia		
Bluegrass, bulbous	6"	
Poa bulbosa	[	1
Cheat		
Bromus secalinus		
Chickweed, common	[	
Stellaria media		)
Chickweed, mouseear		
Cerastium vulgatum	1	
Corn		
Zea mays		
Goatgrass, jointed		
Aegilops cylindrica		
Groundsel, common		
Senecio vulgaris	1	
Henbit		
Lamium amplexicaule		
Horseweed/Marestail		
Conyza canadensis		
Lambsquarters, common		
Chenopodium album		ĺ
Pennycress, field (Fanweed)		
Thlaspi arvense	[	ł
Rocket, London	)	
Sisymbrium irio		
Ryegrass, Italian	l I	
Lolium multiflorum		)
Shepherdspurse		
Capsella bursa-pastoris		}
Spurge, annual		
Euphorbia spp.		
Buttercup	12"	1
Ranunculus spp.	ļ	
Cocklebur		
Xanthium strumarium		
Crabgrass	ļ	
Digitaria spp.	!	
Dwarfdandelion		
Krigia cespitosa	}	
Falseflax, smallseed	Į	
Camelina microcarpa	}	}
Foxtail, Carolina	1	Į
Alopecurus carolinianus	1	1
Johnsongrass, seedling		
Sorghum halepense		
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Oats, wild		
Avena fatua		
Panicum, fall		
Panicum dichotomiflorum		
Panicum, Texas		
Panicum texanum		
Pigweed, redroot		
Amaranthus retroflexus		
Pigweed, smooth		
Amaranthus hybridus		
Witchgrass		
Panicum capillare		
Sicklepod	3 to 4"	24 oz
Cassia obtusifolia		
Signalgrass, broadleaf	4"	
Brachiaria platyphylla		
Horseweed/Marestail	7 to 12"	
Conyza canadensis		
Lambsquarters, common		
Chenopodium album		
Spurge, annual		
Euphorbia spp.		
Rice, red	4"	32 oz
Oryza sativa		
Teaweed		
Sida spinosa		
Sprangletop	6"	
Leptochloa spp.		
Geranium, Carolina	12"	
Geranium carolinianum		
Goosegrass		
Eleusine indica		
Primrose, cutleaf evening		
Oenothera laciniate		
Pusley, Florida		
Richardia scabra		
Sicklepod	5 to 12"	
Cassia obtusifolia		
Spanishneedles		
Bidens bipinnata		
Filaree	12"	48 oz
Erodium spp.		
Sprangletop		
Leptochloa spp.		
	<u> </u>	

<sup>1</sup> For those rates less than 32 fluid ounces per acre, Glyphomax at rates up to 32 fluid ounces per acre may be used where heavy weed densities exist.
 <sup>2</sup> Use these rates to control barnyardgrass in Alabama, Arkansas, Mississippi, Missouri, Louisiana and

Texas for preplant treatments.

<sup>3</sup> For control in no-till systems, use 16 fluid ounces per acre.

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## **Tank Mixtures**

Glyphomax herbicide plus Banvel (dicamba) plus Nonionic Surfactant

Glyphomax herbicide plus 2,4-D plus Nonionic Surfactant

#### Do not apply Banvel (dicamba) herbicide or 2,4-D herbicide tank mixtures by air in California.

These tank mixtures are recommended for use in fallow and reduced tillage areas only. Follow use directions as given in the "Low-Volume Broadcast Application" section.

Glyphomax plus dicamba or 2,4-D will control the annual grasses and broadleaf weeds listed for Glyphomax alone at the indicated heights (except 8 fluid ounces per acre applications), plus the following broadleaf weeds. For those weeds previously listed at 8 fluid ounces of Glyphomax alone per acre, use 12 fluid ounces in these tank mixtures.

**NOTE:** Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Some crop injury may occur if dicamba is applied within 45 days of planting. The addition of dicamba in a mixture with Glyphomax may provide short-term residual control of selected weed species.

Apply 12 to 16 fluid ounces of Glyphomax plus 0.25 pound a.i. of dicamba or 0.5 pound a.i. of 2,4-D, plus 0.5 to 1 percent nonionic surfactant by total spray volume per acre to control dense populations of the following annual broadleaf weeds (Treat when weeds are less than the height indicated.):

Common Name	Scientific Name	Height
Cocklebur	Xanthium strumarium	12"
Kochia <sup>1</sup>	Kochia scoparia	6"
Lambsquarters	Chenopodium album	12"
Lettuce, prickly	Lactuca serriola	6"
Marestail/Horseweed	Conyza canadensis	6"
Morningglory	lpomoea spp.	6"
Pigweed, redroot	Amaranthus retroflexus	12"
Pigweed, smooth	Amaranthus hybridus	12"
Thistle, Russian	Salsola kali	12"

<sup>1</sup> Controlled with dicamba tank mixture only.

Apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. of 2,4-D, plus 0.5 to 1 percent nonionic surfactant by total spray volume per acre to control the following annual broadleaf weeds (Treat when weeds are less than 6 inches in height):

Common Name	Scientific Name
Ragweed, common	Ambrosia artemisiifolia
Ragweed, giant	Ambrosia trifida
Smartweed, Pennsylvania	Polygonum pensylvanicum
Velvetleaf	Abutilon theophrasti

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## **High-Volume Broadcast Applications**

When applied as directed under the conditions described, Glyphomax will control the weeds listed below when water carrier volumes are 10 to 40 gallons per acre for ground applications.

Apply 1 to 1.5 quarts of Glyphomax per acre plus 0.5 to 1 percent nonionic surfactant by total spray volume. Use 1 quart per acre if weeds are less than 6 inches tall and 1.5 quarts per acre if weeds are over 6 inches tall. If weeds have been mowed, grazed or cut, allow adequate time for new growth to reach recommended stages prior to treatment. These rates will also provide control of weeds listed in the "Low-Volume Broadcast Application" section.

#### **Annual Weed Species**

Scientific Name
Momordica charantia
Bassia hyssopifolia
Bromus spp.
Amsinckia spp.
Conyza bonariensis
Erigeron spp.
Kochia scoparia
Lactuca serriola
Panicum spp.
Ambrosia artemisiifolia
Ambrosia trifida
Polygonum pensylvanicum
Sonchus cleraceus
Helianthus annuus
Salsola kali
Abutilon theophrasti

<sup>1</sup> Apply with hand-held equipment only.

### Perennial Weeds

Apply Glyphomax as follows to control or destroy most perennial weeds:

**NOTE:** If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the recommended stages.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of Glyphomax on perennial weeds. The improvement in performance may be apparent where environmental stress is a concern. Refer to the "Mixing, Additives and Application Instructions" section of this label.



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When applied as recommended under the conditions described, Glyphomax WILL CONTROL the following perennial weeds:

#### **Common Name**

### Scientific Name

Alfalfa Alligatorweed 1 Anise (fennel) Artichoke, Jerusalem Bahiagrass Bentarass Bermudagrass Bermudagrass, water (knotgrass) Bindweed, field Bluegrass, Kentucky Blueweed, Texas Brackenfern Bromegrass, smooth Bursage, woollyleaf Canarygrass, reed Cattail Clover, red Clover, white Cogongrass Dallisorass Dandelion Dock, curly Dogbane, hemp Fescues Fescue, tall Guineagrass Horsenettle Horseradish Ice plant Johnsongrass **Kikuyugrass** Knapweed Lantana Lespedeza Milkweed Muhly, wirestem Mullein, common Napiergrass Nightshade, silverleaf Nutsedge, purple Nutsedge, yellow Orchardgrass Pampasgrass Paragrass Phragmites 1 Poison hemlock Quackgrass Redvine<sup>1</sup>

Medicago sativa Alternanthera philoxeroides Foeniculum vulgare Helianthus tuberosus Paspalum notatum Aarostis spp. Cynodon dactylon Paspalum distichum Convolvulus arvensis Poa spp. Helianthus ciliaris Pteridium aquilinum Bromus inermis Franseria tomentosa Phalaris arundinacea Typha spp. Trifolium pratense Trifolium repens Imperata cylindrica Paspalum dilatatum Taraxacum officinale Rumex crispus Apocynum cannabinum Festuca spp. Festuca arundinacea Pancium maximum Solanum carolinense Armoracia rusticana Mesembryanthemum crystallinum Sorghum halepense Pennisetum clandestinum Centaurea repens Lantana camara Lespedeza spp. Asclepias spp. Muhlenbergia frondonsa Verbascum thapsus Pennisetum purpureum Solanum elaeagnifolium Cyperus rotundus Cyperus esculentus Dactylis glomerata Cortaderia spp. Brachiaria mutica Phragmites spp. Conium maculatum Agropyron repens Brunnichia ovata

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Reed, giant Arundo donax Ryegrass, perennial Lolium perenne Smartweed, swamp Polygonum coccineum Sowthistle, perennial Sonchus arvensis Spurge, leafv<sup>1</sup> Euphorbia esula Starthistle, yellow Centaurea solstitalis Sweet potato, wild 1 Ipomoea pandurata Thistle, Canada Cirsium arvense Thistle, artichoke Cvnara cardunculus Timothy Phleum pratense Torpedograss 1 Panicum repens Trumpetcreeper 1 Campsis radicans Paspalum urvillei Vaseygrass Velvetorass Holcus spp. Wheatgrass, western Agropyron smithii

<sup>1</sup> Partial control.

Glyphomax is not registered in California for use on water bermudagrass.

See "Directions for Use" and "Mixing, Additives and Application Instructions" sections of this label for labeled uses and specific application instructions.

Alfalfa: Apply 1 quart of Gipphomax per acre plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Make application after the last hay cutting in the fall. Allow alfalfa to regrow to a height of 6 to 8 inches or more prior to treatment. Applications should be followed with deep tillage at least 7 days after treatment, but before soil freeze-up.

Alligatorweed: Apply 4 quarts of Glyphomax per acre or apply a 1.5 percent solution with hand-held equipment to provide partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain such control.

**Anise (fennel)/Poison hemlock:** Apply a 1 to 2 percent solution of Glyphomax as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth. Repeat applications may be needed in succeeding years to control plants arising from seeds.

**Bentgrass:** For suppression in grass seed production areas. For ground applications only, apply 1.5 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 10 to 20 gallons of water per acre. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should be actively growing and have at least 3 inches of growth. Tillage prior to treatment should be avoided. Tillage 7 to 10 days after application is recommended for best results. Failure to use tillage after treatment may result in unacceptable control.

**Bermudagrass:** For control, apply 5 quarts of Glyphomax per acre. For partial control, apply 3 quarts per acre. Treat when bermudagrass is actively growing and seedheads are present. Retreatment may be necessary to maintain control. Allow 7 or more days after application before tillage.

**Bermudagrass, water (knotgrass):** Apply 1.5 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. Apply when water bermudagrass is actively growing and 12 to 18 inches in length. Allow 7 or more days before tilling, flushing or flooding the field.

Fall applications only: Apply 1 quart of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. Fallow fields should be tilled prior to application. Apply prior

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to frost on water bermudagrass that is actively growing and 12 to 18 inches in length. Allow 7 or more days before tillage.

**Bindweed, field:** For control, apply 4 to 5 quarts of Glyphomax per acre west of the Mississippi River and 3 to 4 quarts east of the Mississippi River. Apply when the weeds are actively growing and are at or beyond full bloom. Do not treat when weed is under drought stress as good soil moisture is necessary for active growth. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost. Allow 7 or more days after application before tillage.

Also for control, apply 2 quarts of Glyphomax plus 0.5 pound a.i. of dicamba in 10 to 20 gallons of water per acre. At these rates, apply using ground application only.

The following tank mixtures with 2,4-D may be applied using aerial application equipment (except in California) in fallow and reduced tillage systems only.

For suppression on irrigated agricultural land, apply 1 to 2 quarts of Glyphomax plus 1 pound a.i. of 2,4-D in 10 to 20 gallons of water per acre with ground equipment only. Applications should be made following harvest or in fall fallow ground when the bindweed is actively growing and the majority of runners are 12 inches or more in length. The use of at least one irrigation will promote active bindweed growth.

For suppression, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. of 2,4-D plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length.

In California only, apply 1 to 5 quarts of Glyphomax per acre. Actual rate needed for suppression or control will vary within this range depending on local conditions.

For suppression on irrigated land where annual tillage is performed, apply 1 quart of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply to actively growing bindweed that has reached a length of 12 inches or greater. Allow maximum weed emergence and runner growth. Do not treat when weeds are under drought stress as good soil moisture is necessary for active growth. Allow 3 or more days after application before tillage.

**Bluegrass, Kentucky / Bromegrass, smooth / Orchardgrass:** Apply 2 quarts of Glyphomax in 10 to 40 gallons of water per acre when the grasses are actively growing and most plants have reached boot-toearly seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height. Allow 7 or more days after application before tillage.

Orchardgrass (sods going to no-till corn): Apply 1 to 1.5 quarts of Glyphomax per acre plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply to orchardgrass that is a minimum of 12 inches tall for spring applications and 6 inches tall for fall applications. Allow at least 3 days following application before planting. A sequential application of atrazine herbicide will be necessary for optimum results.

**Blueweed, Texas:** Apply 4 to 5 quarts of Glyphomax per acre west of the Mississippi River and 3 to 4 quarts per acre east of the Mississippi River. Apply when weed is actively growing and is at or beyond full bloom. Do not treat when weed is under drought stress as good soil moisture is necessary for active growth. New leaf development indicates active growth. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost. Allow 7 or more days after application before tillage.

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**Brackenfern:** Apply 3 to 4 quarts of Glyphomax per acre as a broadcast spray or as a 1 to 1.5 percent solution with hand-heid equipment. Apply to fully expanded fronds which are at least 18 inches long.

**Bursage, woollyleaf:** For control, apply 2 quarts of Glyphomax plus 0.5 lb a.i. of dicamba per acre. For partial control, apply 1 quart of Glyphomax plus 0.5 lb a.i. of dicamba per acre. Add 0.5 to 1 percent nonionic surfactant by total spray volume and apply in 3 to 20 gallons of water per acre. Apply when plants are producing new active growth which has been initiated by moisture for at least 2 weeks and when plants are at or beyond flowering.

**Canarygrass, reed/Timothy / Wheatgrass, western:** Apply 2 to 3 quarts of Glyphomax per acre. For best results, apply to actively growing plants when most have reached the boot-to-head stage of growth. Allow 7 or more days after application before tillage.

**Cogongrass:** Apply 3 to 5 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant in 10 to 40 gallons of water per acre. Apply when Cogongrass is at least 18 inches tall and actively growing in late summer or fall. Allow 7 or more days after application before tillage or mowing. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.

**Dandelion/Dock, curly:** Apply 3 to 5 quarts of Glyphomax per acre when plants are actively growing and most have reached the early bud stage of growth. Allow 7 or more days after application before tillage.

Also for control, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. 2,4-D plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre.

**Dogbane, hemp:** Apply 4 quarts of Glyphomax per acre. Apply when actively growing and when most weeds have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late summer or fall. Allow 7 or more days after application before tillage.

For suppression, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. of 2,4-D plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Delay applications until maximum emergence of dogbane has occurred.

**Fescue, tail:** Apply 3 quarts of Glyphomax in 10 to 40 gallons of water per acre to actively growing plants when most have reached boot-to-early seedhead stage of development.

Fall applications only, apply 1 quart of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply to fescue in the fall when actively growing and plants have 6 to 12 inches of new growth. Allow 7 or more days after application before tillage. A sequential application of 1 pint per acre of Glyphomax plus nonionic surfactant will improve long-term control and control seedlings germinating after fall treatments or the following spring.

**Guineagrass:** Apply 3 quarts of Glyphomax per acre or use a 1 percent solution with hand-held equipment. Apply to actively growing guineagrass when most has reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment. Allow 7 or more days after application before tillage.

**Johnsongrass/Ryegrass, perennial:** Apply 1 to 3 quarts of Glyphomax per acre. In annual cropping systems apply 1 to 2 quarts of Glyphomax per acre. Apply 1 quart of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Use 2 quarts of Glyphomax when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till) is not performed, apply 2 to 3 quarts of Glyphomax in 10 to 40 gallons of water per acre. For best results, apply

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to actively growing plants when most have reached the boot-to-head stage of growth or in the fall prior to frost. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using the 1 quart per acre rate.

For burndown of Johnsongrass, apply 1 pint per acre plus 0.5 to 1 percent nonionic surfactant in 3 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage.

Spot treatment (partial control or suppression): Apply a 1 percent solution of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume when Johnsongrass is 12 to 18 inches in height. Coverage should be uniform and complete.

**Kikuyugrass:** Apply 2 to 3 quarts of Glyphomax per acre. Spray when most kikuyugrass is at least 8 inches in height (3 or 4-leaf stage of growth) and actively growing. Allow 3 or more days after application before tillage.

**Knapweed/Horseradish:** Apply 4 quarts of Glyphomax per acre. Apply when actively growing and when most weeds have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late summer or fall. Allow 7 or more days after application before tillage.

Lantana: Apply Glyphomax as a 1 to 1.25 percent solution using hand-held equipment only. Apply to actively growing lantana at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth. Allow 7 or more days after application before tillage.

**Milkweed, common:** Apply 3 quarts of Glyphomax per acre. Apply when actively growing and most of the milkweed has reached the late bud to flower stage of growth. Following small grain harvest or mowing, allow milkweed to regrow to a mature stage prior to treatment. Allow 7 or more days after application before tillage.

**Muhly, wirestem:** Apply 1 to 2 quarts of Glyphomax per acre. Use 1 quart of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Use 2 quarts of Glyphomax when applying 10 to 40 gallons of water per acre or in pasture, sod, or noncrop areas. Spray when the wirestem muhly is 8 inches or more in height and actively growing. Do not till between harvest and fall applications or in the fall or spring prior to spring applications. Allow 3 or more days after application before tillage. Glyphomax will not provide residual control of wirestem muhly from seeds which germinate after application of Glyphomax. Do not tank mix with residual herbicides when using the 1 quart per acre rate.

**Nightshade, silverleaf:** For control, apply 2 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost. Allow 7 or more days after application before tillage. Do not treat when weed is under drought stress as good soil moisture is necessary for active growth.

**Nutsedge; purple, yellow:** Apply 3 quarts of Glyphomax per acre as a broadcast spray, or apply a 1 to 2 percent solution from hand-held equipment to control existing nutsedge plants and immature nutlets attached to treated plants. Treat when plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers.

Sequential applications of 1 to 2 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre will provide control. Make applications when a majority of the plants are in the 3 to 5-leaf stage (less than 6 inches tall). Repeat this application, as necessary,

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when newly emerging plants reach the 3 to 5-leaf stage. Subsequent applications will be necessary for long-term control.

For suppression to partial control of existing plants, apply 1 pint to 2 quarts of Glyphomax per acre, plus 0.5 to 1 percent nonionic surfactant in 3 to 40 gallons of water per acre. Treat when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants. Wait 7 days after treatment before tillage or mowing.

**Pampasgrass/Ice plant:** Apply Glyphomax as a 1.5 to 2 percent solution using hand-held equipment. Apply to plants that are actively growing. Pampasgrass should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.

**Phragmites:** For partial control of phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 5 quarts per acre as a broadcast spray or apply a 2 percent solution from hand-held equipment. In other areas of the U.S., apply 3 quarts per acre as a broadcast spray or apply a 1 percent solution from hand-held equipment for partial control. For best results, treat during late summer or fall months or when plants are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.

**Quackgrass In Annual Cropping Systems, or in Pastures and Sods Followed by Deep Tillage:** Apply 1 to 2 quarts of Glyphomax per acre. For the 1 quart rate, apply 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. For the 2 quart rate, apply in 10 to 40 gallons of water per acre. Do not tank mix with residual herbicides when using the 1 quart rate. Spray when quackgrass is 6 to 8 inches in height and actively growing. Do not till between harvest and fall applications or in fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, for best results use a moldboard plow.

Quackgrass In Pasture or Sod or Other Noncrop Areas Where Deep Tillage is Not Planned Following Application: Apply 2 to 3 quarts in 10 to 40 gallons of water per acre. Spray when the quackgrass is greater than 8 inches tall and actively growing. Do not till between harvest and fall application or in fall or spring prior to spring application. Allow 3 or more days after application before tillage.

**Redvine:** For suppression, apply 24 fluid ounces of Glyphomax per acre at each of two applications 7 to 14 days apart or a single application of 2 quarts per acre. Apply recommended rates in 5 to 10 gallons of water per acre plus 0.5 to 1 percent nonionic surfactant by total volume. Apply in late September or early October to actively growing plants, which are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.

**Reed, giant:** For control of giant reed, apply a 2 percent solution of Glyphomax when plants are actively growing. Best results are obtained when applications are made in late summer to fall.

**Smartweed, swamp:** Apply 3 to 5 quarts of Glyphomax per acre when plants are actively growing and most have reached the early bud stage of growth. Allow 7 or more days after application before tillage.

Also for control, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. of 2,4-D plus 0.5 to 1 percent nonionic surfactant by total volume in 3 to 10 gallons of water per acre in the late summer or fall. Apply when plants are actively growing and most have reached the early bud stage of growth. Allow 7 or more days after application before tillage.

**Sowthistle, perennial:** Apply 2 to 3 quarts of Glyphomax per acre in 3 to 40 gallons of water when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall,

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allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.

**Spurge, leafy:** For suppression, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. 2,4-D plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in the late summer or fall. Apply when plants are actively growing. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall. Allow 7 or more days after application before tillage.

**Starthistle, yellow:** Best results are obtained when applications are made during periods of active growth, including the rosette, boiting and early flower stages. For spray-to-wet applications, apply Glyphomax as a 2 percent solution. For broadcast applications, apply 2 quarts per acre in 10 to 40 gallons per acre of water carrier.

**Sweet Potato, wild/Thistle, artichoke:** Apply Glyphomax as a 2 percent solution using hand-held equipment. Apply to actively growing weeds that are at or beyond the bloom stage of growth. Repeat applications may be required. Allow the plant to reach the recommended stage of growth before retreatment. Allow 7 or more days before tillage.

**Thistle, Canada:** Apply 2 to 3 quarts of Glyphomax per acre. Apply to actively growing thistles when most are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of Glyphomax. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.

For suppression of Canada thistle, apply 1 quart per acre of Glyphomax, or 1 pint of Glyphomax plus 0.5 pound a.i. 2,4-D per acre, plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in the late summer or fall after harvest, mowing or tillage. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.

**Torpedograss:** Apply 4 to 5 quarts of Glyphomax per acre to provide partial control of torpedograss. Apply to actively growing torpedograss when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to maintain control. Fall treatments must be applied before frost. Allow 7 or more days after application before tillage.

**Trumpetcreeper:** For control, apply 2 quarts of Glyphomax per acre in 5 to 10 gallons of water per acre. Apply to actively growing plants in late September or October, which are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.

**Other perennials listed on this label:** Apply 3 to 5 quarts of Glyphomax per acre. Apply when actively growing and most have reached early head or early bud stage of growth. Allow 7 or more days after application before tillage.

## Woody Brush and Trees

## When applied as recommended under the conditions described, Glyphomax controls or partially controls the following woody brush, plants and trees:

Scientific Name
Alder
Ash <sup>1</sup>
Aspen, quaking
Bearmat (Bearclover)
Beech
Birch
Blackberry
Blackgum
Bracken
Broom, French
Broom, Scotch Buckwheat, California <sup>1</sup>
Cascara <sup>1</sup>
Catsclaw <sup>1</sup>
Ceanothus <sup>1</sup>
Chamise
Cherry, Bitter
Cherry, black
Cherry, pin
Coyote brush
Creeper, Virginia
Dewberry
Dogwood 1
Elderberry
Elm <sup>1</sup>
Eucalyptus
Gorse
Hasardia <sup>1</sup>
Hawthorn
Hazel
Hickory <sup>1</sup>
Holly, Florida
(Brazilian Peppertree <sup>1</sup> )
Honeysuckle
Hornbeam, American <sup>1</sup>
Kudzu
Locust, black <sup>1</sup> Madrone
Manzanita
Maple, red <sup>2</sup>
Maple, sugar
Maple, sugar Maple, vine <sup>1</sup>
Monkey Flower <sup>1</sup>
Oak, Black <sup>1</sup>
Oak, northern pin
Oak, post
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### Common Name

Alnus spp.

Fraxinus spp. Populus tremuloides Chamaebatia foliolosa Fagus grandifolia Betula spp. Rubus spp. Nyssa spp. Peridium spp. Cytisus monspessulanus Cytisus scoparius Eriogonum fasciculatum Rhamnus purshiana Acacia greggi Ceanothus spp. Adenostoma fasciculatum Prunus emarginata Prunus serotina Prunus pensylvanica Baccharis consanguinea Parthenocissus guinguefolia Rubus trivialis Cornus spp. Sambucus spp. Ulmus spp. Eucalyptus spp. Ulex europaeus Haplopappus squamosus Crataegus spp. Corylus spp. Carya spp. Schinus terebinthifolius Lonicera spp. Carpinus caroliniana Pueraria lobata Robinia pseudoacacia Arbutus menziesii Arctostaphylos spp. Acer rubrum Acer saccharum Acer circinatum Mimulus guttatus Quercus velutina Quercus palustris

Quercus stellata

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Oak, red	Quercus rubra
Oak, southern red	Quercus falcata
Oak, white <sup>t</sup>	Quercus alba
Persimmon <sup>1</sup>	Diospyros spp.
Pine	Pinus spp.
Poison-ivy	Rhus radicans
Poison-oak	Rhus toxicoden
Poplar, yellow <sup>1</sup>	Liriodendron tul
Raspberry	Rubus spp.
Redbud, eastern	Cercis canaden
Rose, multiflora	Rosa multiflora
Russian-olive <sup>3</sup>	Elaeagnus angu
Sage; black, white	Salvia spp.
Sagebrush, California	Artemisia califor
Salmonberry	Rubus spectabi
Salt cedar	Tamarixs spp.
Sassafras	Sassafras aibid
Sourwood	Oxydendrum ar
Sumac, poison <sup>1</sup>	Rhus vernix
Sumac, smooth <sup>1</sup>	Rhus glabra
Sumac, winged <sup>1</sup>	Rhus copallina
Sweetgum	Liquidambar sty
Swordfern <sup>1</sup>	Polystichum mu
Tallowtree, Chinese	Sapium sebiferu
Tan Oak	Lithocarpus den
Thimbleberry	Rubus parviflor
Tobacco, tree <sup>1</sup>	Nicotiana glauca
Trumpetcreeper	Campsis radica
Waxmyrtle, southern <sup>1</sup>	Myrica cerifera
Willow	Salix spp.

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<sup>1</sup> Partial control.

<sup>2</sup> See below for control or partial control instructions.

<sup>3</sup> Glyphomax is not registered in California for use on Russian-olive.

NOTE: If brush has been mowed or tilled or trees have been cut, do not treat until regrowth has reached the recommended stages of growth.

Apply Glyphomax when plants are actively growing and, unless otherwise directed, after full leaf expansion. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. Best results are obtained when application is made in late summer or fall after fruit formation.

In arid areas, best results are obtained when application is made in the spring to early summer when brush species are at high moisture content and are flowering.

Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

Allow 7 or more days after application before tillage, mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost.

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See "Directions for Use" and "Mixing, Additives and Application Instructions" sections of this label for labeled uses and specific application instructions.

Apply Glyphomax as follows to control or partially control the following woody brush and trees.

Alder/Dewberry/Honeysuckle/Post Oak/Raspberry: For control, apply 3 to 4 quarts per acre of Glyphomax as a broadcast spray or as a 1 to 1.5 percent solution with hand-held equipment.

Aspen, quaking/Cherry, bitter, black, pin/Hawthorn /Oak, southern red/Sweetgum/Trumpetcreeper: For control, apply 2 to 3 quarts of Glyphomax per acre as a broadcast spray or as a 1 to 1.5 percent solution with hand-held equipment.

**Birch/ Elderberry/ Hazel/ Salmonberry/ Thimbleberry:** For control, apply 2 quarts per acre of Glyphomax as a broadcast spray or as a 1 percent solution with hand-held equipment.

**Blackberry:** For control, apply 3 to 4 quarts per acre of Glyphomax as a broadcast spray, or 1 to 1.5 percent solution with hand-held equipment. Make application after plants have reached full leaf maturity. Best results are obtained when applications are made in late summer or fall. After berries have set or dropped in late fall, blackberry can be controlled by applying a 3/4 percent solution of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume with hand-held equipment. For control of blackberries after leaf drop and until killing frost or as long as stems are green, apply 3 to 4 quarts of Glyphomax in 10 to 40 gallons of water per acre.

Broom: French, Scotch: For control, apply a 1.5 to 2 percent solution with hand-held equipment.

**Buckwheat, California/Hasardia/Monkey Flower/ Tobacco, tree:** For partial control of these species, apply a 1 to 2 percent solution of Glyphomax as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Catsclaw: For partial control, apply as a 1 to 1.5 percent solution with hand-held equipment.

**Coyote Brush:** For control, apply a 1.5 to 2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

**Eucalyptus:** For control of eucalyptus resprouts, apply a 2 percent solution of Glyphomax with hand-held equipment when resprouts are 6 to 12 feet tall. Ensure complete coverage. Apply when plants are growing actively. Avoid application to drought-stressed plants.

**Kudzu:** For control, apply 4 quarts of Glyphomax per acre as a broadcast spray or as a 2 percent solution with hand-held equipment. Repeat applications will be required to maintain control.

**Madrone resprouts:** For suppression or partial control, apply a 2 percent solution of Glyphomax to resprouts less than 3 to 6 feet tall. Best results are obtained with spring/early summer treatments.

**Maple, red:** For control, apply as a 1 to 1.5 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed. For partial control, apply 2 to 4 quarts of Glyphomax per acre as a broadcast spray.

**Maple, sugar/Oak, northern pin/Oak, red:** For control, apply as a 1 to 1.5 percent solution with handheld equipment when at least 50 percent of the new leaves are fully developed.

**Poison-ivy/Poison-oak:** For control, apply 4 to 5 quarts of Glyphomax per acre as a broadcast spray or as a 2 percent solution with hand-held equipment. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.

**Rose, multiflora:** For control, apply 2 quarts of Glyphomax per acre as a broadcast spray or as a 1 percent solution with hand-held equipment. Treatments should be made prior to leaf deterioration by leaf-feeding insects.

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Sage, black/Sagebrush, California/Chamise/Tallowtree, Chinese: For control of these species, apply a 1 percent solution of Glyphomax as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

**Tan oak resprouts:** For suppression or partial control, apply a 2 percent solution of Glyphomax to resprouts less than 3 to 6 feet tall. Best results are obtained with fall applications.

**Willow:** For control, apply 3 quarts of Glyphomax per acre as a broadcast spray or as a 1 percent solution with hand-held equipment.

**Other Woody Brush and Trees listed on this label:** For partial control, apply 2 to 5 quarts of Glyphomax per acre as a broadcast spray or as a 1 to 2 percent solution with hand-held equipment.

## Noncrop Uses

See "General Information" and "Mixing, Additives and Application Instructions" sections of this label for essential product performance information and the following "Noncrop" sections for specific recommended uses.

NOTE: Extreme care must be exercised to avoid contact of spray with foliage, green stems, exposed non-woody roots or fruit of crops, desirable turfgrasses, trees, shrubs or other desirable vegetation since severe damage or destruction may result.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seeds.

Where repeat applications are necessary, do not exceed 10.6 quarts of Glyphomax per acre per year. The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated use rate.

Glyphomax does not provide residual weed control. For subsequent weed control, follow a label-approved herbicide program.

Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

Glyphomax controls annual and perennial weeds listed on this label growing in areas such as ditch banks, dry ditches, dry canals, fencerows, and noncrop areas.

For specific rates of application and instructions for control of various annual and perennial weeds and woody brush and trees, see the "Weeds Controlled" section of this label.

Glyphomax may be applied with recirculating sprayers, shielded applicators, or wiper applicators in any noncrop site specified on this label. See the "Selective Equipment" part of "Application Equipment and Techniques" section of this label for information on proper use and calibration of this equipment.

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## Control of Emerged Weeds

## NOTE: For backpack sprayer and handgun applications, see the "Hand-Held and High-Volume Equipment" section for recommended rates.

**Annual Weeds:** Apply 1 quart per acre of Glyphomax in these tank mixtures when weeds are less than 6 inches tall and 1.5 quarts per acre when weeds are more than 6 inches tall.

**Perennial Weeds:** For partial control of perennial weeds using these tank mixtures, apply 2 to 5 quarts per acre of Glyphomax. Follow the recommendations in the "Weeds Controlled" section of this label for stage of growth and rate of application for specific perennial weeds.

## Preemergence Weed Control

For preemergence weed control, refer to the individual product labels for specific noncrop sites, rates, carrier volumes and precautionary statements.

Mix only the quantity of spray solution which can be used during the same day. Do not allow these tank mixtures to stand overnight as this may result in reduced weed control.

## Farmstead Weed Control

When applied as directed for "Noncrop Uses", under conditions described, Glyphomax controls undesirable vegetation listed on this label around farmstead building foundations, along and in fences, shelterbeits and for general nonselective farmstead weed control.

For specific rates of application and instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

**NOTE:** If spraying areas adjacent to desirable plants, use a shield made of cardboard, sheet metal or plywood while spraying to help prevent spray from contacting foliage of desirable plants.

## Farm Ditches

Glyphomax will suppress perennial grasses along farm ditches. Apply Glyphomax at a rate of 6 to 8 fluid ounces per acre. Use 8 fluid ounces per acre when treating tall (coarse) fescue, fine fescue, orchardgrass or quackgrass covers. For best suppression of these species, add ammonium sulfate at a rate of 1.7 pounds per 10 gallons of spray solution. Use 6 fluid ounces per acre without ammonium sulfate when treating Kentucky bluegrass.

Apply treatments in 10 to 20 gallons of spray solution per acre to actively growing perennial grass covers. For best spray distribution and coverage, use flat fan nozzles.

Add a nonionic surfactant at a rate of 0.5 percent of the spray solution.

Where broadleaf weed control or suppression is desired, tank mix Glyphomax with an appropriate, labeled broadleaf weed herbicide.

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## Conservation Reserve Program (CRP Acres)

Glyphomax can be used to control undesirable vegetation when rotating out of CRP acres or to suppress competitive growth and seed production of undesirable vegetation in CRP acres.

For specific rates of application for various annual and perennial weeds, see the "Weeds Controlled" section of this label.

CRP applications may be made with wiper applicators or conventional spray equipment.

For selective applications with broadcast spray equipment, apply 12 to 16 ounces per acre of Glyphomax in early spring before desirable CRP grasses, such as crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy. Some stunting of CRP perennial grasses will occur if applications are made when plants are not dormant.

## Dormant Rangeland

Glyphomax will control or suppress many weeds, including downy brome, cheat grass, cereal rye, medusahead rye and jointed goatgrass in dormant rangeland.

Apply 8 to 16 ounces per acre of Glyphomax in the early spring when the weeds have greened up, but desirable grasses, such as crested and tall wheatgrass are still truly dormant.

Slight discoloration of the desirable grasses may occur, but they will regreen and regrow under moist soil conditions as effects of Glyphomax wear off.

Do not use additional surfactant or ammonium sulfate when spraying dormant rangeland grasses with Glyphomax.

## Habitat Management

Glyphomax is recommended for the restoration and/or maintenance of native habitats and in wildlife management areas. Apply as recommended in the "Noncrop Uses" section of this label.

Habitat Restoration and Maintenance: When applied as directed, exotic and other undesirable vegetation may be controlled in habitat management areas. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broad spectrum vegetation control requirements in habitat management areas. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement. For spot treatments, care should be exercised to keep spray off of desirable plants.

**Wildlife Food Plots:** Glyphomax may be used as a site preparation treatment prior to planting wildlife food plots. Any wildlife food species may be planted after applying Glyphomax, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after applying Glyphomax before tilling.

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## Christmas Trees

NOTE: Glyphomax is not recommended for use as an over-the-top broadcast spray in Christmas trees. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.

When applied as instructed for the conditions described for "Noncrop Uses". Glyphomax controls undesirable vegetation listed on this label prior to planting, and as a post directed spray around Christmas trees.

For specific rates of application and instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

Where repeat applications are necessary, do not exceed 10.6 quarts of Glyphomax per acre per year.

**Site Preparation:** Following preplant applications of Glyphomax, any Christmas tree species may be planted. Precautions should be taken to protect nontarget plants during site preparation applications.

**Post Directed Spray:** Use as a post directed spray around Christmas trees. Care must be exercised to avoid contact of spray, drift or mist with foliage of or green bark of established species.

## **Cut Stump Treatments**

Woody vegetation may be controlled by treating freshly cut stumps of trees and resprouts with Glyphomax. Apply Glyphomax using suitable equipment to ensure coverage of the entire cambium. Cut vegetation close to the soil surface. Apply a 50 to 100 percent solution of Glyphomax to the freshly-cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.

When used according to directions for cut stump application, Glyphomax will control, partially control or suppress many types of woody brush and tree species, some of which are listed below:

Common Name	Scientific Name
Alder	Alnus spp.
Eucalyptus	Eucalyptus spp.
Madrone	Arbutus menziesii
Oak	Quercus spp.
Reed, giant	Arundo donax
Saltcedar	Tamarisk spp.
Sweetgum	Liquidambar styraciflua
Tan Oak	Lithocarpus densiforus
Willow	Salix spp.

Grass Seed Production

## **Preplant and Renovation**

When applied as directed for "Noncrop Uses", under conditions described, Glyphomax controls most existing vegetation prior to the planting or renovation of grass seed production areas.

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For specific rates of application and instructions for control of various annual and perennial weeds, and woody brush and trees, see the "Weeds Controlled" section of this label.

For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall applications provide best control.

**Do not disturb soil or underground plant parts before treatment.** Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.

Apply Glyphomax to actively growing weeds at the stages of growth recommended in the "Weeds Controlled" section of this label prior to planting or renovation of turf or forage grass areas grown for seed production.

Do not feed or graze treated areas within 8 weeks after application.

## Cropping Systems

When applied as directed for "Cropping Systems", under the conditions described, Glyphomax controls annual and perennial weeds listed on this label, prior to the emergence of direct seeded crops or prior to transplanting of crops listed on this label.

. . .

See "General Information" and "Mixing, Additives and Application Instructions" sections of this label for essential product performance information.

See the following "Cropping Systems" sections for specific recommended uses.

# Extreme care must be exercised to avoid contact of spray with foliage, green stems or fruit of desirable crops, plants, trees or other desirable vegetation since severe damage or destruction may result.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Except as otherwise specified on this label, repeat treatments must be made before the crop emerges in accordance with the instructions of this label.

Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 8 quarts per acre of Glyphomax per year. The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated use rate.

For any crop not listed below, applications must be made at least 30 days prior to planting.

Do not harvest or feed treated vegetation for 8 weeks following application. Following spot treatment or selective equipment use, allow 14 days before grazing domestic livestock or harvesting forage grasses and legumes.

## **Row Crops**

Canola Corn (All) <sup>1</sup> Cotton <sup>1</sup> Crambe Flax Mustard (<u>Greens and Seed</u>) Peanuts Sorghum (Milo) <sup>1</sup> Soybeans <sup>1</sup> Sugarcane<sup>1</sup> \_\_\_\_\_

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## **Cereal Grains**

Barley <sup>1</sup>	Rye '
Buckwheat <sup>1</sup>	Triticale 1
Millet (Pearl, Proso)1	Wheat (All) <sup>1</sup>
Oats 1	Wild Rice <sup>1</sup>
Rice <sup>2</sup>	

## Citrus

Calamondin	Mandarin Orange
Chironja	Orange (All)
Citron	Pummelo
Grapefruit	Tangelo
Kumquat	Tangerine
Lemon	Tangors
Lime	

## **Tree Nuts**

Almond	Filbert (Hazelnut)
Beechnut	Hickory Nut
Brazil Nut	Macadamia
Butternut	Pecan
Cashew	Pistachio
Chestnut	Walnut (Black, English)
Chinquapin	

## Vine Crops

Grapes

Kiwi Fruit

## Tree Fruits

Apple	Olive
Apricots	Peach
Cherry (Sweet, Sour)	Pear
Loquat	Plum/Prune (All)
Mayhaw	Quince
Nectarine	

## Vegetables

Artichoke, Jerusalem	Kohlrabi
Asparagus <sup>1</sup>	Leek
Beans (All)	Lentils
Beet Greens	Lettuce
Beets (Red, Sugar)	Mango Meion 3

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Broccoli (All)	Melons (All) <sup>3</sup>
Brussels Sprouts	Muskmelon <sup>3</sup>
Cabbage (All)	Mustard Greens
Cabbage, Chinese	Okra
Cantaloupe 3	Onion
Carrot	Parsley
Cauliflower	Parsnips
Casaba Meion 3	Peas (All)
Celeriac	Pepper (All) <sup>3</sup>
Celery	Persian Melon <sup>3</sup>
Chard, Swiss	Potato (Irish, Sweet)
Chicory	Pumpkin <sup>3</sup>
Chick Peas	Radish
Collards	Rape Greens
Crenshaw Melon <sup>3</sup>	Rhubarb
Cucumber <sup>3</sup>	Rutabaga
Eggplant <sup>3</sup>	Shailot
Endive	Spinach (All)
Garlic <sup>3</sup>	Squash (Summer, Winter) <sup>3</sup>
Gourds <sup>3</sup>	Tomatillo <sup>3</sup>
Ground Cherry <sup>3</sup>	Tomato <sup>3, 5</sup>
Honeydew Melon <sup>3</sup>	Turnip
Honey Ball Melon 3	Watercress <sup>3</sup>
Horseradish	Watermelon <sup>3</sup>
Kale	Yams

## **Small Fruits and Berries**

Blackberry	Elderberry
Blueberry	Gooseberry
Boysenberry	Huckleberry
Cranberry	Loganberry
Currant	Olallieberry
Dewberry	Raspberry (Black, Red)

## Forage Crops and Legumes

Alfalfa 1	Forage Legumes <sup>1</sup>
Forage Grasses <sup>1</sup>	

## **Tropical Crops**

Acerola	Longan
Atemoya	Lychee
Avocado	Mango
Banana (Plantains)	Mangosteen
Breadfruit	Papaya
Canistel	Passion Fruit
Carambola	Persimm0ns
Cherimoya	Pineapple <sup>4</sup>
Cocoa Beans	Pomegranate
Coffee	Rambutan
Dates	Sapodilla
Durian	Sapote (Black, Mamey,

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Figs	White)
Genip	Soursop
Guava	Sugar Apple
Jaboticaba	Tamarind
Jackfruit	Tea

<sup>1</sup> Spot treatments may be applied in these crops.

<sup>2</sup> Do not treat rice fields or levees when the fields contain flood water.

<sup>3</sup> Apply only prior to planting. Allow at least 3 days between application and planting.

<sup>4</sup> Do not feed or graze treated pineapple forage following application.

<sup>5</sup> Use is restricted to direct seeded crops only.

When applying Glyphomax prior to transplanting crops into plastic mulch, care must be taken to remove residues of Glyphomax from the plastic prior to transplanting. Residues can be removed by 0.5 inch natural rainfall or by applying water via a sprinkler irrigation system.

**Spot Treatment** (Only those crops referenced by footnote "1" above can be spot treated.): Applications in growing crops must be made prior to heading of small grains and milo, initial pod set in soybeans, silking of corn, or boll opening on cotton.

For forage grasses and forage legumes see "Spot Treatment" in the "Pastures" section of "Cropping Systems" in this label.

For dilution and rates of application using boom or hand-held equipment, see "Mixing, Additives and Application Instructions" and "Weeds Controlled" sections of this label.

NOTE: For forage grasses and forage legumes, no more than one-tenth of any acre should be treated at one time. For all other crops, do not treat more than 10 percent of the total field area to be harvested.

The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

**Selective Equipment:** Glyphomax may be applied through recirculating sprayers, shielded applicators or wiper applicators in cotton and soybeans. Shielded and wiper applicators may also be used in tree crops and grapes. Wiper applicators may be used in wheat, rutabagas, forage grasses and forage legumes, including pasture sites and grain sorghum (milo).

See the "Selective Equipment" part of the "Application Equipment and Techniques" section of this label for information on proper use and calibration of this equipment.

#### Allow at least the following time intervals between application and harvest:

Cotton, Soybeans	.7 days
Apples, Citrus, Pear	1 day
Atemoya, Avocado, Breadfruit, Canistel,	
Carambola, Cherry, Durian, Grapes, Dates,	
Jaboticaba, Jackfruit, Longan, Lychee, Mangosteen	, Passion
Fruit, Persimmons, Rambutan, Rutabagas, Sapodill	a,
Sapote, Soursop, Sugar Apple, Tamarind	14 days
Stone Fruit	17 days
Nut Crops, except pistachios	.3 days
Pistachio nuts	
Wheat <sup>1</sup>	35 days

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<sup>1</sup> Do not use roller applicators.

<sup>2</sup> Do not feed or graze treated milo fodder. Do not ensile treated vegetation.

## Asparagus

When applied as directed for "Cropping Systems" under the conditions described, Glyphomax controls weeds listed on this label in asparagus.

For specific rates of applications and instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

**Prior to Crop Emergence:** Apply Glyphomax prior to crop emergence for the control of emerged labeled annual and perennial weeds. **Do not apply within a week before the first spears emerge.** 

**Spot Treatment:** Apply Glyphomax immediately after cutting, but prior to the emergence of new spears. Do not treat more than 10 percent of the total field area to be harvested. Do not harvest within 5 days of treatment.

**Postharvest:** Apply Glyphomax after the last harvest and all spears have been removed. If spears are allowed to regrow, delay application until ferns have developed. Delayed treatments should be applied as directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears. Direct contact of the spray with the asparagus may result in serious crop injury.

**NOTE:** Select and use recommended types of spray equipment for postemergence postharvest applications. A directed spray is any application where the spray pattern is aligned in such a way as to avoid direct contact of the spray with the crop. A shielded spray is any application where a physical barrier is positioned and maintained between the spray and the crop to prevent contact of spray with the crop.

## Berries and Small Fruits

Wiper applicators may be used in cranberries in accordance with instructions in this section.

For other berries, apply as a preplant broadcast application, or as a directed spray or wiper application post-planting.

See "General Information" and "Mixing, Additives and Application Instructions" sections of this label for essential product performance information.

See the "Selective Equipment" part of the "Application Equipment and Techniques" section of this label for information on recommended use and calibration of this equipment.

Allow a minimum of 30 days between last application and harvest of cranberries. For other small fruits and berries, allow a minimum of 14 days between last application and harvest.

For Wick or other Wiper Applicators: Mix 1 gallon of Glyphomax in 4 gallons of water to prepare a 20 percent solution.

In severe infestations, reduce equipment ground speed to ensure that adequate amounts of Glyphomax are wiped on the weeds. A second treatment in the opposite direction may be beneficial.

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Do not permit herbicide solution to contact desirable vegetation, including green shoots, canes or foliage.

## Corn and Grain Sorghum (Milo)

## **Hooded Sprayers**

Glyphomax may be used through hooded sprayers for weed control between the rows of corn or grain sorghum (milo). Only hooded sprayers that completely enclose the spray pattern may be used.

A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

When applying to corn that is grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows.

#### Follow these requirements:

- The spray hoods must be operated on the ground or skimming across the ground.
- Do not apply more than 26-fl oz-1 gt of Glyphomax per acre per application.
- Corn or milo must be at least 12 inches tall, measured without extending leaves. <u>Treat before milo</u> extends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 mph.
- Maximum wind speed: 10 mph.
- Use low-drift nozzles.

Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Do not apply Glyphomax when the leaves of the crop are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.

Contact of Glyphomax in any manner to any vegetation to which treatment in not intended may cause damage. Such damage shall be the sole responsibility of the applicator.

For specific rates of application and instructions for control of various annual and perennial weeds, see the "Weed Control Section" of this label.

Do not graze or feed corn or milo forage or fodder following applications of Glyphomax through hooded sprayers.

Do not apply more than 3 quarts of Glyphomax per acre per year for hooded sprayer applications.

## Fallow and Reduced Tillage Systems

#### For aerial application in California, refer to supplemental labeling.

Use Glyphomax in fallow and reduced tillage systems for control of annual weeds prior to emergence of crops listed in this label. Refer to the "Weeds Controlled" section of this label for specific rates and instructions. Glyphomax may be applied using ground or aerial spray equipment. See the "Application Equipment and Techniques" section of this label for instructions.

## **Tank Mixtures**

- Glyphomax herbicide plus Banvel (dicamba) herbicide plus Nonionic Surfactant
- Glyphomax herbicide plus 2,4-D herbicide plus Nonionic Surfactant
- Glyphomax herbicide plus Tordon\* 22K herbicide plus Nonionic Surfactant
- Glyphomax herbicide plus Goal herbicide plus Nonionic Surfactant
- Glyphomax herbicide plus Atrazine or Bladex (cyanazine) plus Nonionic Surfactant

Glyphomax herbicide plus Dicamba, 2,4-D or Tordon 22K Tank Mixtures (Do not apply Banvel (dicamba), Tordon 22K<sup>+</sup> or 2,4-D tank mixtures by air in California.)

**Dicamba and 2,4-D:** The addition of dicamba in a mixture with Glyphomax may provide short-term residual control of selected weed species. Some crop injury may occur if dicamba is applied within 45 days of planting. Applications of 2,4-D or Banvel (dicamba) herbicide must be made at least 7 days prior to planting corn. Refer to the labels for dicamba and 2,4-D labels for cropping restrictions and other use instructions.

**Tordon 22K**<sup>†</sup>: The addition of Tordon 22K in a mixture with Glyphomax may provide short-term residual control of selected weed species. Application of Glyphomax in tank mix with Tordon 22K should be made only to land that will be planted the following year to grass, barley, oats, wheat, grain sorghum (milo) or fallowed. Some crop injury may occur if Tordon 22K is applied within 45 days of planting. Do not plant grain sorghum within 8 months after application. Tordon 22K is not intended for use on land planted to sweet sorghum. Refer to the label for Tordon 22K for cropping restrictions and other use instructions. <sup>†</sup>Tordon 22K is not registered for use in California.

Glyphomax plus dicamba, Tordon 22K or 2,4-D will control the annual grasses and broadleaf weeds previously listed for Glyphomax alone at the indicated heights (except 8 fluid ounces per acre applications), plus the broadleaf weeds listed below in this section. For those weeds previously listed at 8 fluid ounces of Glyphomax alone per acre, use 12 fluid ounces in these tank mixtures.

Apply 12 to 24 fluid ounces of Glyphomax plus 0.25 pound a.i. of dicamba, or I to 2 ounces of Tordon 22K, or 0.5 pound a.i. of 2,4-D plus 0.5 percent nonionic surfactant by total spray volume per acre to control dense populations of the following annual broadleaf weeds when less than 6 inches in height:

Common Name	Scientific Name
Buckwheat, Wild 1	Polygonum convulvulus
Kochia <sup>2</sup>	Kochia scoparia
Lambsquarters	Chenopodium album
Lettuce, prickly <sup>3</sup>	Lactuca serriola
Pigweed, Redroot	Amaranthus retroflexus
Thistle, Russian <sup>3</sup>	Salsola kali

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- <sup>1</sup> Controlled with Tordon 22K tank mixture only.
- <sup>2</sup>Controlled with dicamba tank mixture only.
- <sup>3</sup>Controlled with dicamba or 2,4-D tank mixtures only.

#### **Glyphomax plus Goal Tank Mixtures**

Glyphomax alone or in tank mixtures with Goal plus 0.5 to 1 percent nonionic surfactant by total spray volume will provide control of those weeds listed below.

Make applications when weeds are actively growing and at the recommended stages of growth. Avoid spraying when weeds are subject to moisture stress, when dust is on the foliage or when straw canopy covers the weeds.

Glyphomax (12 fl oz/acre)	Maximum Height or Length in Inches	Glyphomax (16 fl oz/acre)	Maximum Height or Length in Inches
Wheat	18"	Annual grasses at	
Barley	12"	left plus:	1 1
Bluegrass, annual	6"	Ryegrass, annual	6"
Barnyardgrass	6"	Chickweed	6"
Rye	6"	Groundsel	6"
	1	Marestail	6"
		Rocket, London	6"
}		Shepherdspurse	6"
		Crabgrass	12"
		Johnsongrass, seedling	12"
		Lambsquarters	12"
		Oats, wild	12"
4		Pigweed, redroot	12"
		Mustards	12"

NOTE: Use 32 fluid ounces of Glyphomax per acre where heavy weed densities exist.

Glyphomax (12 fl oz/acre) plus Goal <sup>1</sup> (2 to 4 fl oz/acre)	Maximum Height or Length in Inches	Glyphomax (16 fl oz/acre) plus Goal <sup>1</sup> (2 to 4 fl oz/acre)	Maximum Height or Length in Inches
Annual grasses above		Annual weeds above	
plus:	1	plus:	
Cheeseweed, common	3"	Cheeseweed, common	6"
Chickweed	3"	Groundsel	6"
Groundsel	3"	Chickweed	12"
Rocket, London	6"	Rocket, London	12"
Shepherdspurse	6"	Shepherdspurse	12"

**NOTE:** Use 32 fluid ounces of Glyphomax per acre in mixtures with 2 to 4 fluid ounces of Goal per acre where heavy weed densities exist.

<sup>1</sup> Use the higher rate of Goal when weeds approach maximum recommended height or stands are dense.

These recommended tank mixtures may be applied using ground or aerial spray equipment. Refer to the "Weeds Controlled" section of this label for specific rates and instructions.

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## Glyphomax plus Atrazine or Bladex (cyanazine) Tank Mixtures

For use only in Colorado, Kansas, Nebraska, Oklahoma, Oregon, South Dakota, and Washington. In Oregon and Washington, do not exceed I pound a.i. of atrazine per acre. The addition of 2 percent dry ammonium sulfate by weight (or liquid equivalent) or 17 pounds per 100 gallons of water is recommended to increase the performance of Glyphomax plus atrazine or Bladex plus nonionic surfactant tank mixtures.

Consult the labels for atrazine or Bladex (90 OF, 4L, 80W) for use rates, soil type, planting, cropping and other restrictions, as well as other precautionary statements and use according to the most restrictive label.

Glyphomax plus atrazine or Bladex plus nonionic surfactant tank mixture provides postemergence control of listed annual weeds in fallow and reduced tillage systems. Apply 12 fluid ounces of Glyphomax with I pound a.i. or less of atrazine per acre or 16 fluid ounces of Glyphomax with 2 pounds a.i. or less of atrazine per acre, or 20 fluid ounces of Glyphomax with I to 3 pounds a.i. of atrazine per acre, plus 0.5 percent nonionic surfactant by total spray volume. Apply 16 fluid ounces of Glyphomax with 2.4 to 4 pounds a.i. of Bladex (cyanazine) per acre plus 0.5 percent nonionic surfactant. These tank mixtures will provide soil residual control of weeds listed on the atrazine and Bladex label. In addition, these tank mixtures will provide postemergence control of the following weeds:

Common Name	Scientific Name
Barnyardgrass 1	Echinochloa crus-galli
Brome, downy	Bromus tectorum
Foxtail, green	Setaria, vindis
Kochia <sup>2</sup>	Kochia scoparia
Lambsquarters	Chenopodium album
Lettuce, prickly	Lactuca serriola
Mustard, tansy	Descurainia pinnata
Pigweed	Amaranthus spp.
Sandbur, field	Cenchrus spp.
Stinkgrass	Eragrostis cilianensis
Thistle, Russian	Salsola iberica
Wheat	Triticum aestivum
Witchgrass	Panicum capillare

<sup>1</sup> Barnyardgrass will be suppressed at 20 fluid ounces per acre and will require up to 26 fluid ounces per acre for control.

<sup>2</sup> For improved control of kochia, add 4 fluid ounces per acre (.125 pound a.i. per acre) of dicamba to the above tank mixture.

#### **Postharvest Applications**

Glyphomax will provide control of existing weeds following grain harvest. Weeds should be allowed to regrow after damage incurred during harvest operations, and to recover from environmental stress, before application. Weeds should be treated prior to the heading stage of annual grasses, if possible, and before broadleaf weeds exceed 24 inches in height. Nonionic surfactant should be added at 0.5 percent by total spray volume. Use of ammonium sulfate is recommended and may improve performance on annual weeds.

Apply 12 fluid ounces of Glyphomax per acre plus nonionic surfactant to control downy brome, green foxtail, stinkgrass and volunteer wheat.

To control kochia, lambsquarters, mustard, pigweed and Russian thistle, apply 16 fluid ounces of Glyphomax plus 0.25 pounds a.i. of dicamba or 0.5 pounds a.i. of 2,4-D plus nonionic surfactant per acre.

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Apply 20 fluid ounces of Glyphomax per acre plus nonionic surfactant to control barnyardgrass, sandbur, sunflower, and witchgrass. The addition of 0.25 pound a.i. of dicamba or 0.5 pound a.i. of 2,4-D plus nonionic surfactant to 20 fluid ounces of Glyphomax will control prickly lettuce.

**Grain Sorghum (Postharvest Regrowth Control):** Glyphomax may be applied to grain sorghum (milo) stubble following harvest to suppress or control regrowth. Apply 1 quart of Glyphomax per acre for control, or 1.5 pints of Glyphomax per acre for suppression. Use 0.5 percent nonionic surfactant in 3 to 10 gallons of spray solution per acre.

## **Ecofarming Systems**

The recommendations made in this section are not registered for use in California.

The Ecofarming System consists of the following rotation: winter wheat, corn/sorghum, ecofallow.

Use the following tank mixture for control of emerged annual weeds before planting corn or sorghum in the Ecofarming System:

Glyphomax herbicide at 16 to 20 fluid ounces per acre plus
2,4-D at 0.375 to 0.5 pound a.i. per acre plus
Atrazine herbicide at 0.75 to 1 pound a.i. per acre plus
Lasso herbicide at 2.5 to 3 quarts per acre

The above tank mixture should be applied in 28-0-0 or 32-0-0 liquid fertilizer carrier at 20 to 30 gallons per acre. The liquid fertilizer may be diluted with water to achieve the desired carrier volume.

## Weeds Controlled: The following weeds, up to a maximum height of 4 inches, will be controlled:

Common Name	Scientific Name
Brome, downy	Bromus tectorum
Cheat	Bromus secalinus
Foxtail, green	Setaria viridis
Foxtail, yellow	Setaria lutescens
Kochia 1	Kochia scoparia
Lettuce, prickly	Lactuca serriola
Pigweed, redroot	Amaranthus retroflexus
Thistle, Russian	Salsola kali
Wheat, volunteer	Triticum aestivum

<sup>1</sup> For improved control of kochia, add 4 fluid ounces per acre (0.125 pound a.i. per acre) of dicamba to the above tank mixture.

Risk of crop injury from 2,4-D or dicamba can be reduced by applying this treatment 7 to 14 days before planting.

Refer to the label booklet for Lasso for preemergence weed control achieved by this tank mixture.

Refer to the specific product labels for crop rotation restrictions and cautionary statements for all products used in these tank mixtures.

## Aid To Tillage

Glyphomax, when used in conjunction with preplant tillage practices, will provide control of downy brome, cheat, volunteer wheat, tansy mustard and foxtail. Apply 8 fluid ounces of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. For ground application, apply in 3 to 10 gallons of water per acre. For aerial applications, apply in 3 to 5 gallons of water per acre. Do not tank mix with residual herbicides. Make applications when weeds are actively growing and before they are 6 inches in height. Application must be followed by conventional tillage practices no later than 15 days after treatment and before regrowth occurs. Allow at least 1 day after application before tillage. Tank mixtures with residual herbicides may result in reduced performance. Glyphomax does not provide residual weed control. Repeat treatments may be necessary to control subsequent germinating weeds.

Do not treat weeds under poor growing conditions such as drought stress, or disease or insect damage as reduced weed control may result. Reduced results also may occur when treating weeds heavily covered with dust, or when straw canopy covers the weeds.

#### **Perennial Weeds**

Apply Glyphomax as follows to control or destroy most perennial weeds:

**Note:** If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the recommended stages of growth. Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

The addition of I to 2 percent dry ammonium suifate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this herbicide on perennial weeds. The improvement in performance may be apparent where environmental stress is a concern. Refer to the "Mixing, Additives and Application Instructions" section of this label.

When applied as recommended under the conditions described, Glyphomax will **control** the following perennial weeds:

Common Name	Scientific Name
Alfalfa	Medicago saliva
Johnsongrass	Sorghum halepense
Larkspur, duncecap	Delphinium occidentale
Larkspur, tall	Delphinium barbeyi
Nightshade, silverleaf	Solanum elaeagnifolium
Quackgrass	Agropyron repens
Ryegrass, perennial	Lolium perenne
Spurge, leafy 1	Euphorbia esula
Thistle, Canada	Cirsium arvense

### <sup>1</sup> Partial control

Johnsongrass / Ryegrass, perennial: Apply I to 3 quarts of Glyphomax per acre. In annual cropping systems, apply I to 2 quarts of Glyphomax per acre. Apply I quart of Glyphomax plus 0.5 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. Use 2 quarts of Glyphomax when

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applying 10 to 40 gallons of water per acre. In noncrop or areas where annual tillage (no-till), is not performed, apply 2 to 3 quarts of Glyphomax in 10 to 40 gallons of water per acre. For best results, apply to actively growing plants when most have reached the boot-to-head stage of growth. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using the I quart per acre rate.

For burndown of contacted vegetation, apply I pint per acre plus 0.5 percent nonionic surfactant in 5 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage.

Larkspur, duncecap / Larkspur, tall: Apply Glyphomax as a 2 percent solution using hand-held equipment. Apply as a spot treatment when the larkspur is actively growing and in the vegetative stage just prior to budding. Coverage should be uniform and complete.

Quackgrass (In Annual Cropping Systems, or in Pastures and Sods Followed by Deep Tillage): Apply I to 2 quarts of Glyphomax per acre. For the one quart rate, apply 0.5 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. For the 2 quart rate, apply in 10 to 40 gallons of water per acre. Do not tank-mix with residual herbicides when using the I quart rate. Spray when quackgrass is 6 to 8 inches tall and actively growing. Do not till between harvest and fall applications or in the fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, for best results, use a moldboard plow.

Quackgrass (Pasture or Sod or Other Noncrop Areas Where Deep Tillage is Not Planned Following Application): Apply 2 to 3 quarts in 10 to 40 gallons of water per acre. Spray when the quackgrass is greater than 8 inches tall and actively growing. Do not till between harvest and fall application or in the fall or spring prior to spring application. Allow 3 or more days after application before tillage.

**Spurge, leafy:** For suppression, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. of 2,4-D per acre plus 0.5 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in the late summer or fall. Apply when plants are actively growing. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall. Allow 7 or more days after application before tillage.

**Thistle, Canada:** Apply 2 to 3 quarts of Glyphomax per acre. Apply to actively growing thistles when most are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of Glyphomax. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.

For suppression of Canada thistle, apply I quart per acre of Glyphomax plus 0.5 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in the late summer or fall after harvest, mowing or tillage. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.

Other perennials listed on this label: Apply 3 to 5 quarts of Glyphomax per acre. Apply when actively growing and when most have reached early head or early bud stage of growth. Allow 7 or more days after application before tillage.

See "Directions for Use" and "Mixing Additives, and Application Instructions" sections of this booklet for labeled uses and specific application instructions.



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### Tank Mixtures

When applied as directed under the conditions described, Glyphomax plus dicamba or 2,4-D will **suppress** or **control** the following perennial broadleaf weed:

### Bindweed, field (Convolvulus arvensis)

For suppression, apply 16 fluid ounces of Glyphomax plus 0.5 pound a.i. of 2,4-D or 0.25 pound a.i. of dicamba, plus 0.5 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length. These tank mixtures may be applied using aerial application equipment in fallow and reduced tillage systems only.

For control, apply 2 quarts of Glyphomax plus 0.5 pound a.i. of dicamba in 3 to 20 gallons of water per acre. At these rates, apply using ground application equipment only.

Pastures

Apply Glyphomax prior to planting forage grasses and legumes.

**Pasture or Hay Crop Renovation:** When applied as a broadcast spray, Glyphomax controls the annual and perennial weeds listed in this label prior to planting forage grasses or legumes. Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

**Spot Treatment:** When applied as a spot treatment as recommended, Glyphomax controls annual and perennial weeds listed in this label which are growing in pastures, forage grasses and forage legumes composed of bahiagrass, bermudagrass, bluegrass, brome, fescue, orchardgrass, ryegrass, timothy, wheatgrass, alfalfa or clover.

**Wiper Application:** When applied as directed, Glyphomax controls or suppresses the weeds listed under Wiper Applicators" in the "Selective Equipment" section of this label.

For spot treatment and wiper application, apply in areas where the movement of domestic livestock can be controlled. No more than one-tenth of any acre should be treated at one time. Further applications may be made in the same area at 30-day intervals. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.

## Sugarcane

When applied as directed for "Cropping Systems", under the conditions described, Glyphomax controls those emerged annual and perennial weeds listed on this label growing in or around sugarcane or in fields prior to the emergence of plant cane. Glyphomax will also control undesirable sugarcane.

**NOTE:** Where repeat treatments are necessary, do not exceed a total of 10.6 quarts of Glyphomax per acre per year. Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation.

**Broadcast Treatment:** Apply Glyphomax in 10 to 40 gallons of water per acre on emerged weeds prior to the emergence of plant cane.

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For specific rates of application and instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

For removal of last stubble or ration cane, apply 4 to 5 quarts of Glyphomax in 10 to 40 gallons of water per acre to new growth having at least 7 or more new leaves. Allow 7 or more days after application before tillage.

**Spot Treatment in or Around Sugarcane Fields:** For dilution and rates of application using hand-held equipment, see "Mixing, Additives and Application Instructions" and "Weeds Controlled" sections of this label.

For control of volunteer or diseased sugarcane, make a 1 percent solution of Glyphomax in water and spray to wet the foliage of vegetation to be controlled.

NOTE: When spraying volunteer or diseased sugarcane, the plants should have at least 7 new leaves.

Avoid spray contact with healthy cane plants since severe damage or destruction may result.

Do not feed or graze treated sugarcane forage following application.

## Roundup Ready<sup>®</sup> Crops

The following instructions include all applications that can be made onto Roundup Ready<sup>®</sup> crops during the complete cropping season. Do NOT combine these instructions with other recommendations made for crop varieties that do not contain the Roundup Ready gene, in the "CROPS (ALPHABETICAL)" section of this label.

Glyphomax is recommended for postemergence application only on crop varieties designated as containing the Roundup Ready gene.

- Applying Glyphomax to crop varieties which are not designated as Roundup Ready will result in severe crop injury and yield loss. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants that do not contain the Roundup Ready gene, since severe injury or destruction will result.
- Roundup Ready crop varieties must be purchased from an authorized seed supplier. Crop safety and weed control performance is not warranted when Glyphomax is used in conjunction with "brown bag" or seed saved from previous year's crop production and replanted.
- The Roundup Ready designation indicates that the crop variety contains a patented gene that provides tolerance to glyphosate herbicides. Information on Roundup Ready crop varieties may be obtained from your seed supplier.

## ATTENTION: Avoid drift. Extreme care must be used when applying this product to prevent injury to desirable plants and crops which do not contain the Roundup Ready gene.

See "General Information" and "Application Instructions" sections of this label for essential use directions and restrictions for the application of this product.

**Note:** The following recommendations are based on a clean start at planting by using a burn-down application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a preplant burn-down treatment of 16-64 fluid ounces per acre of this product is recommended to control existing weeds prior to crop emergence.

There are no rotational crop restrictions following the application of this product.

Corn with the Roundup Ready<sup>®</sup> Gene

This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first. Single in-crop applications of Glyphomax are not to exceed 1 quart per acre. Sequential in-crop applications of Glyphomax from emergence through the V8 stage or 30 inches must not exceed 2 quarts per acre per growing season.

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#### **Maximum Yearly Rates Allowed**

**Preplant**: Maximum amount of Glyphomax which can be applied prior to crop emergence is 5 quarts per acre.

**In-crop**: Maximum combined total of multiple in-crop applications from emergence through the V8 stage or 30 inches is 2 quarts per acre.

**Preharvest**: Maximum amount of Glyphomax that can be applied after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest is 1 quart per acre.

Cropping Season: Combined total per year for all applications may not exceed 8 quarts per acre.

When applied as directed, Glyphomax controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more application of Glyphomax. Applications should be made to actively growing weeds before they reach the maximum size listed in the "Weeds Controlled" section of the label booklet for Glyphomax.

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of Glyphomax under hard water conditions, drought conditions or when tank mixed with Bullet, Micro-Tech or Partner Herbicides. Refer to the "Mixing" section of the label booklet for proper use instructions. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion. The addition of other additives, including fertilizers and micronutrients are not recommended with Glyphomax since this may result in increased potential for crop injury.

Allow a minimum of 50 days between application of Glyphomax and harvest of corn forage and 7 days between application and harvest of corn grain. Allow a minimum of 10 days between in-crop applications of Glyphomax. In California, do not graze, harvest or feed corn forage or silage following sequential in-crop applications of Glyphomax on Roundup Ready corn. There are no rotational crop restrictions following applications of Glyphomax.

## ATTENTION: Avoid drift. Extreme care must be used when applying this product to prevent injury to desirable plants and crops that do not contain the Roundup Ready gene.

## Thoroughly clean the spray tank and all lines and filters to eliminate potential contamination from other herbicides prior to mixing and applying this product.

**For ground applications:** Use the recommended rates of Glyphomax in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. Check for even distribution of spray droplets.

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For aerial applications: Use the recommended rates of Glyphomax in 3 to 15 gallons of spray solution per acre. Do not exceed 1 quart per acre. See the "Annual and Perennial Weeds Rate Tables" in this label. Avoid drift - do not apply during inversion conditions, when winds are gusty or under any other conditions that favor drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent vegetation, appropriate buffer zones must be maintained.

## **Weed Control Recommendations**

Apply 24 to 32 fluid ounces of Glyphomax herbicide per acre for control of labeled grasses and broadleaf weeds in conventional and no-till corn production systems. Refer to the "Annual Weeds Rate Table" for rate recommendations for specific annual weeds. Glyphomax herbicide applied at up to 1 quart per acre will control or suppress the growth of perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly. For additional information on perennial weeds, see the "Perennial Weeds Rate Table".

## Preemergence followed by Postemergence Weed Control Program

This product may be applied postemergence in-crop following any labeled preemergence herbicide application. The post application of Glyphomax should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. A single in-crop application of Glyphomax at the recommended rate will provide control of emerged weeds listed on this label. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches (free standing), whichever comes first.

## Postemergence Only Weed Control Program

This product may be applied alone as a postemergence in-crop application to provide control of emerged weeds listed on the label. The postemergence application of Glyphomax should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of Glyphomax at 24 to 32 fluid ounces per acre will control the labeled grasses and broadleaf weeds. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage or until corn height reaches 30 inches (free standing), whichever comes first.

This product may be applied in tank mixture with a labeled rate of FulTime\*, Surpass\* EC, Surpass 100, TopNotch\*, Bicep II, Bicep Lite II Magnum, Bicep II Magnum, Dual II, Dual II Magnum, Frontier, Guardsman, LeadOff, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, Hornet\*, Hornet WDG, Micro-Tech, Bullet, Partner, Permit or Atrazine herbicides. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines - the more restrictive requirements apply. Tank mixtures with other products may result in increased potential for crop injury and/or weed antagonism. Refer to the table below for height limitation for tank mix partner.

Tank Mix Partner	Maximum Height Of Corn For Application
Bicep II	5 inches
Bicep II Magnum	
Bicep Lite II Magnum	
Dual II	
Dual II Magnum	
Builet †	
Micro-Tech <sup>†</sup>	

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Partner †	
Frontier	8 inches
Guardsman	
LeadOff	<u> </u>
FulTime	11 inches
Degree	
Degree Xtra	
Harness	
Harness Xtra	1
Harness Xtra 5.6	
Surpass EC	
TopNotch	
Hornet*	20 inches
Hornet WDG	
Permit	24 inches
Atrazine	12 inches

<sup>†</sup> Bullet, Micro-Tech and Partner are not registered for use as a postemergence application in Texas.

## Soybeans with the Roundup Ready<sup>®</sup> Gene

This product may be applied postemergence to Roundup Ready soybeans from the cracking stage throughout flowering. Allow a minimum of 14 days between application and harvest of soybeans.

### Maximum Allowable Yearly Rates:

**Preplant**: Maximum amount of Glyphomax which can be applied prior to crop emergence is 5 guarts/acre.

**In-crop:** Maximum combined total of multiple in-crop applications from cracking throughout flowering is 3 quarts/acre. The maximum rate for any single in-crop application is 2 quarts/acre. The maximum combined total of Glyphomax that can be applied during flowering is 2 quarts/acre.

**Preharvest**: Maximum amount of Glyphomax that can be applied after loss of green color in soybean pods until 14 days before harvest is 1 quart/acre. The combined total of in-crop and preharvest Glyphomax herbicide applications may not exceed 3 quarts/acre.

Cropping Season: Combined total per year for all applications may not exceed 8 quarts/acre.

When applied as directed, Glyphomax will control labeled annual grasses and broadleaf weeds in Roundup Ready soybeans. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of Glyphomax.

There are no rotational crop restrictions following applications of Glyphomax.

**For ground applications:** Use the recommended rates of Glyphomax in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles that provide a flat fan pattern. Check for even distribution of spray droplets.

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For aerial applications: Use the recommended rates of Glyphomax in 3 to 15 gallons of spray solution per acre. Do not exceed 1 quart of Glyphomax per acre. Do not apply during low level inversion conditions, when winds are gusty or under any other conditions that favor drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. Maintain appropriate buffer zones to prevent injury to adjacent desirable vegetation.

Aerial applications on Roundup Ready soybeans may be made only in the following states: Alabama, Arkansas, Colorado, Florida, Georgia, Kansas, Louisiana, Mississippi, Missouri (Bootheel only), Nebraska, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Virginia, and Wyoming.

#### **Annual Weed Rate Tables**

The following rate recommendations will provide control of labeled grasses and broadleaf weeds in conventional and no-till soybean production systems. Refer to the "Annual Weeds Rate Tables" section of this label booklet for rate recommendations for specific annual weeds.

Dow AgroSciences will not warrant crop safety or weed control when Roundup Ready soybeans are treated with herbicides not specified on this supplemental label. Because of the potential for; 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified on this supplemental label should not be used, whether applied preemergence or applied postemergence as a tank mixture with Glyphomax herbicide.

Up to 64 fluid ounces per acre of Glyphomax may be used in any single application for control of annual weeds, where heavy weed densities exist. The maximum combined total of Glyphomax that can be applied during flowering is 64 fluid ounces per acre.

**NOTE:** The following recommendations are based on a clean start at planting by using a burn down application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a preplant burn-down treatment of 16 - 64 fluid ounces per acre of Glyphomax can be used to control existing weeds prior to crop emergence.

### Midwest/ Mid-Atlantic Recommendations

**Narrow row or drilled soybeans:** A single in-crop application of Glyphomax will provide effective control of labeled weeds. For best results, an initial application of 32 fluid ounces per acre (fl oz/acre), on 4-8" weeds is recommended. Weeds will generally be 4 - 8" tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8-18" tall, use 48 fl oz/acre for best results.

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of Glyphomax at 24 to 32 fluid ounces per acre may be necessary to control late flushes of weeds. The combined total application in-crop must not exceed 96 fluid ounces per acre.

**Wide row soybeans:** An in-crop application of Glyphomax will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 32 fluid ounces per acre (fl oz/acre), on 4-8" weeds is recommended. Weeds will generally be 4-8" tall 3 to 5 weeks after planting. If new flushes of weeds occur, they can be controlled by sequential applications of Glyphomax.

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### **Initial Treatment**

Weed Height (inches)	Rate (fl oz/acre)
1 - 3	24
4 - 8	32
8 - 18	48

**Giant ragweed:** Apply 32 fl oz/acre when the weed is 8-12" tall to avoid the need for sequential application.

**Black nightshade**, Pennsylvania smartweed, velvetleaf and waterhemp. Apply 1 quart per acre to weeds 3-6 inches tall and 48 fl oz when weeds are up to 12 inches tall. For morningglory species, apply 32 fl oz when weeds are up to 4 inches tall, and 48 fl oz when weeds are up to 6 inches tall.

Some weeds, such as black nightshade, woolly cupgrass, shattercane, wild proso millet, burcumber, and giant ragweed, with multiple germination times may require a sequential application of Glyphomax. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 24 fluid ounces of Glyphomax per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 96 fluid ounces per acre.

#### Southeast Recommendations

**Narrow row, drilled, or wide-row soybeans:** An in-crop application of Glyphomax will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 32 fluid ounces per acre (fl oz/acre), on 3-6" weeds is recommended. Weeds will generally be 3-6" tall 2 to 3 weeks after planting.

### **Initial Treatment**

Weed Height	Rate
(inches)	(fl oz/acre)
3 - 6	32
6 - 12	48

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of Glyphomax at 16 to 32 fluid ounces per acre may be necessary to control late flushes of weeds.

#### Sequential Application (if needed)<sup>†</sup>

Weed Height (inches)	Rate (fl oz/acre)
2 - 3	16
3 - 6	24
6 - 12	32

<sup>†</sup>Combined total application in-crop not to exceed 96 fluid ounces per acre.

Florida pusley, hemp sesbania and spurred anoda: Apply 32 fl oz/acre to weeds 2-4" for the initial application. Apply 32 oz/acre when these weeds are 3-6" tall if a sequential application is necessary.

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Morningglory, black nightshade, groundcherry, and Pennsylvania smartweed: Apply 24 fl oz/acre on 1-3" weeds, 32 fl oz/acre on 3-6" weeds, or 48 fl oz/acre on 6-12" weeds for the initial application.

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of Glyphomax. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 16 fluid ounces of Glyphomax per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 96 fluid ounces per acre.

### **Delta/Mid-South Recommendations**

**Narrow row, drilled, or wide row soybeans:** An in-crop application of Glyphomax will provide effective control of the initial stand of labeled weeds. A sequential application will be required to control new flushes of weeds. For best results, an initial application of 32 fluid ounces per acre (fl oz/acre), on 2-4" weeds is recommended. Weeds will generally be 2-4" tall 2 to 3 weeks after planting.

#### Initial Treatment

Weed Height	Rate
(inches)	(fl oz/acre)
2 - 4	32
5 - 12	48

#### Sequential Application (if needed)<sup>†</sup>

Weed Height (inches)	Rate (fl oz/acre)
2 - 3	16
3 - 6	24
6 - 12	32

<sup>†</sup>Combined total application in-crop not to exceed 96 fluid ounces per acre.

Hemp sesbania and spurred anoda: Apply a sequential treatment of 32 fl oz/acre on 3-6"weeds if necessary

Some weeds, such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, and sicklepod, with multiple germination times may require a sequential application of Glyphomax. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 16 fluid ounces of Glyphomax per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 96 fluid ounces per acre.

#### **Perennial Weeds Rate Recommendations**

A rate of 32 to 64 fluid ounces per acre (single or multiple applications) of Glyphomax will control or suppress perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly.

For best results, allow perennial weed species to reach a height of at least 6" before spraying. For additional information on perennial weeds, see the "Perennial Weed Rate Table" of this

label booklet. For some perennial species, repeat application may be required to eliminate crop competition throughout the growing season.

## Conservation Tillage, Minimum Tillage and No-Till Systems

## Corn and Soybeans (Tank Mixtures)

#### The recommendations made in this section are not registered for use in California.

When applied as recommended under the conditions described, the tank mixtures listed in this section control many emerged weeds, and give preemergence control of many annual weeds where corn or soybeans will be planted directly into a cover crop, established sod or in previous crop residues.

Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures. For mixing instructions, see the "Mixing, Additives and Application Instructions" section of this label.

Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre before, during or after planting. Do not apply these mixtures after crop emergence.

When tank mixing with residual herbicides, add an agriculturally approved nonionic surfactant at 0.5 to 1 percent by volume of spray solution. The addition of 1 to 2 percent dry ammonium sulfate by weight may increase the performance of Glyphomax.

NOTE: When using these tank mixtures, do not exceed 4 quarts of Glyphomax per acre.

### Corn

For residual control, Glyphomax may be tank-mixed with the following herbicides or combination of herbicides:

Lasso/Alachlor	Atrazine
Lariat	Cyanazine
Bullet	Simazine
Duai II	Prowl
Dual II Magnum	Pendimax*
Harness	Micro-Tech
Surpass EC	Hornet*
TopNotch	Hornet WDG
Frontier	Degree
Bicep	-
Partner <sup>1</sup>	

For improved burndown, Glyphomax may be tank-mixed with 2,4-D or dicamba. Applications of 2,4-D or dicamba must be made at least 7 days prior to planting corn. See the "Weeds Controlled" section for specific rate information.

<sup>1</sup> Partner herbicide is not registered in California.

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## Soybeans

For residual control, Glyphomax may be tank-mixed with the following herbicides or combination of herbicides:

Canopy	Partner
Command	Preview
Dual	Prowi
FirstRate*	Pursuit
Frontrow*	Pursuit Plus
Gemini	Python*
Lasso/Alachlor	Scepter
Lexone	Sencor
Linuron	Squadron
Lorox Plus	Turbo
Micro-Tech	

#### For improved burndown, Glyphomax may be tank-mixed with the following herbicides:

2.4-DB 2.4-D<sup>1</sup>

<sup>1</sup> See the label for 2,4-D for intervals between application and planting.

## **Corn and Soybeans**

Annual Weeds: For difficult-to-control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply Glyphomax at 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1 to 1.5 pints of Glyphomax per acre when weeds are less than 6 inches tall, and 2 to 3 pints when weeds are over 6 inches tall. For a complete list of annual weeds controlled, see the "Weeds Controlled" section of this label.

Perennial Weeds: At normal application times in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. See the "Weeds Controlled" section of this label for the proper stage of growth for perennial weeds.

Use of 2 to 4 quarts of Glyphomax per acre in the tank mixtures mentioned above, under these conditions provides top kill and reduces competition from many emerged perennial grass and broadleaf weeds. For emerged perennial weeds controlled, see the "Weeds Controlled" section of this label.

To obtain the desired stage of growth, it may be necessary to apply Glyphomax alone in the late summer or fall and then follow with a label-approved, seedling weed-control program at planting.

Use of these tank mixtures for bermudagrass or johnsongrass control in minimum tillage systems is not recommended. For bermudagrass control, follow the instructions under "Control of Perennial Weeds" section of this label and then use a label-approved, seedling weed-control program in a minimum tillage or conventional tillage system. For Johnsongrass control, follow instructions under "Control of Perennial Weeds" section of this label, and then use a label-approved, seedling weed-control program with conventional tillage.

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## **Preharvest Applications**

When applied as directed under the conditions described, Glyphomax controls annual and perennial weeds listed on this label prior to the harvest of corn, cotton, grain sorghum, soybeans and wheat.

For specific rates and application instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

Glyphomax may be applied by both ground and aerial application equipment. **Do not apply more than 1 quart per acre of Glyphomax by air.** See the "Application Equipment and Techniques" section of this label for instructions for ground and aerial applications.

NOTE: Do not apply to crops grown for seed. Reduction in germination or vigor may occur.

The use of Glyphomax for preharvest grain sorghum (Milo) is not registered in California.

## Corn

Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed). For ground applications, apply up to 3 quarts per acre of this product.

Precautions and Restrictions: Allow a minimum of 7 days between application and harvest.

## Cotton

**Broadcast Applications:** Glyphomax may be applied using either aerial or ground spray equipment. For ground applications with broadcast equipment, apply Glyphomax in 10 to 20 gallons of water per acre. For aerial applications, apply Glyphomax in 3 to 10 gallons of water per acre.

Glyphomax provides weed control and cotton regrowth inhibition when applied prior to the harvest of cotton. Apply 1 to 2 quarts of Glyphomax in 3 to 10 gallons of water per acre for cotton regrowth inhibition. Do not apply more than 2 quarts of Glyphomax per acre for preharvest applications. The use of additives for preharvest application to cotton is prohibited.

Glyphomax may be tank mixed with DEF 6, Folex, or Prep defoliants to provide additional enhancement of cotton leaf drop.

Allow a minimum of 7 days between application and harvest of cotton.

Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential.

Do not feed or graze treated cotton forage or hay following preharvest applications.

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## Grain Sorghum (Milo)

Make applications at 30% grain moisture or less and at least 7 days prior to harvest.

For ground applications, apply up to 2 quarts of Glyphomax per acre.

Note: The use of Glyphomax for preharvest grain sorghum (Milo) is not registered in California.

## Soybeans

Apply after pods have set and lost all green color. Allow a minimum of 7 days between application and harvest of soybeans. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

Do not graze or harvest treated crop for livestock feed within 25 days of last preharvest application.

Do not apply more than 6 quarts per acre of Glyphomax for preharvest applications.

## Wheat

Apply after the hard-dough stage of grain (30% or less grain moisture) and at least 7 days prior to harvest.

For control of quackgrass or suppression of Canada thistle, apply I quart of Glyphomax plus 0.5% nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre.

For suppression of field bindweed, apply i to 2 pints of Glyphomax plus 0.5 to 1.0 pounds a.i. of 2,4-D plus 0.5% nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre.

### Do not apply more than 1 quart per acre of Glyphomax for preharvest applications to wheat.

## Tree and Vine Crops

Glyphomax is recommended for weed control in established groves, vineyards, and orchards, or for site preparation prior to transplanting crops listed in this section. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high-volume wands, lances, orchard guns or with wiper applicator equipment, except as directed in this section. See the "Application Equipment and Techniques" section of this label for specific information on use of equipment.

When applying Glyphomax, refer to the "Weeds Controlled" section of this label and to specific recommendations in this section for rates to be used.

**NOTE:** Repeat treatments may be necessary to control weeds originating from underground parts of untreated weeds or from seeds. Glyphomax does not provide residual weed control. For subsequent weed control, use repeated applications of Glyphomax. Do not apply more than 10.6 quarts of Glyphomax per acre per year.

Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of trees or vines. Contact of Glyphomax with other than matured brown bark can result in serious crop damage.

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## Avoid painting out stumps with Glyphomax as injury resulting from root grafting may occur in adjacent trees.

Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed or cut and have not been allowed to regrow to the recommended stage for treatment.

For specific rates of applications and instructions, see the "Weeds Controlled" section of this label, and to specific recommendations which follow.

## Middles Management (For Annual Weeds in Middles Between Rows of Tree and Vine Crops)

For citrus crops, treat uniformly between trees.

- Glyphomax
- Glyphomax plus Goal

Glyphomax alone or in mixtures with Goal will control or suppress the annual weeds listed below.

Apply the recommended rates of Glyphomax, either alone or in mixtures with Goal, plus 0.5 to 1 percent nonionic surfactant by spray volume in 3 to 10 gallons of water per acre. Apply when weeds are actively growing and less than 6 inches in height or diameter. If weeds are under drought stress, irrigate prior to application. Reduced control may occur if weeds have been mowed prior to application. Up to 48 fluid ounces per acre of Glyphomax may be used to control weeds, which have been mowed, are stressed or are growing in dense populations.

Weed Species	Maximum Height or Diameter (inches)	Glyphomax (fl oz/acre)	Goal (fl oz/acre)
Barley	6	8	-
Hordeum vulgare			
Bluegrass, annual			
Poa annua			
Barnyardgrass	6	12	-
Echinochloa crus-galli	i i		
Chickweed, common			
Stellaria media			
Red Maids	i i	1	l
Calandrinia cillata			
Crabgrass	6	16	-
Digitaria spp.		' c	or 🔰
Fleabane, hairy		16 to 32 +	+ 4 to 16 1
Conyza bonariensis			
Groundsel, common		I	
Senecio vulgaris			
Junglerice			
Echinochloa colonum	}		
Lambsquarters, common			

Chenopodium album					
Pigweed, redroot					
Amaranthus retroflexus					
Rocket, London					
Sisymbrium irio	1				
Ryegrass, common					
Lolium multiflorum	1				
Shepherdspurse					
Capsella bursa-pastoris	ļ				
Sowthistle, annual					Í
Sonchus oleraceus					
Cheeseweed, common	3	12 to 32	+	4 to 16	1
Malva spp.					
Cheeseweed, common	6	16 to 32	+	4 to 16	ł
Malva spp.					
Filaree <sup>2</sup>					1
Erodium spp.					
Horseweed/Marestail	}				Į
Conyza canadensis					
Nettle, stinging					
Urtica dioica					
purslane, common <sup>2</sup>					
Purtulaca oleracea					ĺ

<sup>1</sup>The mixture of Glyphomax plus Goal is recommended when weeds are stressed or growing in dense populations.

<sup>2</sup> Suppression only.

Strips (For Annual and Perennial Weeds in Strips of Tree and Vine Crops)

## **Tank Mixtures With Residual Herbicides**

When applied as a tank mixture, Glyphomax provides control of the emerged annual weeds and control or suppression of emerged perennial weeds listed in this label. The following residual herbicides will provide preemergence control of those weeds listed in the individual product labels.

- Giyphomax plus Goai 2XL
- Glyphomax plus Karmex DF
- Giyphomax plus Krovar I
- Glyphomax plus Krovar II
- Glyphomax plus Simazine, Princep Caliber 90
- Giyphomax plus Simazine 4L
- Glyphomax plus Simazine 80W
- Glyphomax plus Solicam 80DF
- · Glyphomax plus Surflan A.S.
- Glyphomax plus Simazine (80W, Or 4L, or Princep Caliber 90) plus Surfian A.S.
- Glyphomax plus Goal 2XL plus Surflan A.S.
- Glyphomax plus Goal 2XL plus Simazine (80W, Or 4L, or Princep Caliber 90)
- Glyphomax plus Goal 2XL plus Surflan A.S. plus Simazine (80W, 4L, or Princep Caliber 90)

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Do not apply these tank mixtures in Puerto Rico.

When tank-mixing with residual herbicides, add an agriculturally approved nonionic surfactant at 0.5 to 1 percent by volume of spray solution.

Refer to the individual product labels for specific crops, rates, geographical restrictions and precautionary statements.

Read and carefully observe the label claims, cautionary statements, rates and all other information on the labels of all products.

## **Recommended Rates**

**Annual Weeds:** Apply 1 to 5 quarts per acre of Glyphomax in these tank mixtures. Use rates at the higher end of the recommended range when weeds are stressed, growing in dense populations or are greater than 12 inches tall.

**Perennial Weeds:** Apply 1 pint to 5 quarts per acre of Glyphomax in these tank mixtures to control or suppress perennial weeds. Follow the recommendations in the "Weeds Controlled" section of this label for stage of growth and application rates for specific perennial weeds.

## Glyphomax plus Goal plus Simazine/Surflan

Glyphomax plus low rates of Goal in 3-way or 4-way mixtures with simazine and/or Surflan will provide postemergence control of the weeds listed below.

Refer to the individual simazine and Surflan labels for preemergence rates, weeds controlled, precautionary statements and other important information.

Apply these tank mixtures in 3 to 40 gallons of water. Add 0.5 to 1 percent nonionic surfactant by total spray volume to the spray solution.

Apply 1 to 5 quarts per acre of Glyphomax plus 4 to 48 fluid ounces per acre of Goal plus labeled rates of simazine and/or Surflan to control the following weeds:

Common Name	Scientific Name
Barley, wild	Hordeum leporinum
Bluegrass, annual	Poa annua
Cheeseweed, common	Malva spp.
Chickweed, common	Stellaria media
Filaree <sup>1</sup>	Erodium spp.
Fleabane, hairy	Conyza bonariensis
Groundsel, common	Senecio vulgaris
Horseweed/Marestail	Conyza canadensis
Nettle, stinging	Urtica dioica
Pineappleweed	Matricaria matricariodes
Rocket, London	Sisymbrium irio
Shepherdspurse	Capsella bursa-pastoris
Sowthistle, annual	Sonchus oleraceus

<sup>1</sup>Use a minimum of 1.5 quarts of Glyphomax in these mixtures.

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**NOTE:** This recommendation does not preclude the use of Goal in these mixtures at higher, labeled rates for preemergence weed control.

## Perennial Grass Suppression (Orchard Floors)

When applied as directed, Glyphomax will suppress vegetative growth as indicated below.

## Bahiagrass

Glyphomax will provide significant inhibition of seedhead emergence and will suppress vegetative growth for a period of approximately 45 days with a single application and approximately 120 days with sequential applications. Apply Glyphomax 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. Applications must be made prior to seedhead emergence. Apply 6 fluid ounces of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 10 to 25 gallons of water per acre.

Sequential applications of Glyphomax plus nonionic surfactant may be made at approximately 45-day intervals to extend the period of seedhead and vegetative growth suppression. For continued seedhead suppression, sequential applications must be made prior to seedhead emergence. Apply no more than 2 sequential applications per year. As a first sequential application, apply 4 fluid ounces of Glyphomax plus nonionic surfactant. A second sequential application of 2 to 4 fluid ounces may be made approximately 45 days after the last application.

## Bermudagrass

For burndown, apply 1 to 2 quarts of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 20 gallons of water per acre. Use 1 quart of Glyphomax in 3 to 20 gallons of water per acre east of the Rocky Mountains. Use 1 to 2 quarts of Glyphomax in 3 to 10 gallons of water per acre west of the Rocky Mountains. Use this treatment only if reduction of the bermudagrass stand can be tolerated. When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

**Suppression only (east of the Rocky Mountains):** Apply 6 to 16 fluid ounces of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 20 gallons of water per acre no sooner than 1 to 2 weeks after full green-up. Mowing prior to application may occur provided a minimum height of 3 inches is maintained. Rates of 6 to 10 fluid ounces of Glyphomax plus nonionic surfactant should be used in shaded conditions or where a lesser degree of suppression is desired. Sequential applications may be made when regrowth occurs and bermudagrass injury and stand reduction can be tolerated.

**Suppression only (west of the Rocky Mountains):** Apply 16 fluid ounces of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre to bermudagrass up to 6 inches in height and no sooner than 1 to 2 weeks after full green-up. Mowing prior to application may occur provided a minimum height of 3 inches is maintained. Sequential applications may be made when regrowth occurs and bermudagrass injury and stand reduction can be tolerated.

## **Cool Season Grass Covers**

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 8 fluid ounces of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 10 to 20 gallons of water per

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acre. For best suppression, add ammonium sulfate to the spray solution at a rate of 2 percent by weight or 17 pounds per 100 gallons of spray solution.

For suppression of Kentucky bluegrass covers, apply 6 fluid ounces of Glyphomax plus 0.5 to 1 percent nonionic surfactant. Do not add ammonium sulfate.

For best results, mow cool-season grass covers in the spring to even their height and apply the recommended rate of Glyphomax 3 to 4 days after mowing. Avoid treating cool season grass covers under poor growing conditions, such as drought stress (drip irrigation), disease or insect damage.

## Low Volume Application (Florida and Texas)

For burndown or control of the weeds listed, apply the recommended rates of Glyphomax plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 30 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre.

## **Annual Weeds**

**Goatweed:** Apply 2 to 3 quarts per acre of Glyphomax plus 17 pounds of ammonium sulfate per 100 gallons of water plus 0.5 to 1 percent nonionic surfactant by total spray volume. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 2 quarts per acre when plants are less than 8 inches tail and 3 quarts per acre when plants are greater than 8 inches. If goatweed is greater than 8 inches tall, the addition of Krovar II or Karmex may improve control. Use labeled rates for these residual products.

Read and carefully observe the label claims, cautionary statements, rates and all other information on the Krovar II and Karmex labels.

## **Perennial Weeds**

Apply when weeds are actively growing and at the growth stages listed in the "PERENNIAL Weeds Controlled" section of this label. If perennial weeds are mowed, allow weeds to regrow to the recommended stage of growth.

S = SuppressionB = BurndownPC = Partial ControlC = Control

Weed Species	Glyphomax Rate Per Acre			
	1 qt	2 qt	3 qt	5 qt
Bermudagrass	В	•	PĆ	C
Guineagrass				
Texas and Florida Ridge	В	С	С	С
Florida Flatwoods	•	В	1 C	C
Paragrass	В	С	С	С
Torpedograss	S	•	PC	С

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## Tree Crops

**Citrus** <sup>5</sup>: calamondin, chironja, citron, grapefruit, kumquat, lemon, lime, mandarin orange, orange, pummelo, tangelo, tangerine, tangors.

**Nuts** <sup>2</sup>: almond, beechnut, Brazil nut, butternut, cashew, chestnuts, chinquapin, filbert, hazel nut, hickory nut, macadamia, pecan, pistachio, walnut.

Pome Fruit 5: apple, loquat, mayhaw, pear, quince.

Stone Fruit <sup>3</sup>: apricots, cherries, nectarines, olives, peaches, plums/prunes.

For cherries, any application equipment listed in this section may be used in all states.

For citron and olives, apply as a directed spray only.

Any application equipment listed in this section may be used in apricots, nectarines, peaches and plums/prunes growing in Arizona, California, Colorado, Idaho, Kansas, Kentucky, New Jersey, North Dakota, Oklahoma, Oregon, Texas, Utah and Washington, except for peaches grown in the states specified in the following paragraph. In all other states use wiper equipment only.

For **peaches** grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom sprayer or shielded wiper applicator, which prevents any contact of Glyphomax with the foliage or bark of trees. Apply no later than 90 days after first bloom. Applications made after this time may result in severe damage. Remove suckers and low-hanging limbs at least 10 days prior to application. Avoid applications near trees with recent pruning wounds or other mechanical injury. Apply only near trees which have been planted in the orchard for 2 or more years. Extreme care must be taken to ensure no part of the peach tree is contacted.

**Tropical Fruit:** acerola <sup>1</sup>, atemoya <sup>1</sup>, avocado <sup>1</sup>, banana <sup>5</sup>, (plantains) <sup>5</sup>, breadfruit <sup>1</sup>, canistel <sup>1</sup>, carambola <sup>1</sup>, cherimoya <sup>1</sup>, cocoa beans <sup>1</sup>, coffee <sup>4</sup>, dates <sup>1</sup>, figs <sup>1</sup>, genip <sup>1</sup>, guava <sup>5</sup>, jaboticaba <sup>1</sup>, jackfruit <sup>1</sup>, longan <sup>1</sup>, lychee <sup>1</sup>, mango <sup>1</sup>, mayhaw <sup>1</sup>, papaya <sup>5</sup>, passion fruit <sup>1</sup>, persimmons <sup>1</sup>, pomegranate <sup>1</sup>, sapodilla <sup>1</sup>, sapote <sup>1</sup>, soursop <sup>1</sup>, sugar apple <sup>1</sup>, tamarind <sup>1</sup>, tea <sup>1</sup>. In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.

#### NOTE:

<sup>1</sup> Allow a minimum of 14 days between last application and harvest.

<sup>2</sup> Allow a minimum of 3 days between last application and harvest of these crops, except pistachio nuts. For pistachio nuts allow a minimum of 21 days between last application and harvest.

<sup>3</sup>Allow a minimum of 17 days between last application and harvest.

<sup>4</sup>Allow a minimum of 28 days between last application and harvest.

<sup>5</sup>Allow a minimum of 1 day between last application and harvest.

Vine Crops

#### Kiwi Fruit

Grapes: Any variety of table, wine or raisin grape may be treated with any equipment listed in this section.

Applications should not be made when green shoots, canes, or foliage are in the spray zone.

Allow a minimum of 14 days between last application and harvest.

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In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury.

## **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

## Warranty Disclaimer

Dow AgroSciences warrants that Glyphomax conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## Inherent Risks of Use

It is impossible to eliminate all risks associated with use of Glyphomax. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tomadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

## Limitation of Remedies

The exclusive remedy for losses or damages resulting from Glyphomax (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of Glyphomax unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

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