LASSO* 4-EC (4 lbs. a.i./gal.) + DINITRO (PREMERGE 3 lbs./gal.)

Broadcast rates per acre:

Apply at cracking at the rate of 2 to 3 quarts of LASSO 4-EC and 2 quarts of PREMERGE per acre.

SOYBEANS

AMIBEN* 2 lbs./gal. liquid

Broadcast rates per acre:

Coarse textured (light) soils - 1 Gallon Medium textured (medium) soils - 1-1/8 Gallons Fine textured (heavy) soils - 1-1/2 Gallons

BASAGRAN* 4 lbs./gal. liquid

Broadcast rates per acre: Apply 3/4 to 1 quart per acre. Rates depend upon weeds to be controlled. Consult and follow the recommended rates on the BASAGRAN label.

DYANAP* 3 lbs./gal. liquid

Broadcast rates per acre: Use 6 quarts as a broadcast spray just after the soybeans are planted but before the soybeans plants emerge from the soil.

LOROX* 50W

Broadcast rates per acre:

Use 1 to 2-1/2 lbs. LOROX 50W per acre depending on soil type. Use on coarse to medium textured soils. Apply after planting before soybeans emerge. Plant soybeans at least 1-3/4" deep on flat seed bed only to avoid possible cropinjury. Do not use on sand or loamy sand or soil with less than 1% organic matter since crop injury may result.

*AMIBEN-Reg. TM
Union Carbide Agricultural Products Co., Inc.

*BASAGRAN-Trademark
BASF Aktiegesellscnaft
*DYANAP-Reg. TM
Uniroyal Chemical, Inc.

*ENIDE-Reg. TM
Tuco, Division of the Upjohn Company
*LASSO-Reg. TM
Monsanto Company
*LOROX-Reg. TM
E.I. Du Pont de Nemours & Co., Inc.

*PREMERGE-Reg. TM
Dow Chemical Company

"##Y **%**

TANK MIX DIRECTIONS FOR USE ON PEANUTS

VERNAM A 6-E may be combined with the compounds listed in this section for tank mix application on peanuts. Recommended rates for each tank mix are listed below. Mixing, spray equipment, soil incorporation, and planting directions for VERNAM A 6-E tank mixes on peanuts are listed at the end of the peanut tank mix section.

VERNAM A 6-E/BALAN *1.5 EC

FOR PEANUTS

Selective Herbicides -- Tank Mix Directions

How to use VERNAM A 6-E and BALAN 1.5 EC For Weed Control on Peanuts.

A tank mix combination of VERNAM A 6-E and BALAN E.C. can be used prior to planting for weed control in peanuts.

NOTE: Follow all use precautions and warnings that appear on the BALAN 1.5 EC label and on the VERNAM A 6-E label. Do not contaminate water by cleaning of equipment or disposal of wastes.

WEEDS CONTROLLED

<u>Annual Grasses:</u>

Annual bluegrass
Barnyardgrass - watergrass
Crabgrass
Crowfootgrass
Fall Panicum
Field sandbur
Foxtails
Goosegrass
Junglerice
Ryegrass

Johnsongrass, seedling

Texas panicum - (buffalograss) - (coloradograss)

Annual Broadleaf Weeds: •

Balloonvine*
Carpetweed
Chickweed
Lambsquarters, common
Florida purslane - pusley
Knotweed
Palmer amaranth - carelessweed
Pigweed
Purslane
Redmaids

*In Alabama Only

Perennial Grasses:

Nutsedge - nutgrass

APPLICATION DIRECTIONS

The following directions give broadcast rates of VERNAM A o-E and BALAN 1.5 EC for application prior to planting. Do not apply this combination after planting. BALAN 1.5 EC is not recommended for use on muck or other soil high in organic matter content.

*BALAN - Registered trademark of Elanco Products Company

Broadcast Rates Per Acre (Conventional spray and center pivot sprinklers):

Apply 2-2/3 pints VERNAM A 6-E plus 3 quarts BALAN 1.5-EC on coarse and medium textured (sandy and loam+light and medium) soils.

Apply 3-1/3 pints VERNAM A 6-E plus 4 quants BALAN 1.5 EC on fine textured (silt and clay-heavy) soils.

CENTER PIVOT SPRINKLER APPLICATION: (Limit use to the Southeastern U.S. only.)

Apply VERNAM A 6-E/BALAN 1.5-EC with irrigation water before planting or immediately after planting before either peanuts or weeds emerge. It is important that application be done immediately after the last tillage operation since poor results will occur if the weeds have germinated before application of the herbicides. Meter the premixed VERNAM A 6-E/BALAN 1.5-EC into the irrigaion water during the entire period. Apply in 1/2 inch of water.

USE PRECAUTIONS:

- A. Apply the product only through center pivot irrigation systems containing anti-siphon and check valves which will prevent water source contamination and overflow of the slurry tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.
- B. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.
- C. Application of more than recommended quantities of irrigation water may result in decreased product performance by removing the chemical from the zone of effectiveness.
- D. Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.

VERNAM® A 6-E/TREFLAN 4-EC

FOR PEANUTS
Selective Herbicide -- Tank Mix Directions

For TEXAS and OKLAHOMA ONLY

How to use VERNAM A 6-E and TREFLAN 4-EC as a spray tank mix for weed control on peanuts.

A tank mix combination of VERNAM A 6-E and TREFLAN 4-EC can be used prior to planting for weed control in peanuts. The combination will control a broader spectrum of weeds than either material used alone. It is especially useful where nutgrass and Texas Panicum are a problem.

WEEDS CONTROLLED

ANNUAL GRASSES:

Annual Bluegrass
Barnyardgrass (Watergrass)
Brachiaria
Bromegrass
Cheat
Crabgrass
Fall Panicum
Foxtails (including Giant Foxtail)
Goosegrass
Junglerice
Johnsongrass, seedling
Sandbur
Sprangletop
Stinkgrass
Texas Panicum (Coloradograss)

ANNUAL BROADLEAVES:

Balloonvine*
Carpetweed
Carelessweed
Chickweed
Florida purslane - pusley
Goosefoot
Knotweed
Kochia
Lambsquarters
Pigweeds (Spiny, Redroot)
Puncturevine
Purslane
Russian Thistle
Stinging Nettle

*In Alahama Only

PERENNIAL GRASSES:

Nutsedge (Nutgrass)

APPLICATIONS DIRECTIONS

The following directions give broadcast rates for YERNAM A 6-E and TREFLAN 4-EC as a spray tank mix for application prior to planting. Read and follow all directions, use limitations, precautions and warnings that appear on the TREFLAN 4-EC and VERNAM A 6-E labels.

Broadcast rates per Acre:

Apply and incorporate before planting 2-2/3 pints of VERNAM A 6-E and 1 pint TREFLAN 4-EC per acre. For band applications, reduce dosage proportionately, depending on row spacing and band width to be treated.

Use the following directions for the VERNAM A 6-E tank mixes on peanuts.

MIXING:

Add the recommended rates of the herbicides to the spray tank during filling and mix thoroughly. Begin adding the herbicides when spray tank is half full. Apply in 10 to 50 gallons of water per acre.

SPRAY EQUIPMENT:

Use a properly calibrated, low pressure, boom-type sprayer having good agitation. Check frequently during application to be sure nozzles are free from clogging and are delivering a uniform spray pattern.

SOIL INCORPORATION:

The tank mix combinations must be mixed (incorporated) into the soil immediately after application. Whenever possible, application and incorporation should be done in the same operation. This can be done by mounting the tanks and boom right on the incorporation rig.

For thorough incorporation, use the following equipment: TANDEM DISC: Set to cut 3 to 6 inches operated at 4-6 mph, followed by a spike-toothed harrow or some other leveling device, which extends beyond the ends of the disc. For thorough mixing, disc in two different directions (cross-disc).

OR: POWER DRIVEN cultivation equipment (tillers, cultivators, hoes) set to cut 2 to 3 inches deep.

Shallow incorporation of less than 2 inches may result in erratic weed control.

PLANTING:

Peanuts should be planted within 43 hours after the combination has been applied to obtain the maximum period of weed control during the growing season.

TANK MIX DIRECTIONS FOR USE ON SOYBEANS

VERNAM A 6-E may be combined with the compounds listed in this section for tank mix applications on soybeans. Recommended rates for each tank mix are listed in the sections below. The mixing, spray equipment, soil incorporation, and planting directions for the VERNAM A 6-E tank mixes on soybeans are listed at the end of the soybean tank mix section.

YERNAM A 6-E/TREFLAN* 4-EC Tank Mix Directions

How to use VERNAM A 6-E and TREFLAN 4-EC as a spray tank mix for weed control on soybeans.

A tank mix combination of YERNAM A 6-E (6 pounds active ingredient per gallon) and TREFLAN E.C. (4 pounds of active ingredient per gallon) can be used prior to planting for weed control in soybeans.

The combination will control a broader spectrum of weeds than either material used alone. This includes tough weeds such as nutgrass, velvetleaf, foxtails, johnsongrass, redroot pigweed and wild cane.

Dependable performance -- because the herbicides are mixed into the soil, rainfall is not needed to move them into the weed germinating zone. They are already there to kill grass and broadleaf weeds when they sprout.

*TREFLAN⊕ Registered trademark of Elanco Products Company

WEEDS CONTROLLED:

Annual Grasses:

Annual bluegrass Barnyardgrass - watergrass Brachiaria Bromegrass Cheat Crabgrass Fall Panicum Field sandbur Foxtails Goosegrass Junglerice Johnsongrass, seedling Sprangletop Stinkgrass Texas panicum - (buffalograss) (coloradograss)

Annual Broadleaf Weeds:

Balloonvine**
Carpetweed
Chickweed
Common lambsquarters
Florida pusley
Goosefoot
Knotweed
Kochia
Palmer amaranth - carelessweed
Pigweed
Purslane
Russian thistle
Sicklepod - coffeeweed
Stinging nettle
Velvetleaf - buttonweed

Perennial Grasses:

Wild cane

Nutsedge - nutgrass Rhizome johnsongrass*

*Suppression
**In Alabama Only

APPLICATION DIRECTIONS

Read and follow all directions, use limitations, precautions and warnings that appear on the VERNAM A 6-E and TREFLAN E.C. labels. Do not contaminate water by cleaning of equipment or disposal of wastes.

Application rates

Oroadcast Rates/Acre

Soil Texture

VERNAM A 6-E*

TREFLAN 4-EC*

Coarse (light-sandy soils)

2-2/3 pints

1 pint

Medium (silt loam & sandy clay soils)

Fine (heavy-clay soils)

3-1/3 to 4 pints

1 to 2 pints

*For rhizome johnsongrass suppression use the high rates of TREFLAN 4-EC and VERNAM A 6-E.

**For nutgrass, wild cane and velvetleaf control, use the high rate of 3-1/3 pints VERNAM A 6-E on medium textured soils.

For Rhizome Johnsongrass - Use mold board plow, chisel plow or similar implement to bring rhizomes to the top of the soil. Then follow with a disc set to cut 4-6 inches deep and operate in two different directions at 4-6 mph before application to cut the rhizomes into small (2-3 inch) pieces. This should also destroy any emerged johnsongrass.

Cultivation is suggested in addition to VERNAM A 6-E/TREFLAN 4-EC treatment in fields with moderate to heavy infestations of nutgrass, wild cane, velvetleaf, and johnsongrass rhizomes.

VERNAM A 6-E/TREFLAN 4-E/METRIBUZIN TANK MIX DIRECTIONS

How to use VERNAM A 6-E and TREFLAN 4-EC and METRIBUZIN (4-L or 50-WP) as a spray tank mix.

A tank mix of VERNAM A 6-E (6 pounds active ingredient per gallon) and TREFLAN 4-EC (4 pounds active ingredient per gallon) and METRIBUZIN 4-L (4 pounds active ingredient per gallon) or METRIBUZIN 50-WP (50% active ingredient by weight) can be used prior to planting for weed control in soybeans.

The combination will control a broader spectrum of weeds than the VERNAM A 6-E/TREFLAN 4-EC tank mix.

WEEDS CONTROLLED:

Annual Grasses:

Annual bluegrass
Barnyardgrass - watergrass
Brachiaria
Bromegrass
Cheat
Crabgrass
Fall Panicum
Field sandbur
Foxtails
Goosegrass
Junglerice
Johnsongrass, seedling
Sprangletop

Stinkgrass
Texas panicum - (buffalograss)
(coloradograss)

Wild cane

Annual Broadleaf Weeds:

Balloonvine**
Carpetweed
Chickweed
Common lambsquarters
Common ragweed
Florida pusley
Goosefoot
Knotweed
Kochia
Palmer amaranth - (carelessweed)
Pennsylvania smartweed

Pennsylvania smartweed
Pigweed
Prickly sida
Purslane
Russian thistle
Sicklepod - coffeeweed

Stinging nettle
Velvetleaf - buttonweed
Venice Mallow

Perennial Grasses:

Purple Nutsedge - nutgrass Yellow Nutsedge - nutgrass Rhizome johnsongrass*

*Suppression **In Alabama Only

APPLICATION DIRECTIONS

Read and follow all directions, use limitations, precautions and warnings that appear on the VERNAM A 6-E, TREFLAN 4-EC and appropriate MTTRIBUZIN (4-L or 50-WP) labels. Do not contaminate water by companies or disposal of wastes.

APPLICATION RATES

Soil Texture	VERNAM A 6-E	Broadca TREFLAN 4-EC	st Rates/Acre METRIBUZIN 4L or 50W?
Medium (silt loam & sandy clay soils)	2-2/3 to 3-1/3 pints	l pint	1/2 pint or 1/? pound
Fine (heavy-clay soils)	3-1/3 to 4 pints	1 pint	1/2-3/4 pint or 1/2-3/4 pouna

*For Rhizome johnsongrass suppression use the high rate of VERNAM A 5-E.

**For nutsedge, wild came, and velvetleaf control, use the high rate of 3-1/3 pints of VERNAM A 6-E on medium-textured soils.

Do not use the VERNAM A 6-E/TREFLAN/METRIBUZIN tank mix on coarse (light sandy) soils.

For Rhizome johnsongrass-use mold board plow, chisel plow or similar implement to bring rhizomes to the top of the soil. Then follow with a disc set to cut 4-6 inches deep and operate

to two different directions at 4-6 mph before application to cut the rnizomes into small (2-3 inch) pieces. This should also destroy any emerged johnsongrass.

Cultivation is suggested in addition to VERNAM A 6-E/TREFLAN 4-EC/ METRIBUZIN (4-L or 50-WP) treatment in fields with moderate to heavy infestations of nutgrass, wild cane, velvetleaf, and johnsongrass rhizomes.

VERNAM A 6-E/AMIBEN TANK MIX DIRECTIONS

How to use VERNAM A 6-E and AMIBEN as a spray tank mix for weed control on soybeans.

A tank mix combination of VERNAM A 6-E (6 pounds active ingredient per gallon) and AMIBEN (2 pounds active ingredient per gallon) can be used prior to planting, for weed control in soybeans.

The combination will control a broader spectrum of weeds than either material used alone.

WEEDS CONTROLLED:

Annual Grasses:

Barnyardgrass - watergrass Crabgrass Foxtail (Giant, green, yellow) German millet Goosegrass Johnsongrass, seedling Stinkgrass

Perennial Grasses:

Purple nutsedge - nutgrass Yellow nutsedge - nutgrass

Annual Broadleaves:

Carpetweed Chickweed Coffeeweed Florida pusley Kochia Lambsquarters, common Norningglory, annual Mustard, wild Nightshade, black Pigweed (redroot, smooth) Prickly sida - teaweed Purslane Ragweed, common Sicklepod Smartweed, Pennsylvania Spurge, annual Velvetleaf - buttonweed

APPLICATION DIRECTIONS

Read and follow all directions, use limitations, precautions and warnings that appear on the VERNAM A 6-E and AMIBEN labels. To not contaminate water by cleaning of equipment or disposal of wastes.

APPLICATION RATES:

Broadcast Rates/Acre

Soil Texture

YERNAM A 6-E

IBEN

Medium (silt loam & sandy clay soils)

2-2/3 pints

3 quarts

For mixing, spray equipment, soil incorporation, and planting directions, refer to the directions at the end of the VERNAM A 6-E tank mix on soybeans section of this label.

VERNAM A 6-E/BASALIN* 4-E TANK MIX DIRECTIONS

How to use VERNAM A 6-E and BASALIN 4-E as a spray tank mix on soybeans.

A tank mix combination of VERNAM A 6-E (6 pounds active ingredient per gallon) and SASALIN (4 pounds active ingredient per gallon) can be used prior to planting for weed control in soybeans.

The combination will provide better weed control than either herbicide used alone.

*BASALIN Registered trademark of BASF Wyandotte Corp.

WEEDS CONTROLLED:

Annual Grasses:

Annual Broadleaves:

Carpetweed

Barnyardgrass - watergrass Crabgrass Foxtail (Giant, green, yellow) German millet Goosegrass Johnsongrass, seedling

Florida pusley
Lambsquarters, common
Morningglory, annual
Pigweed; redroot, smooth
Purslane
Sicklepod
Velvetleaf - buttonweed

<u>Perennial Grasses</u>: Purple nutsedge - nutgrass Yellow nutsedge - nutgrass

APPLICATION DIRECTIONS

APPLICATION RATES:

Broadcast rates/Acre:

Soil Texture YERNAM A 6-E BASALIN 4-E

Coarse (light-sandy soils) 2 pints 3/4 pint

Medium (silt loam and sandy clay soils) 2-2/3 pints 1 pint

For miling, spray equipment, soil incorporation, and planting directions, refer to the directions at the end of the VERNAM A 6-E tank mix on soybeans section of this label.

VERNAM A 6-E/LASSO* 4-EC TANK MIX DIRECTIONS

How to use VERNAM A 6-E and LASSO 4-EC as a spray tank mix for weed control on soybeans.

A tank mix combination of VERNAM A 6-E (6 pounds active ingredient per gallon) and LASSO 4-EC (4 pounds active ingredient per gallon) can be used prior to planting for weed control in soybeans grown in North Central States of Michigan, Indiana, and Illinois. Do not use on sand or loamy sandy soils as injury may occur.

The combination will provide better weed control than either herbicide used alone.

WEEDS CONTROLLED:

Annual Grasses:

Barnyardgrass - watergrass Crabgrass Fall panicum Foxtail (Giant, green, yellow) Goosegrass Johnsongrass, seedling

Annual Broadleaves:

Carpetweed
Florida pusley
Lambsquarters, common
Morningglory, annual
Pennsylvania smartweed
Pigweed; redroot, smootn
Purslane
Sicklepod
Velvetleaf - buttonweed

Perennial Grasses:

Purple nutsedge - nutgrass Yellow nutsedge - nutgrass

APPLICATION DIRECTIONS

Read and follow all directins, use limitations, precautions and warnings that appear on the VEPNAM A 5-E and LASSO 4-EC labels. Do not contaminate water by cleaning of equipment or disposal of wastes.

APPLICATION RATES:

Broadcast rates/Acre:

Soil Texture	VERNAM A 6-E	LASSO 4-EC
Coarse (light-sandy soils)	2 pints	2 pints
Medium (silt loam and sandy clay soils)	2-2/3 pints**	3 pints
Fine (heavy - clay soils)	3-1/3 pints	4 pints

**For nutgrass and velvetleaf control, use the rate of 3-1/3 pints of VERNAM A 6-E on medium and fine textured (medium and heavy - clay) soils.

For Mixing, Sproy Equipment, Soil Incorporation, and Planting directions, refer to the directions at the end of the VERNAM A 6-E tank mix on soybean section of this label.

VERNAM A 6-E/PROWL* 4-E TANK MIX DIRECTIONS

How to use VERNAM A 6-E and PROWL 4-E as a spray tank mix for weed control on soybeans.

A tank mix combination of VERNAM A 6-E (6 pounds active ingredient per gallon) and PROWL 4-E (4 pounds active ingredient per gallon) can be used prior to planting for weed control in soybeans

The combination will provide better weed control than either herbicide use alone.

WEEDS CONTROLLED:

Annual Grasses:

Barnyardgrass - watergrass Crabgrass Foxtail millet Foxtail (Giant, green, yellow) Goosegrass Johnsongrass, seedling

Annual Broadleaves:

Carpetweed
Florida pusley
Lambsquarters, common
Morningglory, annual
Pigweed; redroot, smooth
Purslane
Sicklepod
Velvetleaf - buttonweed

^{*}Reg * of Monsanto Company

Perennial Grasses:

Purple nutsedge - nutgrass Yellow nutsedge - nutgrass

APPLICATION DIRECTIONS

Read and follow all directions, use limitations, precautions and warnings that appear or the VERNAM A δ -E and PROWL 4-E labels. Do not contaminate water by cleaning of equipment or disposal of wastes.

APPLICATION RATES:

Broadcast rates/Acre:

Soil Texture	VERNAM A 6-E	PROWL 4-E
Coarse (light-sandy soils)	2 pints	3/4 pints
Medium (silt loam and sandy clay soils)	2-2/3 pints**	1 pints
Fine (heavy - clay soils)	3-1/3 pints	1-1/2 pints

^{**}For nutgrass and velvetleaf control, use the rate of 3-1 3 pints of YERNAM A 6-E on medium textured (medium and heavy - c ry) soils.

For mixing, spray equipment, soil incorporation, and planting directions, refer to the directions at the end of the VERNAM A 6-E tank mix on soybean section of this label.

VERNAM A 6-E/TOLBAN* 4-E TANK MIX DIRECTIONS

How to use VERNAM A 6-E and TOLBAN® 4-E as a spray tank mix for weed control on soybeans.

A tank mix combination of VERNAM A 6-E (6 pounds active ingredient per gallon) and TOLBAN 4-E (4 pounds active ingredient per gallon) can be used prior to planting for weed control in soybeans.

The combination will provide better weed control than either herbicide use alone.

WEEDS CONTROLLED:

Annual Grasses:

Barnyardgrass - watergrass Crabgrass Foxtail (Giant, green, yellow) German millet Goosegrass Johnsongrass, seedling

Annual Broadleaves:

Carpetweed
florida pusley
Lambsquarters, common
Morningglory, annual
Pigweed; redroot, smooth
Purslane
Sicklepod
Velvetleaf - buttonweed

^{*}Reg. " of American Cyanamid Company.

Perennial Grasses:

Purple nutsedge - nutgrass Yellow nutsedge - nutgrass

APPLICATION DIRECTIONS

Read and follow all directions, use limitations, precautions and warnings that appear on the VERNAM A 6-E and TOLBAN 4-E labels. Do not contaminate water by cleaning of equipment or disposal of wastes.

APPLICATION RATES:

Broadcast rates/Acre:

Soil Texture	YERNAM A 6-E	TOLBAN 4-E
Coarse (light-sandy soils)	2 pints	3/4 pints
Medium (silt loam and sandy clay soils)	2-2/3 pints**	l pints
Fine (heavy - clay soils)	3-1/3 pints	1-1/2 pints

**For nutgrass and velvetleaf control, use the rate of 3-1/3 pints of VERNAM A 6-E on medium textured soils.

For mixing, spray equipment, soil incorporation, and planting directions, refer to the directions at the end of the VERNAM A 6-E tank mix on soybean section of this label.

*TOLBAN Registered * of Ciba-Geigy Corp.

USE THE FOLLOWING DIRECTIONS FOR THE VERNAM A 6-E TANK MIXES ON SOYBEANS.

Mixing:

Add the recommended rates of both VERNAM A 6-E and TREFLAN 4-EC to the spray tank during filling and mix thoroughly. Begin adding the herbicides when spray tank is half full. Apply in 10-50 gallons of water per acre.

Spray Equipment:

Use a properly calibrated, low pressure, boom-type sprayer having good agitation. Check frequently during application to be sure nozzles are free from clogging and delivering a uniform spray pattern.

DRY FERTILIZER STATEMENT

VERNAM A 6-E/TREFLAN 4-EC tank mix may be impregnated on many dry bulk fertilizers for use on soybeans. However, uniform distribution of VERNAM A 6-E/TREFLAN 4-EC on fertilizer particles and uniform application are necessary to assure good results. See Appendix II giving directions for impregnation and use.

Soil Incorporation:

The tank mix combinations with VERNAM A 6-E must be mixed (incorporated) into the soil immediately after application. Whenever possible, application and incorporation should be done in the same operation. This can be done by mounting the tanks and boom right on the incorporation rig.

For thorough incorporation, use the following equipment:

<u>Tandem Disc</u> - Set to cut to a depth of 4 inches, followed by a <u>spiked-tooth</u> harrow or some other leveling device which extends beyond the ends of the disc. For thorough mixing, disc in two different directions (cross disc).

OR: Power-driven cultivation equipment set to cut to a depth of 2-3 inches.

Planting:

Do not plant seed deeper than 2 inches. Seeding can be done immediately, or it may be delayed up to 10 days. If it is necessary to work the soil following application and incorporation, but before planting, do not work the soil deeper than the depth the herbicide was incorporated i.e., no more than 1/2 the depth the herbicides were incorporated. To avoid removing the herbicide from the row (with loss of weed control in the row) do not move or shape soil after treatment, such as by planting in deep furrows.

APRENDIX I

PROCEDURE FOR TESTING THE COMPATIBILITY OF VERNAM A 6-E AND COMBINATIONS WITH FLUID FERTILIZERS

The following procedure is suggested for determining whether VERNAM A 6-E may be combined with a specific fluid fertilizer for spray tank application.

MATERIALS REQUIRED:

- 1. VERNAM A 6-E and/or combination.
- 2. Fluid fertilizer to be used.
- 3. Adjuvant for fertilizer tank mix: Compex*, Sponto 168-D*, Unite* or equivalent. The adjuvant which provides the best compatibility depends on the specific fertilizer under consideration.

Compex, Kalo Laboratories, Inc., Kansas City, Missouri; Sponto 168-D*, Witco Chemical Company, Houston, Texas; Unite, Hopkins Agricultural Chemical Company, Madison, Wisconsin.

- 4. Two one-quart, wide-mouth glass jars with lid.
- 5. Measuring spoons; a 25 ml pipette or graduated cylinder provides more accurate measurement; 1 tablespoon equals 3 teaspoons, 1 teaspoon equals approximately 5 milliliters.
- Measuring cup, 8 oz. (237 m¹).

PROCEDURE:

- 1. Pour a pint (about 473 ml) of the fluid fertilizer into each of the quart jars.
- 2. Add adjuvant to one of the jars and mix (see rate table).
- 3. Add the VERNAM A 6-E to the desired combinations of herbicide to both jars (see rate table for VERNAM A 6-E).
- 4. Close both jars with lid and mix the contents by turning the jars upside down ten times.
- 5. Inspect the surface and body of the mixtures --
 - (A) Immediately after completing the jar inversions.
 - (B) After allowing the jars to stand quietly for 30 minutes.
 - (C) And then again after turning the jars upside down 10 times.

APPENDIX I (continued)

If a uniform mix cannot be made, the mixture should not be used. If either mixture remains uniform for 30 minutes, the combination may be used. Should either mixture separate after 30 minutes, but readily remix uniformly with the jar inversions, the mixture can be used if adequate agitation is maintained in the tank. If the mixture with adjuvant is satisfactory, but the one without adjuvant is not, be sure to use the adjuvant in the spray tank. Add the adjuvant first at a rate of 3 pints per 100 gallons of fluid fertilizer; foaming can be minimize by using moderate agitation.

If nondispersible oil, sludge or clumps of solids form in the mixtures, the combinations should not be used.

Rate Table For YERNAM A 6-E and Adjuvant** With The Fluid Fertilizer

Gallons of Fluid Fertilizer To Be Applied Per Acre		VERNAM A 6-E* Pint of Fertilizer	
	VERNAM A 6-E		
	<u>mL</u> .	<u> Tsp</u> .	
10	8	1-3/5	
15 20	5 4	4/5	
25 30	3 2.5	2/3 1/2	
40	2	2/5	

- * Based on field rate of l pound active ingredient per acre in the fertilizer volumes indicated. Increase volume proportionately to correspond with intended field rate in terms of pounds active ingredient per acre (e.g. for field rate of 4 pounds actual active ingredient in 40 gallons fertilizer per acre, add 8 ml. or 2 tsp. VERNAM A 6-E to each jar for compatibility testing purposes).
- ** Two (2) milliliters or one-half (1/2) teaspoon of adjuvant should be added to 1 pint of fluid fertilizer in order to equal the rate of 3 pints of adjuvant per 100 gallons of fluid fertilizer.

APPERDIX II

VERNAM A 6-E and VERNAM A 6-E/TREFLAN* 4-EC IMPREGNATION ON DRY BUCK FERTILIZERS

CAUTION: VERNAM A 6-E alone or in combination with other herbicides must not be impregnated on ammonium nitrate, sodium nitrate or potassium nitrate. Such mixtures may cause explosion and fire.

VERNAM A 6-E alone may be impregnated on many* dry bulk fertilizer for use on registered crops. VERNAM A 6-E in combination with TREFLAN may be impregnated on many* dry bulk fertilizers and applied and incorporated in the soil before planting for the control of labeled grasses and broadleaf weeds in soybeans.

Field results have shown that VERNAM A 6-5 and VERNAM/TREFLAN 4-EC on bulk dry fertilizers give weed control edual to VERNAM A 6-E or VERNAM A 6-E/TREFLAN 4-EC applied as a spray in water or liquid fertilizer. However, uniform impregnation of herbicide solution on the dry fertilizer particles and uniform application in the field are necessary to assure good results.

For impregnating pesticides on dry fertilizers, use a closed rotary-drum mixer or a similar type of closed blender equipped with suitable spray equipment. The spray nozzle (or nozzles) should be positioned inside of the mixer to provide uniform spray coverage of the tumbling fertilizer. For the VERNAMTA 6-E/ TREFLAN 4-EC combination, premix in the proper use ratio to prepare a uniform solution for joint spray impregnation. The physical properties of fertilizers vary, particularly in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with VERNAM A 6-E or VERNAM A 6-E/ TREFLAN 4-EC provides a satisfactory, dry mixture. If the absorptive capacity is inadequate, use of a highly absorptive powder is required to provide a dry, flowable mixture. Microcel E (Johns-Manyille Products Corp.) is the recommended absorbent powder. It should be added separately and uniformly to the prepared VERNAM A 5-E or VERNAM A 6-E/TREFLAN 4-EC fertilizer mixture, in a quantity that is sufficient to provide a suitably flowable mixture. Generally less than 2% by weight of Microcel E is required. The amount of product actually required in the manufacture of individual fertilizer mixture should be determined carefully for each production operation. This is necessary to ensure that the amount of VERNAM A 6-E/TREFLAN 4-EC actually contained in the mixture applied to the soil represents the correct rate of use.

All VERNAM A 6-E and TREFLAN 4-EC label recommendations regarding rates per acre, soil incorporation, application, cautions, general use precautions and other directions must be followed.

All individual state regulations relating to bulk dry fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the fertilizer and VERNAM A 5-E and/or VERNAM A 6-E/TREFLAM 4-EC mixture.

APPENDIX II (continued)

A minimum of 200 pounds and a maximum of 450 pounds of approved ingredients* impregnated with VERNAM A 6-E/TREFLAN 4-EC at the recommended rate must be applied per acre.

Bulk fertilizer impregnated with VEPNAM A 6-E should be applied immediately, not stored. It is recommended that all bulk containers be tightly covered while the product is being transported and applied to reduce chances of VERNAM A 6-E loss via volatilization.

*Approved Dry Fertilizer Ingredients			
	<u> </u>	<u>P</u>	<u>K</u>
Ammonium Sulfate	21	0	0
Diammonium Phosphate	18	46	0
Potassium Chloride	0	0	60
(Single) Superphosphate	0	20	0
Triple Superphosphate	0	46	0
Urea	45	0	0
Ammonium Phosphate-Sulfate	16	20	0
Potassium Sulfate	0	0	52

NOTE: Sul-PO-MAG, K-MAG, and 11-48-0 have been shown to be compatible with VERNAM A 6-E plus TREFLAN 4-EC and are approved for use.

VERNAM A 6-E Typical Physical Data

Specific Gravity, 20/20°C 0.972 (typical)
Pounds/Gallon, 20°C 8.091 (typical)
Flashpoint: 187°F (Setaflash closed cup)
Viscosity: Sprayable down to minus 20°F



(Stauffer Shield)

VERNAM® A 6-E

Emulsifiable Liquid - - A Selective Herbicide For Control Of Weeds in Peanuts, Irish Potatoes, Soybeans, and Sweet Potatoes

Contains Six Pounds of Active Ingredient Per Gallon

ACTIVE INGREDIENT:

ACC-1983

KEEP OUT OF REACH OF CHILDREN

CAUTION

HARMFUL IF SWALLOWED

STATEMENT OF PRACTICAL TREATMENT

If a known exposure occurs or is suspected, immediately initiate the recommended procedures below. If further treatment is required, contact a poison center, a physician, or the nearest hospital.

If swallowed, immediately give several glasses of water but do not induce vomiting. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit evacuation of stomach. Do not give anything by mouth to an unconscious person.

For eye contact, immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart during flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

For skin contact, immediately flush all affected areas with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention if skin irritation occurs. Wash clothing before reuse.

If inhaled, remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

EPA Reg. No. 475-EPA Est. No. 476RS-836105

Gal. Net

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any Country except as specified: Country: United States of America

Made in U.S.A. by STAUFFER CHEMICAL COMPANY Westport, CT. 06881-0850

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

V O I T U A O

Harmful if swallowed. Avoid contact with skin, eyes and clothing. Avoid inhalation of spray mist. Wear rubber gloves, goggles and protective clothing. Wash with soap and water immediately after use or contact. Do not contaminate food and feed. Keep away from heat and flame.

ENVIRONMENTAL HAZARDS - Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes.

In case of emergency call (day or night) Chemtrec 300-424-9300 or Stauffer Chemical Company 203-226-6602.

WEEDS CONTROLLED BY VERNAM A 6-E

VERNAM A 6-E will not control established weeds:

<u>Annual Grasses:</u>

Barnyardgrass - Watergrass (Echinochloa crus-galli)
Crabgrass (Digitaria spp.)
Fall Panicum (Panicum dichotomiflorum)
Foxtail millet (Setaria italica)
Giant foxtail (Setaria faberi)
Goosegrass (Eleusine indica)
Green foxtail (Setaria viridis)
Johnsongrass seedling (Sorgnum halepense)
Wild cane* (Sorghum bicolor)
Yellow foxtail (Setaria glauca)

*Cultivation is suggested in addition to the VERNAM A 6-E treatment in fields with moderate or heavy infestations of wild cane.

Annual Broadleaf Weeds:

Annual morningglory (Ipomoea purpurea)
Balloonvine* (Cardiospermun halicacabum)
Carpetweed (Mollugo verticillata)
Common lambsquarters (Chenopodium album)
Florida purslane - Florida pusley (Richardia scabra)
Purslane (Portulaca oleracea)
Redroot pigweed (Amaranthus retroflexus)
Sicklepod - coffeeweed (Cassia obtusifolia)
Smooth pigweed (Amaranthus nyoridus)
Velvetleaf - buttonweed (Abutilon theophrasti)

*in Alabama only

The above listed proadleaf weeds will be controlled only if theatment is made when conditions are favorable for weed seed germination and growth.

Perennial Grasses:

Purple nutsedge - nutgrass (<u>Cyperus rotundus</u>) Yellow nutsedge - nutgrass (<u>Cyperus esculentus</u>)

Existing stands of nutgrass must be turned under and enobbed up thoroughly before treatment. For nutgrass control VERNAM A 6-E must be thoroughly mixed into the soil prior to planting or applied subsurface to the soil with injectors or sweeps. Cultivation is suggested in addition to VERNAM A 6-E treatment in fields with moderate to heavy nutgrass infestations.

GENERAL USE PRECAUTIONS

Read entire label before using.

VERNAM A 6-E should be used only for recommended purposes and at recommended rates (do not overdose).

Failure to follow label instructions, or use on crops not specifically listed on the label may result in crop injury or destruction.

Applied according to directions and under normal growing conditions, VERNAM A 6-E will not harm the treated crop. Malformation of the primary leaves is not unusual. This condition is only temporary and will not affect yields. During germination and early stages of growth, extended periods of unusually cold and wet or hot and dry weather, insect or plant disease attack, the use of certain soil-applied systemic insecticides, improperly placed fertilizers or soil insecticides may create abnormal conditions that weaken crop seedlings. VERNAM A 6-E used under these abnormal conditions could result in crop injury.

YERNAM A 6-E is recommended for use on mineral soils only. Do not tank mix VERNAM A 6-E with insecticides or fungicides.

Do not contaminate irrigation water or water used for domestic purposes. In irrigated areas, do not apply VERNAM A 6-E before pre-irrigation.

DIRECTIONS FOR USE OF VERNAM A 6-E

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

VERNAM A 6-E is a selective herbicide which is mixed (incorporated) into the soil or applied below the surface of the soil for control of weeds listed on this label. VERNAM A 6-E controls annual weeds as their seeds germinate by interfering with normal germination and seedling development. It does not control established weeds. All weed growth and crop stubble should be thoroughly worked into the soil before treatment.

APPLICATION DIRECTIONS

Pour the recommended amount of VERNAM A 6-E into the spray tank during the filling operation. Apply in 10 to 50 gallons of water per acre using a properly calibrated, low-pressure (20 to 40 PSI) sprayer naving good agitation. The soil should be well-worked and dry enough to permit good soil mixing (incorporation) or subsurface application. Soil should be as free as possible of trash for subsurface application with sweeps or injectors. Avoid overlaps that will increase dosage above recommended limits.

FLUID FERTILIZER STATEMENT

VERNAM A 6-E may be combined with fluid (solution, slurry, or suspension) fertilizers. However, physical compatibility with these fluid fertilizers must be determined before combining in the spray tank. See Appendix I for directions regarding these combinations.

DRY FERTILIZER STATEMENT

VERNAM A 6-E may be impregnated on many dry bulk fertilizers for use on registered crops. However, uniform distribution of VERNAM A on fertilizer particles and uniform application are necessary to assure good results. See Appendix II for information and directions for impregnation and use.

INCORPORATION DIRECTIONS

VERNAM A 6-E must be incorporated into the soil immediately (within minutes) to prevent loss of the herbicide. Whenever possible, application and incorporation should be done in the same operation.

SOIL MIXING (INCORPORATION) BEFORE PLANTING: Use power-driven cultivation equipment set to cut to a depth of 2 to 3 inches or tangem discs set to cut to a depth of 4 to 6 inches, operated at 4 to 6 mpn, followed by a spiked-tooth harrow or some other leveling device which extends beyond ends of the disc. For thorough mixing, disc in two different directions (cross disc). Prior to the second discing, raise the disc to prevent cutting deeper than 4 to 6 inches.

NOTE: In the southern lower Delta of the Mississippi Valley, disc incorporation is not recommended on the heavy (gumbo) clay soils.

SOIL MIXING (INCORPORATION) AFTER PLANTING: Use power-driven cultivation equipment set to cut to a depth of 2 inches, or on coarse textured (light) soils only, ground-driven tillers (rolling cultivators, rotary hoe, row wheels. etc.) set to cut to a depth of 1-1/2 inches and operated at 6 to 8 mph. When incorporating after planting, care must be taken not to disturb the crop seed or seedlings by adjusting times or plades of incorporation equipment so they are not directly over the drill row.

SUBSURFACE APPLICATION BEFORE OR AT PLANTING (for peanuts and soybeans only): Special equipment designed for subsurface application MUST be used. Injector units must be rigidly mounted on or IMMEDIATELY ahead or IMMEDIATELY behind the planter unit. Sweeps must be mounted IMMEDIATELY ahead of the planter unit.

- (1) Soil Injection -- Injector snanks must be spaced 2-1/2 to 3 inches apart and mounted in staggered cositions to avoid trash buildup. Set shanks to inject YERNAM A 6-E 1-1/2 to 3 inches below the soil surface. The width of the band in which weed control is desired will determine the number and spacing of injector snanks required per row. (Example: Four injector shanks spaced 3 inches apart gives a 12-inch band). A proadcast application can be made by increasing the number of shanks. The two shanks adjacent to the drill row must be 1-1/4 to 1-1/2 inches on either side of it.
- (2) Covered Sweeps -- Set the sweeps to run 3 to 4 inches Selow the soil surface. Calibrate by measuring the spray band width at the back edge of the sweep, not the sweep width. For BROADCAST APPLICATIONS, stagger sweeps on double tool bar so that they overlap sufficiently to allow spray bands to meet.

NOTE: When applying with preeps, YERNAM A 6-E must be applied deep enough to allow 3 to 4 inches of soil to remain over the treatment after the planting operation.

PLANTING -- SOYBEANS, PEANUTS

Do not plant seed deeper than 2 inches. For VERNAM A 6-E application made before planting, seeding can be done immediately, or it may be delayed up to 10 days. If it is necessary to work the soil following application and incorporation, but before planting, do not work the soil deeper than the depth the harbicide was incorporated. To avoid removing VERNAM A 6-E from the row (with loss of weed control in the row) do not move or shape soil after treatment, such as by planting in deep furrows.

RECOMMENDATIONS - VERNAM A 6-E

These recommendations are given in terms of broadcast (overall) rates of YERNAM A 6-E per acre. For band or row application, reduce broadcast rates proportionately, depending upon band width to be treated and row spacing.

PEARUTS

VERNAM A 6-E may be applied before planting, at planting or immediately after planting. When applying after planting, care must be taken not to disturb the seed. Use 2-2/3 pints on coarse textured (sandy-light) spils; 3-1/3 pints on medium to fine textured (sandy-loam to clay loam-medium to heavy) soils.

POTATOES (Inish) - except in Florida

VERNAM A 6-E may be applied before planting. Use 4 pints on coarse textured (sandy - light) soils, 5-1/4 pints on medium to fine textured (sandy loam to play loam - medium to heavy, soils, and 8-1/4 pints on very fine textured (clay - very neavy) soils.

VERNAM A 6-E may be applied through irrigation water after planting perore weed growth starts or immediately following clean cultivation. Meter VERNAM A 6-E into the irrigation water using a metering device that will introduce a constant flow into the water.

Furrow: Meter VERNAM A 6-E into the water during the entire irrigation period. Do not apply within 45 days of harvest.

Sprinkler: Meter VERNAM A 6-E into the water during the entire Deriod or into sufficient water to penetrate to a depth of 3 to 4 inches. Time this VERNAM A 6-E application to insure that proper penetration of the herbicide corresponds with the end of the irrigation period. Flush the lines then turn the water off promptly. Tailwater (run-off water) from irrigation should be recirculated. Do not apply within 45 days of harvest.

SOYBEANS

The following recommendations are for soybeans grown in all areas except in the Southeastern States:

VERNAM A 6-E may be applied before planting, at planting, or immediately after planting. When applying at or after planting, care must be taken not to disturb the crop seed or seedlings. Use 2-2/3 pints on coarse textured (sandy-light) soils, 3-1/3 pints on medium to fine textured (sandy-loam to clay loam - medium to heavy) soils, 4 pints on very fine textured (clay - very heavy) soils.

For soybeans grown in the Southeastern States including North Carolina, South Carolina, Georgia, Alabama, Florida and Eastern Tennessee (Tenn. River East):

VERNAM A 6-E may be applied before planting, at planting, or immediately after planting. For incorporated applications made before planting, do not plant in deep furrows, or use shanks or other device ahead of planter which bring up untreated soil to the surface. For furrow planted soybeans, apply VERNAM A 6-E at or immediately after planting in bands over the row and incorporate with row wheels only. When applying at or after planting, care must be taken not to disturb the crop seed or seedlings. use 2-2/3 pints on coarse textured (sandy-light) soils; 3-1/3 nints on medium to fine textured (sandy-light) loam-medium to heavy) soils.

NOTE: In areas where peds are rane prior to planting soybeans, \overline{VERRAM} A 6-E may be applied in a band inmediately ahead of the beauing discs, set to cover the VERNAM A 6-E with 3 to

VERNAM A 6-E 7.

4 inches of soil. If ped levelers are used before planting soybeans, make the peds nigher to compensate for leveling, so 2 to 3 inches of soil remain over the treatment after the planting operation is done.

<u>SWEET POTATOES</u> (VERNAM A 6-E is not recommended on sweet potatoes in the states of New Jersey, Maryland, Virginia, Delaware and California).

- A. For a broadcast bed-up application, apply 2 pints of VERNAM A 6-E par acre immediately anead of bedding discs set to cover VERNAM A 6-E with 3 to 4 inches of soil.
- 8. For a band bed-over application reduce the broadcast rate (broadcast rate for this method is 4 pints per acre) proportionately depending upon band width and row spacing. Apply VERNAM A 6-E immediately ahead of badding discs set to cover VERNAM A 6-E with 3 to 4 inches of soil. Set discs so that treated soil is not folded in.
- C. For a broadcast incorporation application, apply /ERNAM A 6-E at 2-2/3 pints per acre and disc incorporate just before making beds (if beds are made) and transplanting.

NOTE: With methods A and B, if bed levelers are used when transplanting, make the beds higher to compensate for leveling, so 3 to 4 inches of soil covers VERNAM A 5-E after transplanting.

SEQUENTIAL APPLICATIONS

IMPORTANT: Always consult exact label of each herbicide used for specific recommendations and limitations.

For control of weeds not listed on the VERNAM A 6-E label, and for increased control of labeled broadleaf weeds, the following herbicides are suggested as overlay treatments after preplant applications of VERNAM A 6-E:

PEANUTS

DYANAP* 3 lbs./gal. liquid

Broadcast rates per acre:

Apply at cracking at the rate of 6 quarts per acre.

ENIDE* 50W + DINITRO (PREMERGE 3 15s./gal.)

Broadcast rates per acre:

Apply at cracking or up to 7 days after at the rate of 4 lbs. ENIDE 50W and 2 quarts PREMERGE per acre.