

PM 25  
10182-103

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**ACCEPTED**  
**JUL 13 1987**  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 10182-103

Concentration Table  
GRAMOXONE SUPER Herbicide to be Applied

Flows/ha	fl oz/ha	lb a.i./ha	oz/gal
4/3	7.1	083	18
2/3	10.7	125	12
1 1/3	21.3	250	8
1 1/2	24.0	281	5.3
2	32.0	375	4
2 2/3 (1 1/3 qt)	42.7	500	3
4	64.0	750	2
5 1/3 (2 2/3 qt)	85.3	1000	1.5

 **ICI Americas Inc.**  
Agricultural Chemical Division  
Wilmington, Delaware 19897

EPA Reg No 10182-103

**RESTRICTED USE PESTICIDE**  
For retail sale to and use only by Certified Applicators or persons  
under their direct supervision and only for those uses covered by  
the Certified Applicator's certification

  
**Gramoxone**  
**SUPER**

**SUPPLEMENTAL PAMPHLET**  
**DIRECTIONS FOR USE**  
**READ WORKER SAFETY RULES**



**POISON**  
**DO NOT POUR FROM ORIGINAL CONTAINER**  
**EXCEPT FOR IMMEDIATE USE.**

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Do not apply within 14 days of harvest. Do not allow spray to contact green stems, foliage, flowers, or cones, as injury may result. Do not allow animals to graze in treated hop yards. Hop vine rot and silage may be led to livestock.

**PRE-PLANT TREATMENT** - Apply as a directed spray at 2 1/2 qts GRAMOXONE SUPER Herbicide per sprayed acre in 50 to 200 gals. to thoroughly cover the weeds and grasses. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. Apply when weeds and grasses are succulent and the new growth is from 1 to 6 inches high. For mature woody weeds, late germinating weeds and grasses and for perennials - retreatment or spot treatment may be necessary. **CAUTION:** Do not allow spray to contact green stems, fruit or foliage as injury may result. Do not spray under windy conditions and use a shield for young vines. If bark is still green, wrap vine prior to application to prevent injury. If application is to be made during harvesting season, apply GRAMOXONE SUPER Herbicide only after picking fruits off the ground. Do not allow animals to graze on treated areas.

**VEGETABLES**

**PRE-PLANT AND PRE-EMERGENCE TREATMENT.**

Beans (Lima, Bush, French), Cabbage, Carrots, Cauliflower, Fava Beans, Collards, Corn, Cucumbers (Watermelon, Cantaloupe/Watermelon, Pumpkin, Squash, Cucumber), Eggplant, Peas, Tomatoes.

Apply 1 1/2 to 2 1/2 qts GRAMOXONE SUPER Herbicide per sprayed acre as a band treatment over the crop row, or as a broadcast treatment before, during or after planting - but before emergence of the crop. Use sufficient water to give thorough coverage. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. diluted spray. Use the higher rate with heavier weed infestations. Seedbeds should be formed as far ahead of planting and treatment as possible to permit maximum weed and grass emergence. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application will be killed.

Lettuces, Melons, Peppers, Sugar Beets, Tomatoes.

Apply 1 1/2 to 2 1/2 qts GRAMOXONE SUPER Herbicide per sprayed acre as a band treatment over the crop row, or as a broadcast

treatment, prior to, during or after planting - but before emergence of the crop. Aerial Application - 5 to 10 gals. water per acre. Broadcast Application - Use 20 to 60 gals. diluted spray. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. of diluted spray. Seedbeds should be formed as far ahead of planting and treatment as possible to permit maximum weed and grass emergence. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application will be killed.

**POST-EMERGENCE DIRECTED SPRAY**

Tomatoes and Peppers (Middle Atlantic, Southeast, South Central Regions, and Southeast to the Western Boundary of Texas) - For Kill of Emerged Broadleaf Weeds and Grasses and for Top Kill and Suppression of Emerged Perennial Weeds between Rows after Crop Plant Emergence or Establishment.

Apply as directed spray using 1 1/2 qt. GRAMOXONE SUPER Herbicide per sprayed acre in 20 to 100 gals. spray mix. Apply with conventional ground equipment directing spray between the rows and using shields to prevent spray contact with crop plants. Add Spreader (non-ionic) at 8 fl. oz. per 100 gals. spray mix. Apply when weeds and grasses are succulent and weed growth is 1 to 6 inches high. Weeds and grasses emerging after application will not be controlled. Do not allow spray to contact tomato or pepper plants as injury or excessive residues may result. Do not apply more than 3 applications per crop season. Do not allow animals to graze on treated areas.

**DORMANT TREATMENT**

Shrub - For Kill of Emerged Annual Broadleaved Weeds and Grasses and for Top Kill and Suppression of Emerged Perennial Weeds in Dormant Shrub.

Apply 1 1/2 to 2 1/2 qts GRAMOXONE SUPER Herbicide per sprayed acre by ground application equipment. Use 50 to 150 gals. spray mix per acre. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. spray mix. Use the higher rate with heavier weed infestations. Apply during the dormant season before buds in crown begin to grow. Do not make more than two applications per season.

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- Copy B (below)

- Copy A  
- Copy B

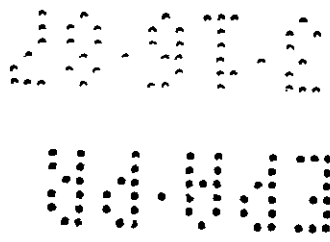
COPY A

...or plant beds...

COPY B

...or transplanting...

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# COTTON

## PREPLANT TREATMENT.

Apply 3 to 5 pts. GRAMOXONE SUPER Herbicide per acre as a single broadcast application in 20 to 60 gals. water by ground application or in 5 to 10 gals. by air. Beds should be preformed to permit maximum weed and grass emergence prior to treatment. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. spray.

## TANK MIX WITH GOAL<sup>®</sup> 1.6 E (Preplant or Fallow Bed Treatment).

Apply 1½ to 5 pts. GRAMOXONE SUPER Herbicide with 1¼ to 2½ pts. GOAL 1.6 E for each acre treated. Apply a minimum of 10 gals. of water per acre. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. diluted spray. Refer to the respective labels for recommended growth stages of susceptible weeds and for specific use restrictions.

## TANK MIX WITH BLADEX 80 W, 90 DF or 4L

For added residual control of weeds, tank mix GRAMOXONE SUPER Herbicide at the above rates with BLADEX<sup>®</sup> 80 W, 90 DF or 4 L at the rates listed on the BLADEX label. Consult the BLADEX label for weed species, timing, rates and environmental factors relative to BLADEX efficacy.

## FOR KILL OF EMERGED VOLUNTEER BARLEY (California Only).

Apply 11 to 21 fl. oz. GRAMOXONE SUPER Herbicide per acre broadcast as a preplant treatment to preformed seedbeds. Aerial Application — Use 5 to 10 gals. water per acre. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. diluted spray.

## HARVEST AID — To Aid in Opening of Mature Bolls and to Desiccate Green Leaves.

Apply 11 fl. oz. of GRAMOXONE SUPER Herbicide in combination with 1 pt. of phosphate or 1 gal. of chlorate defoliant per acre. Apply when 80% or more of the bolls are open and the remaining bolls to be harvested are mature. Development of immature bolls will be inhibited.

## To Aid in Defoliation and Opening of Mature Bolls of Western Cotton (Arizona, California).

First Application — 7 to 11 fl. oz. GRAMOXONE SUPER Herbicide plus 1 to 3 pts. of phosphate defoliant or 1 to 2 gals. of chlorate defoliant per acre. Use higher dosages on rank cotton. (Caution — Do not use more than 11 fl. oz. GRAMOXONE SUPER Herbicide in initial application, as excessive desiccation may occur.) Apply when 60% or more of the bolls are open and remaining bolls to be harvested are mature. Development of immature bolls will be

per acre (in desert cotton areas or on rank vigorous cotton, use the 21 fl. oz. rate only) or 11 to 21 fl. oz. GRAMOXONE SUPER Herbicide plus 1½ to 2 pts. of phosphate defoliant or 1½ to 2 gals. of chlorate defoliant. Apply when 75% or more of the bolls are open and the remaining bolls to be harvested are mature. Development of immature bolls will be inhibited.

## To Desiccate Stripper Cotton.

Apply 1½ to 2½ pts. GRAMOXONE SUPER Herbicide per acre. When foliage is dense, use 2 applications of 1½ pts. if necessary. Apply when 85% or more of the bolls are open and the remaining bolls to be harvested are mature. Development of immature bolls will be inhibited. Aerial Application — Apply 3 to 10 gals. spray mix per acre. Use Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. spray mix. Do not apply during periods of thermal inversion to avoid drift. Ground Application — Apply 10 to 30 gals. spray mix per acre. Arrange nozzles to provide thorough coverage of the foliage. Use Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. spray mix.

May apply as split application. Do not pasture lactating dairy animals. Do not pasture livestock in treated fields within 15 days after treatment. Remove livestock from treated area 30 days before slaughter. Do not feed gin trash to livestock. Do not apply to cotton within 3 days before harvest. Repeat application if necessary. Do not make more than 2 applications or exceed a total of 2½ pts. per acre. When combined with phosphate defoliants, observe livestock cautions listed on the phosphate label. When combined with chlorate defoliants, do not pasture livestock on treated areas or feed treated foliage or gin trash. Do not apply within 7 days when used with phosphate or chlorate defoliant.

## EASTER LILIES (Field Grown)

### PREEMERGENCE

Apply 3 to 5 pts. per sprayed acre in 20 to 50 gals. of spray mix. Apply as a band treatment over the row or as a broadcast application prior to crop emergence. Do not apply more than twice per season. Lilies emerged at time of application will be severely injured. Add Spreader (non-ionic) at 8 to 16 fl. oz./100 gals. of spray.

## GRASSES (For Seed)

SEEDBED PREPARATION FOR ESTABLISHING GRASSES FOR SEED PRODUCTION — To Control Grasses and Broadleaf Weeds.

Prepare the seedbed and allow weed seeds to germinate. When broadleaf weeds and annual grasses are at the 3 to 5 leaf stage apply 2½ pts. GRAMOXONE SUPER Herbicide in 20 to 40 gals. water per acre (larger weeds will be less affected by this treat-

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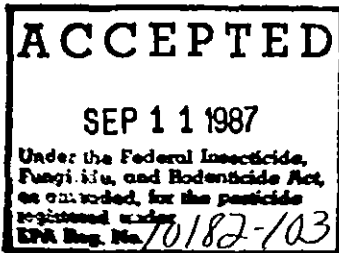
TO AID IN OPENING OF MATURE BOLLS AND TO DESICCATE GREEN WEEDS - POST DEFOLIATION APPLICATION IN PICKED COTTON (For use in all cotton-producing areas except Arizona and California).

Apply 1½ to 2½ pints of GRAMOXONE SUPER per acre. Use the higher rate if weed infestation is dense or heavy. Apply when 75% or more of the bolls are open and remaining bolls to be harvested are mature. Development of immature bolls will be inhibited.

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TO DESICCATE REGROWTH IN COTTON

Apply 11 to 21 fl. oz. of GRAMOXONE SUPER per acre to desiccate regrowth occurring after defoliation or desiccation. Use the higher rate if regrowth is excessive.



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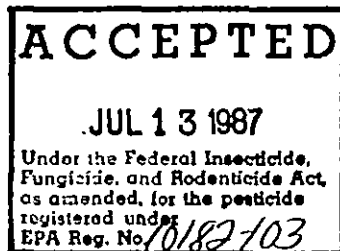
GRAMOXONE® SUPER Herbicide  
EPA Reg. No. 10182-103  
Amendment Submitted 4/13/87

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NO-TILL ALFALFA: Preplant or Preemergence Treatment - Apply 1½ to 2½ qts. per sprayed acre as a band treatment over the crop row, or as a broadcast treatment, prior to, during or after planting, but before emergence of the crop. Aerial Application - 3 to 10 gals. water per acre. Ground Application - Use 10 to 60 gals. diluted spray. Add Spreader (nonionic) at 8 to 32 fl. oz. per 100 gals. of diluted spray. Seeding should be done with a minimum amount of soil disturbance. Weeds and grasses emerging after application will not be controlled. Crop plants emerged at time of application will be killed.

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PIGEON PEAS (Puerto Rico only) - Directed Spray: For kill of emerged annual broadleaf weeds and grasses. Apply at the rate of 2½ pints per acre. Add Spreader (nonionic) at 8 fl. oz. per 100 gals. of diluted spray. Avoid contact with pigeon pea foliage. Do not harvest within 60 days of application. Do not make more than one application per season. Do not graze treated areas or feed treated forage to livestock. Cannery waste can be fed to livestock.



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are less than 4" tall. Refer to PRINCEP 80 W label for cautions, limitations, and recommended rates for specific soil types. Do not pasture animals in treated fields before first cutting. Do not graze, cut or harvest within 90 days of application. Do not apply more than once per season.

**TARE-MIX WITH VELPAR L\*\*** - For control of Chickweed, Broomrape and Teasels (Bale, Green, Blue and Woodstock only). Apply 1½ to 2½ pts. GRAMOXONE SUPER Herbicide plus 1 to 2 qts of VELPAR L per acre in 10 gals. spray mix by air or 20 gals. spray mix by ground equipment. Add Spreader (non-ionic) at 16 to 32 fl oz per 100 gals. spray mix. Use the lower rate of VELPAR L on loamy sand or sandy loam soils. Use the 1½ pt rate of GRAMOXONE SUPER Herbicide when weeds and grasses are less than 4 inches tall. Refer to the VELPAR label for cautions, limitations and recommended rates for specific soil types. Apply once to established stands of alfalfa during the dormant season for alfalfa. Do not apply to regrowth that is more than 2 inches tall. Do not apply following cuttings during the growing season. Do not apply to alfalfa during the first season after seeding. Stress which may be caused in part by low fertility, disease, insects, winter kill, over cutting, drought or frost may increase the chances of crop injury. Temporary chlorosis may occur on alfalfa regrowth. Do not graze, cut or harvest within 42 days of application.

**NOTE:** Do not use on gravelly or rocky soils, exposed sub soils, hardpan, sand, poorly drained or alkali soils. Crop injury, including mortality, may result in fields having restricted root growth due to non-uniform soil profiles such as gravel bases, hardpans and clay lenses.

**California only** - For control of Bluegrass, Ryegrass, Shepherds-purse, Chickweed, Teasels, Foxtail, Sorghum and Groundsel.

Apply 1½ to 2½ pts. in 20 to 100 gals. spray mix by ground as a broadcast application. Apply by air in 5 or more gals. spray mix per acre. Use high rate for Ryegrass, Shepherds-purse, Sorghum and Groundsel. Do not apply if regrowth after grazing or cutting is more than 2 inches tall and do not graze, cut or harvest within 60 days of application or excessive residues may result. Alfalfa foliage present at the time of application will be burned and temporarily stunted. Apply when broadleaf weeds and grasses are succulent and growth is from 1 to 6 inches tall (treat before grasses tiller). Add Spreader (non-ionic) at 8 to 16 fl oz/100 gals. spray mix. Do not apply more than once per season. Do not apply following cuttings during growing season.

**BETWEEN CUTTING TREATMENT (Established Pasture) - For Weed Control Between Cuttings in States East of the Rockies.**

Apply 1½ pt. per acre in 20 to 60 gals. of water by ground equipment as a broadcast application for control of annual grasses and broadleaves and the suppression of perennial weeds. Weeds much beyond the seedling stage and the stubble of those cut off during harvest will be less affected by the treatment. Apply to established stands (at least one year old). Apply immediately after alfalfa has been removed for silage or hay. Do not treat more than 5 days after cutting. Alfalfa foliage present at the time of application will be burned. Weeds that germinate after application will not be controlled. In arid areas or when soil moisture is limited, effectiveness may be reduced. Add Spreader (non-ionic) at 16 to 32 fl oz/100 gals. of spray mix. Do not graze, cut or harvest within 30 days of application. Make 1 to 3 applications as needed, during the cutting season. These sprays can be applied in addition to a dormant application.

#### ASPARAGUS

##### PREPLANT OR PREEMERGENCE.

Apply 1½ to 2½ qts. GRAMOXONE SUPER Herbicide per sprayed acre as a band treatment over the row or as a broadcast treatment prior to, during, or after planting, but before emergence of the crop. Add Spreader (non-ionic) at 8 to 32 fl oz. per 100 gals. spray. Apply 50 to 100 gals. spray per acre. Allow maximum weeds and grass emergence prior to treatment. Seeding or transplanting should be done with a minimum of soil disturbance. Weeds and grasses emerging after treatment will not be controlled.

##### PLANTINGS ESTABLISHED 2 YEARS OR MORE - Preemergence.

Apply 1½ to 2½ qts. GRAMOXONE SUPER Herbicide per sprayed acre in 25 to 100 gals. of spray mix. Apply as a band treatment over the row or as a broadcast application prior to emergence of the crop and/or after the last harvest. Add Spreader (non-ionic) at 8 to 32 fl oz. per 100 gals. of spray mix. For residual control add 2½ to 5 lbs. PRINCEP® 80 W as a tank mix. Refer to PRINCEP 80 W label for specific recommendations and cautions. Crop plants emerged at time of application will be severely injured. Do not apply within 6 days of harvest.

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### MINTS (Peppermint, Spear-mint)

For Suppression of Weeds such as Italian Broomrape, Prickly Lettuce, Broadleaf Chickweed, Downy Broom and Bluegrass During the Dormant Season

Apply 2 to 4 pts. per acre as a broadcast spray in 25 to 65 gals. spray mix. Use the higher rate with heavier weed infestations. Add Spreader (non-ionic) at 8 fl. oz. per 100 gals. spray mix. Apply when peppermint or spearmint is dormant and before spring growth begins. Do not apply to weeds which are greater than 6" tall. Do not apply more than 4 pts. per acre per dormant season as injury or excessive residues may result. For Improved Control Activity and Botanical Control of Italian Broomrape, Prickly Lettuce and Broadleaf - Add 1 to 2 lbs. of SIMBAR® (Terbacil) Weed-Killer as a tank mix. Use the higher tank mix rate with heavier weed infestations. Apply tank mix treatment no more than once per season. Use a minimum of 25 gals. spray mix per acre. Refer to the SIMBAR label for specific recommendations and cautions.

### NONCROP USES

**NONCROP AREAS** (Public Markets, Electric Transformer Stations and Substations, Pipeline Pumping Stations, Aerial Commercial Buildings, Storage Yards and Other Installations, Fence Lines, and Similar Noncrop Areas) - For the Control of Annual Broadleaved Weeds and Grasses (such as Barnyard, Chickweed, Filaree, Broadleaf, Nettle, Pigweed, Plantain, Peckerweeds, Purslane, Red Clover, Shepherdspurse, Thistle, Wild Mustard, Wild Radish, Wild Oats, Bluegrass, Chickweed, Creeping and Top Knot) and Suppression of Perennial Weeds (such as Bermudagrass, Johnsongrass, and Nutsedge).

Apply 1 1/2 qt. GRAMOXONE SUPER Herbicide per acre. Apply for full coverage and thorough weed contact (50 to 100 gals. diluted spray per acre). Best results are obtained when applications are made to young, succulent weeds and grasses. Mature, woody weeds are less susceptible. Repeat as needed. Add Spreader (non-ionic) at 8 oz. per 100 gals. GRAMOXONE SUPER Herbicide is compatible with many residual herbicides. Avoid spray contact with foliage or fruit of food crops and ornamentals.

### ONIONS (Seeds)

**PREPLANT AND PREEMERGENCE** - For Green or Dry Bulb Harvest. Apply 1 1/2 to 2 1/2 qts. GRAMOXONE SUPER Herbicide per sprayed acre as a broadcast treatment prior to, during or after planting, but

before emergence of the crop. Use the high rate for heavier weed infestations and for control of Wild Oats. Add Spreader (non-ionic) at 8 to 32 fl. oz. per 100 gals. spray. Apply in 20 to 100 gals. water per acre. Allow maximum weed and grass emergence prior to treatment. Seeding should be done with a minimum of soil disturbance. Weeds and grasses emerging after treatment will not be controlled. Crop plants emerged at time of application will be injured. Maximum of one application at the 2 1/2 qts. per acre dosage. Do not apply within 60 days of harvest in California - Do not apply within 200 days of harvest.

### PASTURE AND RANGE RESEEDING

For Suppression of Existing Sod and Undesirable Emerged Broadleaf Weeds and Grasses in Perennial Pasture and Range Reseeding.

Apply recommended rates in water to make 18 to 75 gals. diluted mix per sprayed acre. Add 8 to 32 fl. oz. Spreader (non-ionic) per 100 gals. spray. Apply broadcast or in bands over the drill row prior to, or at time of seeding desired grasses and/or forage legumes. Apply as a band treatment when recovery of the sprayed sod is desired, such as in the case with desirable rescue grass. Apply as a broadcast treatment when existing grass species is undesirable and should be totally suppressed, such as in the case with run-down bluegrass sod. Weed of Cascade and Sierra Nevada Mountains - 1 1/2 to 2 1/2 pts. GRAMOXONE SUPER Herbicide per sprayed acre prior to, or at time of seeding grasses such as Hardneckgrass and Palestine Orchardgrass. Apply in October through December after first fall rains and after weeds have emerged and sod has started new growth. For best seeding results, apply on moderate to heavily grazed areas. Do not use in areas with heavy sod and weed growth. Do not pasture treated areas until growth of newly planted seedlings is 3 to 6 inches high. Weed of Rocky Mountains - 1 1/2 to 2 1/2 pts. GRAMOXONE SUPER Herbicide per sprayed acre during the growing season. Use the 2 1/2 pts. rate to suppress vigorous and coarse sod species such as Bromegrass. See specific directions for use in the South and Southeast for suppression of Yermudgrass or Bahagrass sods. Apply prior to, or at time of seeding grasses or forage legumes such as alfalfa, clover and birdsfoot trefoil. Apply only to grazed or mowed pastures which are not more than 2 to 3 inches in height at time of treatment. Do not graze treated areas until the newly planted seedlings have reached their recommended grazing height. Under

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