

FILE



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

MAY 17 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Nancy Huebl
SANDOZ AGRO INC.
1300 EAST TOUHY AVE
DES PLAINES, IL 60018

Subject: Label Amendment Submission of 07/09/93 in Response to PR Notice 93-7
EPA Reg. No. 55947-38
BANVAL HERBICIDE (THE POTASSIUM FORMULATION)

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.

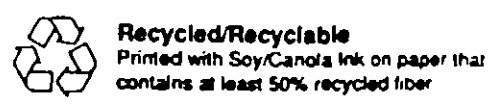
WHAT THIS ACCEPTANCE MEANS:

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.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Nancy Huebl
SANDOZ AGRO INC
1300 EAST TOUHY AVE
DES PLAINES IL 60018

Comment for: EPA Reg Nr.55947-38
BANVEL HERBICIDE (THE POTASSIUM FORMULATION)

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.

Delete the crossed-out statements on your proposed label.
They are redundant statements or phrases.

(Container Label)

ACCEPTED
with COMMENTS
in EPA Letter Dated

MAY 17 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
55947-38

BANVEL Herbicide
POTASSIUM FORMULATION

Active Ingredient:

Potassium salt of dicamba
(3,6-dichloro-p-anisic acid)* 43.3%

Inert Ingredients: 56.7%

TOTAL 100.0%

*This product contains 37.0% 3,6-dichloro-p-anisic
acid (dicamba) or 4 pounds per gallon (480 g/L).

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.)

See side panel for additional precautionary statements

EPA Reg. No. 55947-38

EPA Est. No. 55947-TX-1

Net Contents:

BEST AVAILABLE COPY

SANDOZ AGRO, INC.
1300 EAST TOUHY AVENUE
DES PLAINES, IL 60018

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive, causes eye damage. Do not get in eyes, on skin, or on clothing. ~~Wear goggles or face shield when handling.~~ Harmful if swallowed. ~~Wash thoroughly after handling.~~ In case of contact, wash skin with soap and water; for eyes, flush with water for 15 minutes and get medical attention.

Personal Protective Equipment:

Applicators and other handlers must wear:

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

Engineering controls statements:

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

BEST AVAILABLE COPY

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Keep out of lakes, streams or ponds. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Apply this product only as directed on label.

DIRECTIONS FOR USE

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

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

BEST AVAILABLE COPY

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 48 hours.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Protective eyewear

Do not apply this product through any type of irrigation system. Refer to the DIRECTIONS FOR USE booklet attached to this container for proper use directions and additional precautionary statements.

BEST AVAILABLE COPY

STORAGE AND DISPOSAL

PROHIBITIONS

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

STORAGE

Store in original container in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Plastic or Metal: After triple rinsing (or equivalent), offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIMITATION OF LIABILITY

NOTICE: Read this Limitation of Warranty and Limitation of Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sandoz or seller. All such risks shall be assumed by buyer or user. Sandoz warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, under normal use conditions, subject to the risks described above. **Sandoz makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty.** In no event shall Sandoz or seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **The exclusive remedy of the user or buyer, and the exclusive liability of Sandoz or seller for any and all claims, losses, injuries or damages (including claims based on breach of warranty, contract, negligence, tort, strict liability or otherwise) resulting from the use or handling of this product, shall be the return of the purchase price of the product or, at the election of Sandoz or seller, the replacement of the product.** Sandoz and seller offer this product, and buyer and user accept it, subject to the foregoing limitations of warranty and limitation of liability, which may not be modified by any oral or written agreement.

(Directions for Use)

BANVEL® HERBICIDE
(The Potassium Formulation)

EPA Reg. No. 55947-38

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER
INCONSISTENT WITH ITS LABELING.

For any requirements specific to your State or Tribe, consult the agency responsible for
pesticide regulation.

BEST AVAILABLE COPY

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.

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Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Protective eyewear

THIS LABEL MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

SANDOZ AGRO, INC.
1300 EAST TOUHY AVENUE
DES PLAINES, IL 60018

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**BEFORE USING BANVEL HERBICIDE
READ AND FOLLOW THE PRECAUTIONS
APPEARING ON THE CONTAINER**

IMPORTANT

The following directions apply to all uses of BANVEL herbicide. Additional precautions and restrictions will be found in each specific use section.

Do not contaminate irrigation ditches or water used for domestic purposes.

SENSITIVE CROP PRECAUTIONS: BANVEL herbicide may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to BANVEL herbicide during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING BANVEL HERBICIDE.

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of BANVEL herbicide with the roots of desirable plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops. However, always make applications when there is some air movement to determine the direction and distance of possible spray drift. Leave an adequate buffer between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays. Agriculturally approved drift-reducing additives may be used.
- Do not apply BANVEL herbicide in the vicinity of sensitive crops when the temperature on the day of application is expected to exceed 85°F as drift is more likely to occur.
- Do not use aerial equipment to apply BANVEL herbicide when sensitive crops and plants are growing in the vicinity of area to be treated.
- To avoid injury to desirable plants, equipment used to apply BANVEL herbicide should be thoroughly cleaned (see PROCEDURE FOR CLEANING SPRAY EQUIPMENT on pages ____) before reusing to apply any other chemicals.

All in-crop uses of BANVEL herbicide are intended for a normal growing interval between planting and harvest. If this interval is shortened, such as in cover crops that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to

hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations.

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of BANVEL herbicide or tank mixes of BANVEL herbicide plus 2,4-D amine.

- 1) Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
- 2) Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out of the spray tank through the boom.
- 4) Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply BANVEL herbicide as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. BANVEL herbicide tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

- 5) Complete step 1.
- 6) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

REFER TO THE CONTAINER LABEL FOR INSTRUCTIONS CONCERNING DISPOSAL OF WASTE AND CLEANING RINSES.

MIXING AND APPLICATION

UNLESS OTHERWISE SPECIFIED UNDER INDIVIDUAL USE HEADINGS OF THIS BOOKLET, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF BANVEL HERBICIDE. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES AND TIMINGS.

BANVEL herbicide is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (see COMPATIBILITY TEST on page) should be made prior to tank mixing.

Ground or aerial application equipment which will give good spray coverage of weed foliage should be used. **HOWEVER, DO NOT USE AERIAL APPLICATION EQUIPMENT IF SENSITIVE CROPS ARE GROWING IN THE VICINITY OF THE AREA TO BE TREATED.**

Apply 5 to 50 gallons of diluted spray per treated acre when using ground application equipment, or 3 to 10 gallons of diluted spray per treated acre when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays. Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

BANVEL herbicide should not be applied during periods of gusty wind or when wind is in excess of 15 mph as uneven spray coverage may occur.

Avoid disturbing (e.g. cultivating or mowing) treated areas for at least 7 days following application.

BAND TREATMENTS

BANVEL herbicide may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per treated acre} = \text{Band RATE per treated acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per treated acre} = \text{Band VOLUME per treated acre}$$

COMPATIBILITY TEST

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint of Spray Carrier
(Assuming Volume is 25 Gallons per Acre)

HERBICIDE FORMULATION	RATE PER ACRE	LEVEL TEASPOONS
Dry	1 lb.	1 1/2
Liquid	1 pt.	1/2

If herbicide(s) do not ball-up or form flakes, sludge, gels, oily film or layers, or other precipitates, then the tested spray mix is compatible. Usually incompatibility in any of the above described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the above COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

GENERAL WEED LIST

This is a general list of weeds which may be treated with BANVEL herbicide in accordance with this label as recommended under the rates and timing sections of the Individual Use Headings. Proper usage of this product will give control or growth suppression of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species including:

(list begins on following page)

ANNUALS

amaranth, spiny
(spiny pigweed)
aster, slender
beggarweed, Florid
broomweed,
+ buckwheat, tartary
+ buckwheat, wild
buffalobur
burclover, California
buttercup, roughseed
carpetweed,
catchfly, nightflowering
+ chamomile, corn
chickweed, common
clovers (annual)
+ cockle, corn
+ cockle, cow
+ cocklebur,
croton, tropic
croton, woolly
cucumber, wild
daisy, English
eveningprimise, cutleaf
fleabane, annual
henbit
jimsonweed
+ knawel (German moss)
+ knotweed
+ kochia
+ ladysthumb
+ lambsquarters,
+ mallow, common
mallow, Venice
mayweed
morningglory, ivyleaf
morningglory, tall
+ mustard, tansy
mustard, wild
mustards (yellowtops)
+ nightshade, black
pennycress, field
(fanweed, frenchweed,
stinkweed)

pepperweed, Virginia
(peppergrass)
pigweed, prostrate
+ pigweed, redroot
(carelessweed)
+ pigweed, rough
pigweed, smooth
+ pigweed, tumble
poorjoe
puncturevine
+ purslane, comwn
pusley, Florida
+ ragweed, common
+ ragweed, giant
(buffaloweed)
rubberweed, bitter
(bitterweed)
sesbania, hop
shepherdspurse
sicklepod
sida, prickly (teaweed)
+ smartweed, green
+ smartweed, Pennsylvania
sneezeweed, bitter
+ sowthistle, annual
sowthistle, spiny
spanishneedles
spikeweed, common
spurge, prostrate
spurry, corn
starbur, bristly
sumpweed, rough
+ sunflower, common (wild)
+ sunflower, volunteer
thistle, Canada (seedling)
+ thistle, Russian
+ velvetleaf
waterhemp
waterprimrose, winged
wormwood, annual

+ These ANNUALS, when found in small grain crops, are controlled at recommended rates listed in the SMALL GRAINS section, pages _____

BIENNIALS

burdock, common
carrot,, wild (Queen Anne's lace)
cockle, white
eveningprimrose, common
geranium, Carolina
knapweed, diffuse
knapweed, spotted
mallow, dwarf

plantain, bracted
ragwort, tansy
starthistle, yellow
sweetclover
teasel
thistle, bull
thistle, musk
thistle, plumeless

PERENNIALS

*alfalfa
artichoke, Jerusalem
aster, spiny
aster, whiteheath
bedstraw, smooth
bindweed, field
bindweed, hedge
blueweed, Texas
chicory
*clover, hop
cress, hoary (whitetop)
*dandelion, common
*dock, broadleaf (bitter dock)
dock, curly
dogbane, hemp
*dogfennel (cypressweed)
eupatorim, late (thoroughwort)
fern, bracken
garlic, wild
goldenrod, Canada
goldenrod,,Missouri
goldenweed,
hawkweed
horsenettle, Carolina
ironweed
knapweed, black
knapweed, Russian
lespedeza
lupine, silvery
mare's tail (horseweed)
milkweed, climbing
milkweed, common
milkweed ,honeyvine
milkweed, western whorled
nettle, stinging

*bursage, skeletonleaf
(bur ragweed, povertyweed)
bursage, woollyleaf
(lakeweed)
*buttercup, tall
campion, bladder
chickweed, field
chickweed, mouseear
nightshade, silverleaf
(white horsenettle)
onion, wild
*plantain, buckhorn
*plantain, broadleaf
pokeweed
ragweed , western
redvine
smartweed, swamp
snakeweed, broom
*sorrel, red (sheep sorrel)
sowthistle
sowthistle, perennial
spurgy, leafy
sundrop, halfshrub
(eveningprinwose)
thistle, Canada
toadflax, Dalmatian
trumpetcreeper (buckvine)
vetch
waterhemlock
waterprimrose, creeping
*woodsorrel, common yellow
wormwood, common
wormwood, Louisiana
*yankeeweed
yarrow, common

*Noted PERENNIALS may be controlled using BANVEL herbicide at rates lower than those recommended for other listed perennial weeds. (See application rates and timings on pages _____.)

WOODY

alder
ash
aspen
basswood
beech
birch
blackberry
blackgum
cedar
cherry
chinquapin
condalia, lotebush (lote)
cottonwood
creosotebush
cucumbertree
dewberry
dogwood
elm
grape
guava
hawthorn (thornapple)
hemlock
redcedar, eastern
rose, McCartney
rose, multiflora
sagebrush, fringed
sassafras
serviceberry
snowberry, western
(buckbrush)
spicebush
spruce

hickory
honeysuckle
hornbeam
huckleberry
huisache
ivy, poison
kudzu
locust, black
maple
melaleuca
mesquite
oak
oak, poison
olive, autumn
olive, Russian
peppertree,, Brazil
(Florida holly, Schinus)
persimmon, eastern
pine
plum, sand (wild plum)
poplar
rabbitbrush
sumac
sweetgum
sycamore
tarbush
waxmyrtle
willow
witchhazel
Yaupon
yucca

FIELD AND SILAGE CORN
(Conventional, Minimum, and No Tillage)

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____**

Direct chemical contact with corn seed must be avoided. Corn seed should be placed 1 1/2 inches or more below the soil surface if applications are to be made prior to corn emergence. If the corn seeds are less than 1 1/2 inches below the surface, delay application until the corn has spiked.

BANVEL herbicide preemergence treatments do not require mechanical incorporation to become active. To move this herbicide into the weed germination zone, a shallow mechanical incorporation is recommended for applications which are not followed by adequate rainfall or sprinkler irrigation. Cultivations made due to soil crusting should be shallow.

A PREEMERGENCE TO EARLY POSTEMERGENCE application may be followed by one POSTEMERGENCE application of BANVEL herbicide during a growing season.

Applications of BANVEL herbicide to corn during periods of rapid growth, may result in temporary leaning. Corn will usually be erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Prior to the ensilage (milk) stage of the crop, do not harvest or graze corn for dairy or beef feed.

AVOID SPRAY DRIFT: Observe the following precautions in addition to those appearing on pages 4 and 5 when applying POSTEMERGENCE sprays of BANVEL herbicide to corn if sensitive crops are growing nearby:

- Use coarse sprays. Select nozzles which are designed to produce minimal amounts of fine spray particles. Keep the spray pressure below 20 psi and the spray volume at or above 20 gpa unless otherwise required by the manufacturer of drift-reducing nozzles.
- Use drop pipes (drop nozzles) when corn is 8 inches or more in height to direct the spray beneath the lower leaves of the corn and onto the weeds and soil.
- Do not apply BANVEL herbicide sprays when soybeans are growing nearby if:
 - 1) corn is more than 24 inches tall,
 - 2) soybeans are more than 10 inches tall,
 - 3) soybeans have begun to bloom,whichever comes first.

WEEDS CONTROLLED

BANVEL herbicide, when applied at recommended rates, will control many ANNUAL broadleaf weeds or give growth suppression of many PERENNIAL broadleaf weeds commonly found in corn. (Refer to WEED LIST on pages ____.)

Control of cocklebur, velvetleaf and jimsonweed resulting from a preemergence application may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

If wild mustards, sunflower, or velvetleaf are over 5 inches tall or are growing under drought stress at time of application, adding an agriculturally approved surfactant to BANVEL herbicide or tank mixing BANVEL herbicide plus 2,4-D herbicide will improve control. Refer to tank mix treatments on page ____.

PREEMERGENCE TO EARLY POSTEMERGENCE USES

Application of BANVEL herbicide may be made immediately after planting until corn is no more than 5 inches tall, with the application rate depending on soil texture and organic matter content. For best performance, make application when ANNUAL broadleaf weeds are emerging from the soil.

SOIL TEXTURE	BROADCAST RATE PER TREATED ACRE	
	2 1/2% or less organic matter	more than 2 1/2% organic matter
COARSE SOILS		
sand, sandy loam and loamy sand	*1/2 pt. (1/4 lb. a.i.)	*3/4 pt. (3/8 lb. a.i.)
MEDIUM SOILS		
loam, silt loam, silt, sandy clay and sandy clay loam	*3/4 pt. (3/8 lb. a.i.)	1 pt (1/2 lb. a.i.)
FINE SOILS		
silty clay, silty clay loam, clay loam and clay	*1 pt. (1/2 lb. a.i.)	1 pt. (1/2 lb. a.i.)
ALL SOILS CONTAINING GREATER THAN 8% ORGANIC MATTER - USE 1 PINT (1/2 lb. a.i.) PER TREATED ACRE.		

*Make application after corn and weeds have begun to emerge.

POSTEMERGENCE USES

Application of BANVEL herbicide may be made any time after weeds have emerged and are actively growing, but before corn is 36 inches tall or 15 days before tassel emergence, whichever comes first. For best performance, make application when weeds are small, less than 3 inches tall. Drop nozzles should be used to direct spray beneath the corn canopy if weeds are covered by the corn leaves. Poor control of some weed species may result if weeds are greater than 12 inches tall at time of application.

BROADCAST RATE PER TREATED ACRE: 1/2 pint (1/4 lb. a.i.)

OVERLAY (SEQUENTIAL) TREATMENTS

BANVEL herbicide may be applied to ground previously treated with one or more of the following herbicides:

	Rates expressed as maximum lbs. a.i. per treated acre
alachlor (Lasso®)	4
atrazine	4
butylate (Sutan®)	6
cyanazine (Bladex®)	4
EPTC (Eradicane®)	6
glyphosate (Roundup®)	5
metolachlor (Dual®)	3
paraquat	1
pendimethalin (Prowl®)	2
propachlor (Bexton®, Ramrod®)	6
simazine (Princep®)	4

Read and follow the label of each of the above products for precautionary statements, directions for use and other restrictions.

TANK MIX TREATMENTS

BANVEL herbicide may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, and other restrictions.

BANVEL PLUS ATRAZINE: Application may be made immediately after planting, but before grasses are 1-1/2 inches tall. Use 1.25-4.0 lbs. a.i. atrazine per treated acre.

BANVEL PLUS BLADEX: Application may be made immediately after planting, but before grasses are 1-1/2 inches tall and the corn is not beyond the four true leaf stage. Use 1.25-4.0 lbs. a.i. Bladex per treated acre for preemergence treatments or 1.25-2.0 lbs. a.i. Bladex per treated acre for postemergence treatments. **AFTER CORN EMERGENCE, USE ONLY THE BLADEX 80W FORMULATION.**

BANVEL PLUS 2,4-D: Tank mix 1/8-1/4 lb. 2,4-D acid equivalent (amine or Low Volatile ester) per treated acre. Use drop pipes (drop nozzles) if the crop is taller than 8 inches. Keeping the spray off the corn leaves and out of the whorl will reduce chances of crop injury and improve spray coverage of weed foliage.

BANVEL PLUS DUAL: Application may be made immediately after planting, but before weeds and corn emerge. Make applications only on medium or fine textured soils containing greater than 2-1/2% organic matter. Use 1.5-3.0 lbs. a.i. Dual per treated acre.

BANVEL PLUS LASSO: Application may be made immediately after planting and until grasses reach the two-leaf stage and before corn is greater than 3 inches tall. Applications prior to crop emergence should only be made to fine textured soils containing 3% or more organic matter. Use 1.5-4.0 lbs. a.i. Lasso per treated acre.

BANVEL PLUS PROWL: Application may be made immediately after planting, but before grasses and corn emerge. Make applications only on medium or fine textured soils containing greater than 2-1/2% organic matter. Use 1.0-2.0 lbs. a.i. Prowl per treated acre.

In addition to the tank mixes listed above or to any combinations thereof, BANVEL herbicide may also be tank mixed with combinations of paraquat (1/4 to 1 lb. a.i./acre), Princep (2 to 3 lbs. a.i./acre), or Roundup (1 1/2 to 3 lbs. a.i./acre). As with all tank mixes, read and follow the label of each tank mix product used for precautionary statements, directions for use and other restrictions.

**SMALL GRAINS
(NOT UNDERSEEDED TO LEGUMES)**

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGES ____.

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

If small grains are grown for pasture only, refer to the Pasture, Rangeland and Non-Cropland section on pages ____.

Do not graze or harvest for livestock feed prior to crop maturity.

WEEDS CONTROLLED

BANVEL herbicide, when applied at recommended rates, will control ANNUAL broadleaf weeds commonly found in small grains. These weeds are indicated on page ____.

POSTEMERGENCE USES

Application of BANVEL herbicide may be made any time after the weeds have emerged and are actively growing. See specific crop for timing restrictions. For best performance, make application when weeds are in the 2-3 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

FALL SEEDED WHEAT

BANVEL HERBICIDE MUST BE APPLIED TO FALL SEEDED WHEAT PRIOR TO THE JOINTING STAGE. OBSERVE ALL PRECAUTIONS ON LABELING OF ALL PRODUCTS USED IN TANK MIXTURES.

AMOUNT OF PRODUCT PER ACRE FOR BROADCAST USE*

Herbicide	Fluid Ounces	Equivalent Pints	Equivalent Pounds Active
BANVEL	4	1/4	1/8
BANVEL plus 2,4-D	2 to 4 plus 8 to 12	1/8 to 1/4 plus 1/2 to 3/4	1/16 to 1/8 plus 1/4 to 3/8
BANVEL plus MCPA	2 to 4 plus 8 to 12	1/8 to 1/4 plus 1/2 to 3/4	1/16 to 1/8 plus 1/4 to 3/8
BANVEL plus Bromoxynil	2 to 4 plus 16 to 24	1/8 to 1/4 plus 1 to 1 1/2	1/16 to 1/8 plus 1/4 to 3/8
BANVEL plus Bromoxynil plus MCPA	2 to 4 plus 16 plus 8	1/8 to 1/4 plus 1 plus 1/2	1/16 to 1/8 plus 1/4 plus 1/4

SPECIAL USE TANK MIX FOR FALL SEEDED WHEAT ONLY+

BANVEL	4	1/4	1/8
plus 2,4-D amine or 2,4-D ester	plus 16 to 32 or 16 to 24	plus 1 to 2 or 1 to 1 1/2	plus 1/2 to 1 or 1/2 to 3/4

+ Note: Do not use unless possible crop injury will be acceptable.

*Broadcast rate based on 4 pounds per gallon formulations of BANVEL herbicide, MCPA and 2,4-D and 2 pounds per gallon formulation of Bromoxynil.

SPRING SEEDED WHEAT

BANVEL HERBICIDE MUST BE APPLIED BEFORE SPRING SEEDED WHEAT EXCEEDS THE 5 LEAF STAGE. OBSERVE ALL PRECAUTIONS ON LABELING OF PRODUCTS USED IN TANK MIXTURES.

AMOUNT OF PRODUCT PER ACRE FOR BROADCAST USE*

Herbicide	Fluid Ounces	Equivalent Pints	Equivalent Pounds Active
BANVEL	4	1/4	1/8
BANVEL plus 2,4-D	2 to 4 plus 8 to 12	1/8 to 1/4 plus 1/2 to 3/4	1/16 to 1/8 plus 1/4 to 3/8
BANVEL plus MCPA	2 to 4 plus 8 to 12	1/8 to 1/4 plus 1/2 to 3/4	1/16 to 1/8 plus 1/4 to 3/8
BANVEL plus Bromoxynil	2 to 4 plus 16 to 24	1/8 to 1/4 plus 1 to 1 1/2	1/16 to 1/8 plus 1/4 to 3/8

*Broadcast rate based on 4 pounds per gallon formulations of BANVEL herbicide, MCPA and 2,4-D and 2 pounds per gallon formulation of Bromoxynil.

FALL SEEDED BARLEY

BANVEL HERBICIDE MUST BE APPLIED TO FALL SEEDED BARLEY PRIOR TO THE JOINTING STAGE. Note: For fall barley varieties that are seeded during the winter months or later, follow the rates and timings given for Spring Seeded Barley. OBSERVE ALL PRECAUTIONS ON LABELING OF ALL PRODUCTS USED IN TANK MIXTURES.

AMOUNT OF PRODUCT PER ACRE FOR BROADCAST USE**

Herbicide	Fluid Ounces	Equivalent Pints	Equivalent Pounds Active
BANVEL	4	1/4	1/8
BANVEL plus 2,4-D	2 to 4 plus 8	1/8 to 1/4 plus 1/2	1/16 to 1/8 plus 1/4
BANVEL plus MCPA	2 to 4 plus 8 to 12	1/8 to 1/4 plus 1/2 to 3/4	1/16 to 1/8 plus 1/4 to 3/8

**Broadcast rate based on 4 pounds per gallon formulations of BANVEL herbicide, MCPA and 2,4-D.

SPRING SEEDED BARLEY

BANVEL HERBICIDE MUST BE APPLIED WHILE SPRING SEEDED BARLEY IS IN THE 2 TO 3 LEAF STAGE. OBSERVE ALL PRECAUTIONS ON LABELING OF PRODUCTS USED IN TANK MIXTURES.

AMOUNT OF PRODUCT PER ACRE FOR BROADCAST USE*

Herbicide	Fluid Ounces	Equivalent Pints	Equivalent Pounds Active
BANVEL	3	3/16	3/32
BANVEL plus MCPA	2 to 3 plus 8	1/8 to 3/16 plus 1/2	1/16 to 3/32 plus 1/4

*Broadcast rate based on 4 pounds per gallon formulations of BANVEL herbicide and MCPA.

FALL AND SPRING SEEDED OATS

BANVEL HERBICIDE MUST BE APPLIED BEFORE SPRING SEEDED OATS EXCEED THE 5 LEAF STAGE. APPLICATIONS TO FALL SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE. OBSERVE ALL PRECAUTIONS ON LABELING OF ALL PRODUCTS USED IN TANK MIXTURES.

AMOUNT OF PRODUCT PER ACRE FOR BROADCAST USE**

Herbicide	Fluid Ounces	Equivalent Pints	Equivalent Pounds Active
BANVEL	4	1/4	1/8
BANVEL plus MCPA	2 to 4 plus 8 to 12	1/8 to 1/4 plus 1/2 to 3/4	1/16 to 1/8 plus 1/4 to 3/8

**Broadcast rate based on 4 pounds per gallon formulations of BANVEL herbicide AND MCPA.

PASTURE, RANGELAND AND NON-CROPLAND AREAS

BANVEL herbicide is recommended for use for pasture, rangeland, general farmstead weed and brush control and for use on non-cropland areas such as fence rows, roadways, rights-of-way (utility, railroad, highway, pipeline), nonselective forest brush control, wasteland and other non-cropland areas.

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

BANVEL herbicide uses described in this section also pertain to small grains such as barley, oats, rye or wheat grown for pasture use only.

NEWLY SEEDED AREAS, including small grains such as barley, oats, rye or wheat grown for pasture, may be severely injured if rates of BANVEL herbicide in excess of those listed for control of ANNUAL weeds are applied.

ESTABLISHED GRASS CROPS growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Furthermore, rates of BANVEL herbicide in excess of 2 quarts (2 lbs. a.i.) per treated acre may cause temporary injury to many grass species. Bentgrass, carpetgrass, buffalograss and St. Augustine grass may be injured at rates exceeding 1 pint BANVEL herbicide (1/2 lb. a.i.) per treated acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch and other legumes.

REMOVE MEAT ANIMALS FROM TREATED AREAS 30 DAYS PRIOR TO SLAUGHTER.

THERE IS NO WAITING PERIOD BETWEEN TREATMENT AND GRAZING FOR NON-LACTATING ANIMALS.

**TIMING RESTRICTIONS FOR LACTATING DAIRY
ANIMALS FOLLOWING TREATMENT**

BANVEL herbicide Rate Per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint (1/2 lb. a.i.)	7 days	37 days
Up to 1 quart (1 lb. a.i.)	21 days	51 days
Up to 2 quarts (2 lbs. a.i.)	40 days	70 days
Up to 8 quarts (8 lbs. a.i.)	60 days	90 days

NOTE: Observe all precautions and restrictions on labels of products used in tank mixtures.

BEST AVAILABLE COPY

MIXING AND APPLICATION

BANVEL herbicide can be applied using water, oil-water emulsions (including invert systems), sprayable fluid fertilizer as the carrier.

BANVEL herbicide may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply 10 to 600 gallons of diluted spray per treated acre. Volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used. When using aerial equipment, apply 3 to 40 gallons of diluted spray per treated acre.

BANVEL herbicide may be applied to individual clumps or small areas (SPOT TREATMENT) of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.

ACCUTROL® herbicide adjuvant or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Spray additives must be agriculturally approved when used in pasture applications. If spray additives are used, read and follow all use recommendations and precautions on product label.

WEEDS CONTROLLED

BANVEL herbicide, when applied at recommended rates, will give control of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species commonly found in Pasture, Rangeland and Non-Cropland areas. (Refer to GENERAL WEED LIST on page ____.) Noted (*) PERENNIAL weeds may be controlled with lower rates of either BANVEL herbicide or BANVEL herbicide plus 2,4-D. See RATES AND TIMINGS on the following page.

RATES AND TIMINGS

Application rates and timing of BANVEL herbicide are given below. Use the higher level of listed rate ranges when treating dense or tall vegetative growth.

<u>WEED STAGE & TYPE</u>	<u>BANVEL herbicide per treated acre</u>	
	<u>amount</u>	<u>lbs. a.e.</u>
Annual		
Small, actively growing	1/2 - 1 pt.	1/4 - 1/2
Established weed growth	1 - 1 1/2 pts.	1/2 - 3/4
+Biennial		
Rosette diameter		
Less than 3 inches	1/2 - 1 pt.	1/4 - 1/2
3 inches or more	1 - 2 pts.	1/2 - 1
Bolting	2 - 3 pts.	1 - 1 1/2
Perennial		
Suppression or top growth control	1/2 - 1 qt.	1/2 - 1
Noted (*) Perennials	1 - 2 qts.	1 - 2
Other perennials	2 - 4 qts.	2 - 4
Dense stands	4 - 6 qts.	4 - 6
Woody Brush & Vines		
Foliage Suppression	1/2 - 1 qt.	1/2 - 1
Stems	1 - 2 qts.	1 - 2
Stems and Stem Sprouts	1/2 - 1 gal.	2 - 4
Stems and Root Sprouts	1 - 2 gals.	4 - 8

+ For best performance, make application when BIENNIAL WEEDS are in the rosette state.

Retreatments may be made as needed; however, do not exceed a total of 2 gallons (8 lbs. a.i.) of BANVEL herbicide per treated acre during a growing season

TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND OTHER RESTRICTIONS. BANVEL herbicide may be tank mixed with one or more of the following herbicides for control of grasses, additional broadleaf weeds, and woody brush and vines.

<u>Compound</u>	<u>Rates Expressed as lbs. a.i. per treated acre</u>
Pasture, rangeland, and non-cropland use:	
dalapon (Dalapon®)	5 to 15
diuron (Karmex®)	4 to 48
glyphosate (Roundup®)	3/4 to 3 3/4
simazine (Princep®)	5 to 40
paraquat	1/2 to 1
2,4-D	1/4 to 6
Rangeland and non-cropland use only:	
picloran (Tordon®)	1/4 to 3
2,4,5-T	1/4 to 6
Non-cropland use only:	
+ amitrole	
atratol (Atratol®)	6 to 50
bromacil (Ryvar®)	2 1/2 to 24
diquat	1/2
fosamine ammonium (Krenite®)	2 to 12
hexazinone (Velpar®)	2 to 10 3/4
MSMA	2 to 4 1/2
prometon (Pramitol®)	10 to 59
tebuthiurn (Spike®)	1 1/4 to 16
triclopyr (Garlon®)	1 to 8

Due to the variations that may occur in formulated products and specific use ingredients (e.g. water supplies), a COMPATIBILITY TEST as described on page 8 is recommended prior to actual tank mixing.

For non-cropland uses apply amitrole at rates such as 1.8 lbs. a.i. - 3.2 lbs. a.i. in 30-60 gallons of water. For other crop uses, please refer to product labeling for specific recommendations.

CUT SURFACE TREE TREATMENTS

BANVEL herbicide may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees. A mix of 1 part BANVEL herbicide with 3 to 5 parts water should be used in application. Use the lower dilution treating difficult-to-control species.

- **TREE INJECTIONS:** Injector cuts must penetrate the bark and the sapwood, and should be made completely around tree trunk at intervals of 1 to 2 inches. Apply 1 milliliter of BANVEL herbicide/water mix to each cut.
- **FRILL or GIRDLE TREATMENTS:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint cut surface with the BANVEL herbicide/water mix.
- **STUMP TREATMENTS:** Spray or paint freshly cut surface with the BANVEL herbicide/water mix. The area adjacent to the bark should be thoroughly wet.

Note: For more rapid foliar effects, 2,4-D may be added to the BANVEL herbicide/water mix.

GRAIN SORGHUM (Milo)

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

(Including The reference To Crops Growing Under Stress)

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

Applications of BANVEL herbicide to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 to 14 days.

Do not graze or feed treated sorghum forage or silage prior to mature grain stage.

Do not apply BANVEL herbicide to sorghum grown for seed production.

Make no more than one application per growing season.

Delay harvest until 30 days after treatment.

WEEDS CONTROLLED

BANVEL herbicide, when applied at the recommended rate for grain sorghum, will control many actively growing ANNUAL broadleaf weeds and will reduce competition from established PERENNIAL broadleaf weeds as well as control their seedlings. (Refer to WEED LIST on pages ____)

POSTEMERGENCE USES

Application of BANVEL herbicide may be made any time after weeds have emerged and are actively growing but before the sorghum is 15 inches tall or 25 days after emergence, whichever comes first. Use drop pipes (drop nozzles) if the crop is taller than 8 inches. Keeping the spray off the sorghum leaves and out of the whorl will reduce the chances of crop injury and improve spray coverage of weed foliage. For best performance, make application when weeds are small, less than 3 inches tall.

BROADCAST RATE PER TREATED ACRE: 1/2 pint (1/4 lb. a.i.)

PREHARVEST USES

For Use Only in the States
of Texas and Oklahoma

Application of BANVEL herbicide may be made any time after the sorghum has reached the soft dough stage of development for suppression of weeds. An agriculturally approved surfactant may be used to improve performance.

BROADCAST RATE PER TREATED ACRE: 1/2 pint (1/4 lb. a.i.)

ASPARAGUS
For Use Only In the States of
California, Oregon and Washington

OBSERVE ALL PRECAUTIONS ON PAGE ____.

READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

Do not harvest prior to 24 hours after treatment.

Make only one application per season.

RATES AND TIMINGS

Apply BANVEL herbicide to emerged and actively growing weeds in 40 to 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

WEEDS	Rate Per Treated Acre
mustard, black	
pigweed, redroot (carelessweed)	1/2 to 1 pt.
sowthistle, annual	(1/4 to 1/2 lb.a.i.)
*thistle, Canada	
thistle, Russian	
*bindweed, field	
chickweed, common	1 pt.
goosefoot, nettleleaf	(1/2 lb. a.i.)
radish, wild	
thistle, milk	

BANVEL herbicide plus 2,4-D herbicide tank mixture may be used for improved control of noted (*) weeds. READ AND FOLLOW 2,4-D PRODUCT LABELING FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS, AND OTHER RESTRICTIONS.

TURF AND LAWNS

Including Golf Course Fairways, Aprons, Tees and Rough

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

To avoid injury to newly seeded grasses, application of BANVEL herbicide should be delayed until after the second mowing. Furthermore, application rates in excess of 1 pint (1/2 lb. a.i.) per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustine grass.

In areas where roots of sensitive plants extend, do not apply in excess of 1/4 pint (1/8 lb. a.i.) of BANVEL herbicide per treated acre on coarse textured (sandy-type) soils, or in excess of 1/2 pint (1/4 lb. a.i.) per treated acre on fine textured (clayey-type) soils. Do not make repeat applications in these areas for 30 days and until previous applications of BANVEL herbicide have been activated in the soil by rain or irrigation.

WEEDS CONTROLLED

BANVEL herbicide, when applied at recommended rates, will give control of many broadleaf weeds ANNUAL, BIENNIAL, and noted (*) PERENNIAL broadleaf weeds commonly found in turf. BANVEL herbicide will also give growth suppression of many other listed PERENNIAL broadleaf weeds and WOODY brush and vine species. (Refer to GENERAL WEED LIST on pages ____)

MIXING AND APPLICATION

Apply 30 to 200 gallons of diluted spray per treated acre (3 qts. to 4 1/2 gals. per 1,000 sq. ft.), depending on density or height of weeds treated and on the type of equipment used.

RATES AND TIMINGS

Use the higher level of listed rate ranges when treating dense vegetative growth.

<u>WEED STAGE & TYPE</u>	<u>pints per treated acre</u>	<u>BANVEL herbicide lbs. a.i. per treated acre</u>	<u>teaspoons per 1,000 sq. ft.</u>
Annual			
Small, actively growing	1/2 - 1	1/4 - 1/2	1 - 2 1/4
Established @ growth	1 - 1 1/2	1/2 - 3/4	2 1/4 - 3 1/4
Biennial			
rosette diameter			
Less than 3 inches	1/2 - 1	1/4 - 1/2	1 - 2 1/4
3 inches or more	1 - 2	1/2 - 1	2 1/4 - 4 1/2
Perennials and Woody			
Brush and Vines	1 - 2	1/2 - 1	2 1/4 - 4 1/2

For best performance, apply when weeds are emerged and actively growing.

Retreatments may be made as needed; however do not exceed a total of 2 pints (1 lb. a.i.) BANVEL herbicide per treated acre during a growing season.

TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS AND OTHER RESTRICTIONS.

Tank mix treatments of BANVEL herbicide may be made with 2,4-D, MCPA, MCPP, or bromoxynil for control of additional weeds listed on the tank mix product label.

Apply 1/5 to 1/2 pint (1/10-1/4 lb. a.i.) per acre of BANVEL herbicide with 1/2 to 1 1/2 lb. acid equivalent of 2,4-D, MCPA, or MCPP, or with 3/8 to 1/2 lb. a.i. of bromoxynil. Use the higher level of the listed rate ranges when treating established weeds. Repeat treatments may be made as needed; however, do not exceed 2 pints (1 lb. a.i.) of BANVEL herbicide per treated acre during the growing season.

GRASS SEED CROPS
Perennial Grasses such as Bluegrass,
Lawntype Fescue and Ryegrass

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

Refer to the Pasture, Rangeland, and Non-cropland section (pages ____) for possible grazing and feeding restrictions.

Do not use on bentgrass unless possible crop injury can be tolerated.

RATES AND TIMINGS

Apply 1/2 to 2 pints (1/4-1 lb. a.i.) of BANVEL herbicide 40 gallons of diluted spray per treated acre after weeds have emerged and are actively growing for control of broadleaf weeds such as:

alfalfa
*bindweed, field
catchfly, nightflowering
chamomile, corn
chickweed, common
chickweed, mouseear
clover

cockle, white
dock, curly
*knapweed, Russian
knotweed
sorrel, red (sheep sorrel)
starwort, little
*thistle, Canada

*Top growth control only

Use 1/2 to 1 pint (1/4-1/2 lb. a.i.) of BANVEL herbicide per treated acre on SEEDLING GRASS after the crop reaches the 3-5 leaf stage. Up to 2 pints (1 lb- a.i.) of BANVEL herbicide per treated acre may be used on well-established perennial grass. DO NOT APPLY AFTER THE GRASS SEED CROP BEGINS TO JOINT.

For control of ANNUAL GRASS WEEDS such as:

brome, downy (cheatgrass)
brome, rigput
fescue, rattail

hairgrass
oats, wild
windgrass

Apply 2 to 4 quarts (2-4 lbs. a.i.) of BANVEL herbicide per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made within 3-14 days following first irrigation and before weeds have more than 2 leaves.

**BETWEEN CROPPING APPLICATIONS (BCA)
FOR BROADLEAF WEED CONTROL**

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

WEEDS CONTROLLED

BANVEL herbicide when applied at the recommended rates in Between Cropping Systems, will control many ANNUAL and BIENNIAL broadleaf weeds. (Refer to GENERAL WEED LIST on pages ____). In addition BANVEL herbicide will control the following PERENNIAL broadleaf weeds:

*alfalfa
artichoke, Jerusalem
bindweed, field
bindweed, hedge
blueweed, Texas
*bursage, skeletonleaf
(bur ragweed,
povertyweed)
bursage, woollyleaf
lakeweed)

*dandelion, common
*dock, curly
garlic, wild
nightshade, silverleaf
(whiteweed)
redvine
*sowthistle, perennial
thistle, Canada
trumpet creeper (buckvine)

For weeds noted above, apply 2 to 4 pints (1-2 lbs. a.i.) of BANVEL herbicide per treated acre. For other listed perennials, use 4 pints (2 lbs. a.i.) of BANVEL herbicide per treated acre for most effective control.

APPLICATION DIRECTIONS

Apply BANVEL herbicide as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest and before a killing frost. Agriculturally approved spray additives, such as surfactants or oils, may be used to enhance spray coverage and the herbicide's penetration of weed foliage. See ROTATIONAL CROPS for recommended interval between application and planting to prevent crop injury.

- For control of ANNUAL broadleaf weeds, apply 1/2 to 1 pint (1/4-1/2 lb. a.i.) of BANVEL herbicide per treated acre. For best performance, make application when weeds are less than 6 inches tall.

- For control of BIENNIAL broadleaf weeds, apply 1 to 2 pints (1/2-1 lb. a.i.) of BANVEL herbicide per treated acre. For best performance, make application when weeds are in the rosette stage.
- For control of PERENNIAL broadleaf weeds, apply 2 to 4 pints (1-2 lbs. a.i.) of BANVEL herbicide per treated acre. For best performance, make application to regrowth in late summer or fall following a mowing or tillage treatment. Most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if application is made when the majority of weeds are 8 inches or taller. Viney perennial broadleaf weeds, such as field bindweed and hedge bindweed are best controlled when weeds are in or beyond the full bloom stage.

Avoid disturbing treated areas for at least 7 days following application. Treatments may not kill weeds which develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for BANVEL herbicide. For seedling control, a follow-up program or other cultural practices should be instituted (refer to pages _____ for corn, sorghum and wheat in-crop uses of BANVEL herbicide). Repeat treatments with BANVEL herbicide may be made during the season to control regrowth; however, do not exceed a total of 4 pints (2 lbs. a.i.) per treated acre during any given fallow period.

TANK MIX TREATMENT

BANVEL herbicide may be applied as a tank mix treatment with 2,4-D amine or low volatile ester formulations for control of additional broadleaf species. Tank mix treatments with Roundup® herbicide may be made for control of grasses and additional broadleaf weeds. Read and follow all applicable directions, restrictions, and precautionary statements on the 2,4-D, paraquat or Roundup herbicide product labels. When tank mixing with Roundup herbicide, make applications with a maximum of 10 gallons of water per acre.

- For grass and ANNUAL broadleaf weed control during FALLOW periods, tank mix 1/2 to 1 pint (1/4-1/2 lb. &.i.) of herbicide per treated acre with 1/2 to 1 pint (1/4-1/2 lb. &.i.) of Roundup herbicide or 1/2 to 1 lb. a.i. of paraquat per treated acre. An alternate treatment for broadleaf control is to tank mix 1/2 to 1 pint (1/4-1/2 lb. a.i.) of BANVEL herbicide per treated acre with 1/4-1/2 lb. acid equivalent of 2,4-D per treated acre. Add 0.5% by volume of an agriculturally approved NONIONIC surfactant to the spray solution. Use the lower rates only when weeds are small, less than 4 inches. If weeds are 4 to 6 inches tall, use the above recommended rates of herbicide with the higher rate of Roundup herbicide or 2,4-D herbicide.
- For control of actively growing PERENNIAL broadleaf weeds, where a short waiting interval (see ROTATIONAL CROPS section) requires lower rates of BANVEL herbicide [1 to 3 pints (1/2-1 1/2 lbs. a.i.) per treated acre] a tank mixture with Roundup herbicide [2 to 4 pints (1-2 lbs. a.i.) per treated acre] or 2,4-D (1 to 2 lbs. acid equivalent per acre) may be used. When using the lower rates of BANVEL herbicides use the higher rates of Roundup herbicide. For effective control of thistle, use herbicide or BANVEL herbicide plus Roundup herbicide tank mix treatments. For control of wild garlic in this situation, apply 1 pint (1/2 lb. a.i.) of BANVEL herbicide with 1 1/2 lbs. acid equivalent of 2,4-D low volatile ester per treated acre. Apply when wild garlic is 4 to 8 inches tall.

ROTATIONAL CROPS

CORN and SORGHUM may be planted in the spring following applications made during the previous year.

WHEAT may be planted in the fall or spring following applications. Crop injury may occur if the interval between application and planting is less than specified:

East of the Mississippi River, the interval is 20 days per pint of BANVEL herbicide per treated acre. Exclude days when ground is frozen.

West of the Mississippi River, the interval is 45 days per pint of BANVEL herbicide per treated acre. Exclude days when ground is frozen.

Following a normal harvest of corn, sorghum, or wheat, any rotational crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed under, do not follow up with the planting of a sensitive crop.

**CONTROL OF PERENNIAL
BROADLEAF WEEDS IN CROPLAND
(SPOT APPLICATION ONLY)**

For Use Only in the States of Idaho, Montana, Nevada, Oregon, Utah and Washington.

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

**READ AND FOLLOW MIXING AND APPLICATION INSTRUCTIONS
ON PAGE ____.**

Do not treat subirrigated cropland or areas where the soil remains saturated with water throughout the year.

Make only one application of BANVEL herbicide per year.

WEEDS CONTROLLED

BANVEL herbicide, when applied at recommended rates, will control many broadleaf weeds including:

bindweed, field
dock, broadleaf (bitterdock)
dock, curly
knapweed, black

knapweed, Russian
ragwort, tansy
spurge, leafy
thistle, Canada

RATES AND TIMINGS

BANVEL herbicide may be applied at any time following a crop harvest to stubble fallow or other cropland. Application should be made when weeds are actively growing and prior to a killing frost.

Apply 4 to 6 quarts (4-6 lbs. a.i.) of BANVEL herbicide per treated acre. Application may be made up to one month prior to the planting of wheat. NOTE: Do not use unless injury to wheat or rotated barley will be acceptable.

Barley, oats, corn, sorghum (milo), annual or perennial grass crops may be planted into treated areas one year after application. Crops grown for seed (other than perennial grass seed) should not be planted into treated areas until three years after application. Do not plant broadleaf crops such as alfalfa, beans, peas, potatoes, or sugarbeets into treated areas until two years after application.

In most cases, treatments will not kill perennial weed seedlings which germinate from one or two years after treatment. Once the effect of the chemical has been lost, a follow-up program for seedling control or other cultural practices should be instituted.

WIPER APPLICATION USES

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

BANVEL herbicide may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part BANVEL herbicide to 1 part water. Do not contact desirable vegetation with herbicide solution. Wiper applications should only be made to crops (including pastures) and non-cropland areas described in this label.

SUGARCANE

(NOT FOR USE IN HAWAII)

IMPORTANT

OBSERVE ALL PRECAUTIONS ON PAGE ____.

WEEDS CONTROLLED

BANVEL herbicide when applied in accordance with this label will control the following ANNUAL and PERENNIAL broadleaf weeds.

ANNUALS

amaranth, spiny
beggarweed, Florida
burclover
buttercup
chickweed, common
clovers (annual)
cocklebur, common
cudweed
eveningprimrose, cutleaf
fireweed
fleabane, annual
geranium, wild
groundcherry
henbit
jimsonweed

lambsquarters, common
lettuce, prickly
marshcress
mayweed
morningglory, ivyleaf
morningglory, tall
mustards, wild
nighshade, black
pepperweed, Virginia
pigweed, prostrate
pigweed, redroot
(carelessweed)
pigweed, smooth
purslane, common
purslane, horse

pursley, Florida
ragweed, common
ragweed, giant
rocket, London
shepherdspurse
sicklepod
sida, prickly
(teaweed)
speedwell
spurge, prostrate
sowthistle, annual
swinecress

BANVEL herbicide and BANVEL herbicide tank mixes will reduce competition from established PERENNIAL broadleaf weeds and control their seedlings. (Refer to GENERAL WEED LIST on page ____).

BANVEL herbicide plus 2,4-D herbicide or BANVEL herbicide plus MCPA herbicide tank mix, when applied in accordance with this label, will control the following listed weeds in addition to the weeds listed for BANVEL herbicide alone:

carpetweed
chickweed, common
dragonhead, American
hempnettle
lettuce, prickly
mayweed
mustards, annual
pennycress, field (fanweed,
frenchweed, stinkweed)

pineappleweed
puncturevine
radish, wild
salsify (goatsbeard)
shepherdspurse
starthistle, yellow
vetch

THE SPECIAL USE TANK MIX FOR FALL SEEDED WHEAT ONLY allows a higher rate of 2,4-D to be used in combination with BANVEL herbicide. This tank mix treatment may be used for improved performance of difficult-to-control weeds including:

fiddleneck (tarweed)
*garlic, wild
gromwell

henbit
*onion, wild

*Spring applications may not control weeds that develop in the fall. For fall applications, refer to the Between Cropping Application section, pages ____.

BANVEL herbicide plus bromoxynil herbicide tank mix, when used in accordance with this label, will control the following listed weeds in addition to the weeds listed for BANVEL herbicide alone:

alkanet
bedstraw, catchweed
chervil, bur
cornflower (bachelorbutton)
falseflax, smallseeded
fiddleneck (tarweed)
flixweed
fumitory
gromwell, corn
groundsel
henbit rocket, London
Jacobs ladder
knotweed
kochia

lettuce, miners
lettuce, prickly
mayweed
mustard, blue (purple)
mustard, tumble
(Jim Hill)
mustard, wild
pennycress, field (fanweed,
frenchweed, (stinkweed)
pepperweed (peppergrass)

rocket, yellow (wintercress)
shepherdspurse

PERENNIALS

aster
chickweed, mouseear
dandelion, common
dock, curly
elderberry
garlic, wild
goldenrod
groundsel
onion, wild
sowthistle, perennial
toadflax, damation

- * For noted weeds apply 2 to 4 pints (1 to 2 lbs. a. i.) per treated acre of BANVEL HERBICIDE. When tank mixing with 2,4-D apply 1 to 2 pints (1/2 to 1 lb. a. i.) per treated acre of BANVEL HERBICIDE with 1 1/2 to 3 lbs. acid equivalent of 2,4-D per treated acre.

APPLICATION DIRECTIONS

Apply BANVEL HERBICIDE to emerged and actively growing weeds in plant or stubble cane prior to close-in. Ground or aerial application equipment which will give good spray coverage of weed foliage may be used. For broadcast application, apply 10 to 40 gallons of diluted spray per treated acre when using ground application, or 3 to 10 gallons of diluted spray per treated acre when using aerial application. Do not make aerial application in Louisiana. For band treatment, apply a broadcast equivalent rate and volume per acre by using the formula below:

$$\begin{array}{l} \text{Band width} \\ \text{in inches} \\ \text{Row width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{RATE} \\ \text{per treated} \\ \text{acre} \end{array} = \begin{array}{l} \text{Band RATE} \\ \text{per treated acre} \end{array}$$

- For control of broadleaf weeds, apply 1/2 to 1 pint (1/4 to 1/2 lb. a. i.) per treated acre of BANVEL HERBICIDE.
- For control of PERENNIAL broadleaf weeds, apply 1 to 2 pints (1/2 to 1 lb. a. i.) per treated acre of BANVEL HERBICIDE.

Use the higher level of the listed rate ranges when treating dense growth, drought stressed or maturing weeds. Repeat treatments with BANVEL HERBICIDE may be made during the season, however, do not exceed 6 pints (3 lbs. a. i.) per treated acre during one cane-growing season.

TANK MIX TREATMENTS

BANVEL HERBICIDE may be tank mixed with 2,4-D amine or LV ester formulations for control of additional broadleaf weed species. Read and follow all applicable directions, restrictions, and precautionary statements on the 2,4-D product label.

- For control of ANNUAL broadleaf weeds, apply 1/2 to 3/4 pint (1/4 to 3/8 lb. a. i.) per treated acre of BANVEL HERBICIDE with 1/2 to 1 lb. acid equivalent of 2,4-D per treated acre.
- For control of PERENNIAL broadleaf weeds, apply 3/4 to 1 pint (3/8 to 1/2 lb. a. i.) per treated acre of BANVEL HERBICIDE with 1 to 1 1/2 lb. acid equivalent of 2,4-D per treated acre.

Use the higher level of the listed rate ranges when treating dense weed growth, drought stressed or maturing weeds. Repeat treatments may be made during the season, however, do not exceed 6 pints (3 lbs. a. i.) per treated acre of BANVEL HERBICIDE, and 4 1/2 lbs.* acid equivalent of 2,4-D per treated acre during one cane-growing season.

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