

PM 25

524-382

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

MAR 18 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

DR RUSSELL P. SCHNEIDER
MONSANTO COMPANY
AGENT FOR: MONSANTO AGRICULTURAL CO.
700 14TH ST., N.W. SUITE 1100
WASHINGTON, D.C. 20005

Subject: Label Amendment Submission of 9/20/93 Response to PR Notice 93-7
EPA Reg. No. 524-382
RANGER HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

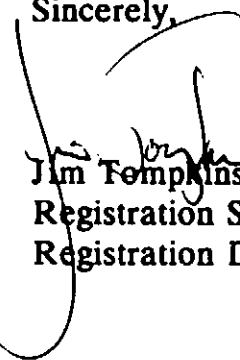
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Dr Russell P Schneider
MONSANTO CO
AGENT FOR: MONSANTO AGRICULTURAL CO
700 14TH ST, N.W. SUITE 1100
WASHINGTON DC 20005

Comment for: EPA Reg Nr.524-382
RANGER HERBICIDE

The following specific comments pertain to your WPS
labeling submission concerning the product
cited above:

Remove the statement "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." from its current position within
the Agricultural Use Box and place it above the Agricultural
Use Box.

Correct the typographical errors circled on your proposed
label.

RANGER®
Herbicide by Monsanto

For control of quackgrass and listed weeds in annual cropping systems, pastures and sods.

AVOID CONTACT WITH FOLIAGE OF CROP OR OTHER DESIRABLE VEGETATION, SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT.

Complete Directions for Use

EPA Reg. No. 524-382

® Ranger is a registered trademark of Monsanto Company.

1990-1 892.20-000.25/53

Read the entire label before using this product.

Use only according to label instructions

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

REFORMULATION IS PROHIBITED. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in

ACCEPTED
with COMMENTS
In EPA Letter Dated
MAR 18 1994

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

524-382

incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

DANGER! PELIGRO!

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.)

CAUSES EYE BURNS.

HARMFUL IF SWALLOWED OR INHALED.

Do not get in eyes, on skin or on clothing.

~~Wear goggles or face shield and rubber gloves in transferring and mixing and when adjusting, repairing or cleaning equipment.~~

Avoid breathing vapor or spray mist.

~~Wash thoroughly with soap and water after handling.~~

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF INHALED, remove individual to fresh air. Get medical attention if breathing difficulty develops.

IF SWALLOWED, this product will cause gastrointestinal tract irritation. Immediately dilute by swallowing water or milk. Get medical attention.

Personal Protective Equipment:

Applicators and other handlers (other than mixers and loaders) must wear long-sleeved shirt and long pants, shoes plus socks, and protective eyewear. Mixers and loaders must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eyewear. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

User Safety Recommendation:
Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

Environmental Hazards

Do not apply directly to water or wetland (swamps, bogs, marshes or potholes). Do not contaminate water when disposing of equipment washwaters.

Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fiberglass, plastic and 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.

ACTIVE INGREDIENT:

*Glyphosate, N-(phosphonomethyl) glycine,
in the form of its isopropylamine salt28.6%
INERT INGREDIENTS:71.4%
100.0%

*Contains 324 grams per litre or 2.7 pounds per U.S. gallon of the active ingredient, glyphosate, in the form of its isopropylamine salt. Equivalent to 240 grams per litre or 2 pounds per U.S. gallon of the acid, glyphosate.

Product protected by U.S. Pat. Nos. 3,799,758, 4,405,531, and 4,840,550. Other patents pending.

No license granted under any non-U.S. patent.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency

responsible for pesticide regulations.

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 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.

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, waterproof gloves, shoes plus socks, and protective eyewear.

Storage and Disposal

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

STORAGE:

At temperatures below 50°F, the viscosity of this product may increase to a point that pouring and mixing could be difficult.

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 retains vapor and product residue. Observe all labeled safeguards until container is destroyed.

Do not reuse container. Triple rinse container. Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state or local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Ranger is a postemergence herbicide used in agricultural systems for control of quackgrass and other weeds listed on this label.

This product enters the plant through the foliage and moves throughout the plant. Visual effects of control are a gradual wilting or yellowing of the plant, which advances to complete browning of above-ground growth and deterioration of affected underground plant parts. Visible symptoms will usually develop on labeled weeds within 2 to 4 days after application, but may not occur for 7 or more days. Extremely cool or cloudy weather following treatment may slow activity of this product and delay the visual effects of control.

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

APPLICATION PRECAUTIONS AND WARNINGS

- Apply only when there is no hazard from spray drift since very small quantities of spray which may not be visible may severely injure susceptible crops or desirable vegetation.
- The likelihood of injury occurring to adjacent crops from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions including lesser wind velocities will favor spray drift.
- Do not feed or forage vegetation from treated areas within 8 weeks after application.

- Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly recommended in this labeling. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance. Use of this product in any manner not consistent with this label may result in injury to persons, animals, or crops, or other unintended consequences.

Timing of Application

This product should be applied postemergence to vigorously growing weeds when they have reached the recommended size given in the "WEEDS CONTROLLED" section of this label. Application should be delayed until maximum emergence of the target weeds.

For quackgrass control in the fall, do not till between harvest and application. For quackgrass control in the spring, do not till in the fall or spring prior to application. A tillage operation following application may give improved quackgrass control. Allow 3 or more days after application before tillage.

When applied as directed under the conditions described, this product controls the weeds listed on this label, prior to the emergence of the following crops.

Alfalfa	Forage legumes
Barley	Oats
Corn (all)	Wheat
Forage grasses	

WEEDS CONTROLLED

FOR CONTROL OF QUACKGRASS AND ASSOCIATED ANNUAL WEEDS, APPLY 3 PINTS PER ACRE OF THIS PRODUCT IN RECOMMENDED WATER VOLUMES WHEN THE PLANTS HAVE REACHED THE 3- TO 4- LEAF STAGE AND ARE AT LEAST 6 TO 8 INCHES HIGH. FOR QUACKGRASS CONTROL IN SODS WHICH HAVE BEEN ESTABLISHED FOR 3 YEARS OR LONGER, USE 5 TO 6 PINTS PER ACRE. THIS PRODUCT MAY BE TANK-MIXED WITH 2,4-D OR BANVEL FOR FORAGE LEGUME CONTROL IN SOD SITUATIONS. REFER TO THE SPECIFIC PRODUCT LABELS FOR USE RATES, CROP ROTATION RESTRICTIONS AND CAUTIONARY STATEMENTS.

When applied as directed under the conditions described, this

product controls the following annual and perennial weeds listed below:

RECOMMENDED RATES AND WEEDS CONTROLLED

ANNUAL WEED SPECIES	MAXIMUM HEIGHT	RATE PER ACRE
Foxtail Setaria spp.	12"	12 oz.
Barnyardgrass Echinochloa crus-galli	6"	18 oz.
Bluegrass, annual Poa annua		
Brome, downy* Eromus tectorum		
Mustard, blue Chorispora tenella		
Mustard, tansy Descurainia pinnata		
Mustard, tumble Sisymbrium altissimum		
Mustard, wild Sinapis arvensis		
Spurry, umbellatum Holsteum umbellatum		
Barley Hordeum vulgare	12"	
Rye Secale cereale		
Sandbur, field Cenchrus spp.		
Shattercane Sorghum bicolor		

Stinkgrass

Eragrostis cilianensis

Wheat

18"

Triticum aestivum

Morningglory

3"

24 oz.

Ipomea spp.

Bluegrass, bulbous

6"

24 oz.

Poa bulbosa

Cheat

Bromus secalinus

Chickweed, mouseear

Cerastium vulgatum

Corn, volunteer

Zea mays

Groundsel, common

Senecio vulgaris

Horseweed/Marestail

Conyza canadensis

Pennycress, field

Fanweed

Thlaspi arvense

Rocket, London

Sisymbrium irio

Ryegrass, Italian

Lolium multiflorum

Shepherdspurse

Capsella bursa-pastoris

Buttercup

12"

Ranunculus spp.

Cocklebur

Xanthium pensylvanicum

Crabgrass

Digitaria spp.

Dwarf dandelion

Krigia cespitosa

False flax, smallseed

Camelina microcarpa

Lambsquarters, common

Chenopodium album

Oats, wild

Avena fatua

Panicum, fall

Panicum dichotomiflorum

Panicum, Texas

Panicum texanum

Pigweed, redroot

Amaranthus retroflexus

Pigweed, smooth

Amaranthus hybridus

Witchgrass

Panicum capillare

* For control in no-till systems, use 24 fluid ounces per acre.

PERENNIAL
WEED SPECIES

GROWTH
STAGE

RATE PER
ACRE/PINTS

Fescue (tall)

Festuca arundinacea

Fall applications

4 to 12"

3

Spring applications

4 to 12"

5 to 6

Muhly, wirestem

Muhlenbergia frondosa

8" or more

3 to 6

Orchardgrass

Dactylis glomerata

Fall applications only 4 to 12" 5 to 6

Quackgrass

Agropyron repens

In cropping situations 3 to 4 leaves 3

In established sods* 3 to 4 leaves 5 to 6

* 3 years or older.

™Banvel is a trademark of Sandoz, Inc.

APPLICATION EQUIPMENT

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

This product may be applied using either ground or aerial spray equipment. Use extreme care to avoid misting or drifting of herbicide solution onto foliage, green stems or fruit of desirable crops, trees, or plants during both growing and dormant periods, since even small quantities of spray can cause severe plant injury.

Ground Application: Apply recommended rates of this product in 5 to 30 gallons of water per acre as a broadcast spray. For optimum spray distribution and coverage, use flat fan or low-volume flood nozzles. When using flood nozzles, space them no more than 40 inches apart and ensure double overlap of spray pattern. Refer to the manufacturer's recommendations for correct pressure and nozzle height above the target canopy. Avoid pressure and nozzle combinations which produce fine droplets or mist susceptible to drift.

Use appropriate marking devices to ensure uniform spray coverage and best results from this product.

Aerial Application: Apply the recommended rates of this product in 3 to 15 gallons of water per acre as a broadcast spray. DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR WHEN OTHER CONDITIONS WILL FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT WAS 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 airstream and do not increase spray volume by increasing nozzle pressure.

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

MIXING INSTRUCTIONS

Fill the spray tank to about 3/4 of the desired volume with clean water. Add the recommended amount of this product, then complete the filling process while maintaining agitation. Remove the hose from the mix tank immediately after filling to avoid siphoning back into the carrier source. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, terminate by-pass and return lines at the tank bottom and/or use an agriculturally approved anti-foam or defoaming agent.

Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance. Do not add additional surfactant to the spray solution when using this product.

NOTE: Reduced results may occur if water containing soil is used, such as water from ponds and unlined ditches

When mixing in water below 50°F without vigorous agitation, this product should be premixed with water in a ratio of two parts water to one part this product.

SPRAYER CLEANUP

Clean sprayer and parts immediately after using this product by thoroughly flushing with water.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEARS ARE THE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification

MIL-C-38413 may prevent corrosion.

892.20-000.25/53

In case of emergency involving this product, Call Collect,
day or night, (314) 694-4000.

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MONSANTO COMPANY
AGRICULTURAL PRODUCTS
ST. LOUIS, MISSOURI 63167 U.S.A.