



AGRICULTURAL BULLETIN

352-392 PM23 10/37



VELPAR® L HERBICIDE
CROWN VETCH
DELAWARE, MARYLAND, NEW YORK
AND PENNSYLVANIA

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

NOV 23 1987
352-392

VELPAR® L HERBICIDE
FOR SELECTIVE CONTROL OF CANADA THISTLE IN CROWN VETCH
IN THE STATES OF DELAWARE, MARYLAND, NEW YORK AND PENNSYLVANIA

DIRECTIONS FOR USE

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

Du Pont Velpar® L Herbicide is recommended for selective control of Canada thistle infesting established roadside-stands of crown vetch in the states of Delaware, Maryland, New York and Pennsylvania. "Velpar" L is an effective herbicide providing both foliar and residual activity to control Canada thistle.

HOW TO USE

Apply 3 to 5 pts. of "Velpar" L in 25 to 100 gals. of water per acre by ground only, using conventional spray equipment that has been properly calibrated. Do not use a surfactant.

Make a single application from late spring through mid summer, when thistle is in an active growth stage but prior to flowering. Moisture is required to activate "Velpar" L in the soil. Best results are obtained when soil is moist at time of application and 1/4 to 1/2 inch of rainfall occurs within 2 weeks after application. Some discoloration of the crown vetch foliage may occur after application, but recovery should be complete in 30 to 45 days.

Note: Injury or loss of desirable trees or other plants may result from failure to observe the following: Do not apply, drain or flush equipment on or near desirable trees or other plants. Do not apply on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Prevent drift of spray to desirable plants. Do not allow livestock to graze on treated roadside areas.

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IMPORTANT

BEFORE USING "VELPAR" L, READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE PRODUCT LABEL.

This bulletin contains new or supplemental instructions for use of this product which may not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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AGRICULTURAL BULLETIN



VELPAR® L HERBICIDE
ALFALFA

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
FOR CONTROL OF CERTAIN WEEDS IN ESTABLISHED ALFALFA

DIRECTIONS FOR USE

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

ACCEPTED
JUN 2 1986
EPA REG. NO. 352-392

GENERAL INFORMATION

Du Pont Velpar® L Herbicide is recommended for control of certain weeds in established hay alfalfa except in the states of Montana, North Dakota, South Dakota and Wyoming. It is also recommended for control of certain weeds in established seed alfalfa in the State of California.

Sufficient moisture is necessary to activate the herbicide. Best results are obtained when 1/2 to 1" of rainfall or sprinkler irrigation occurs within two weeks after application, and when soil is moist at time of application, and weeds have not germinated or are less than 2" tall or across.

Since the effect of "Velpar" L on alfalfa varies with soil conditions, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas.

HOW TO USE

Treat only stands of alfalfa established for one year or for one growing season, provided the alfalfa root system is well established and the crop is healthy, vigorous and not under stress from weather conditions, insect or disease damage. Do not use on seedling alfalfa nor on alfalfa-grass mixtures or on other mixed stands.

At elevations above 3,000 ft. do not use "Velpar" L on alfalfa that has been established with a cover or nurse crop until the alfalfa has gone through two summer growing seasons.

Dormant Varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre after it becomes dormant and before new growth begins in the spring.

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Non-dormant and semi-dormant varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre during winter months when alfalfa plants are in the least active stage of growth.

Exception:

- In certain northeastern* and midwestern* states, make a single application of 1 to 3 quarts per acre in the spring before new growth exceeds 2" in height or to stubble after cutting following hay removal and before regrowth exceeds 2" in height. Severe alfalfa injury may result following an after-cutting application if the regrowth is more than 2" high, or significant stubble is left after alfalfa cutting, and/or the air temperature is above 90°F.
- Do not exceed 1 1/2 qts/acre on alfalfa less than one year old.

Seed Alfalfa (California Only)

Do not use on fields with sandy loam or loamy sand soils having less than 1% organic matter.

Do not exceed 1 quart per acre on fields with sandy loam or loamy sand soils having between 1 and 2% organic matter.

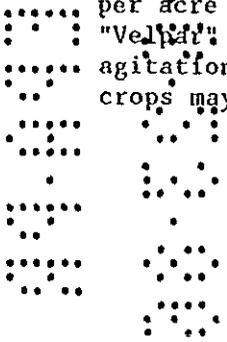
Do not exceed 1 quart per acre on seed alfalfa that has been established for only one growing season.

If abnormally dry conditions exist following application, restrict first irrigation to not more than 1/2 inch of water.

APPLICATION AND SPRAY VOLUMES

Apply "Velpar" L using a fixed boom power sprayer or aerial equipment. Before spraying, calibrate equipment to determine the quantity of water necessary to uniformly and thoroughly cover the vegetation in a measured area to be treated. The sprayer must be properly calibrated to a constant speed and rate of delivery. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping to prevent crop injury.

Add the "Velpar" L to a water-filled tank, mix thoroughly. Apply in at least 20 gallons of water per acre by ground and 5 to 10 gallons of water per acre by air, but use at least 5 gallons of water for every 1 gallon of "Velpar" L. To avoid foaming problems, use anti-foam agents and minimal agitation. Only those anti-foam agents which are cleared for use on growing crops may be added to the spray mixture.



USE RATES

Rate selection is to be based on soil texture and organic matter content as follows:

"Velpar" L (Quarts/Acre)

Soil Texture	Soils With <1% Organic Matter	Soils With 1 to 5% Organic Matter	Soils With >5% Organic ¹ Matter
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IMPORTANT

Do not use on gravelly or rocky soils, exposed subsoils, 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, hard pans, and clay lenses.

Coarse

loamy sand, sandy loam	1 to 1 1/2	1 to 1 1/2	2 to 3
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Medium

loam, silt loam, silt, clay loam, sandy clay loam	1 to 1 1/2	1 1/2 to 3	2 to 3
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Fine

silty clay loam, sandy clay, silty clay, clay	1 1/2 to 3	1 1/2 to 3	2 to 3
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¹On soils high in organic matter (>5%), the effectiveness of "Velpar" L can be significantly reduced and weed control may be unsatisfactory.

WEED SPECIES CONTROLLED

"Velpar" L when applied preemergence or early postemergence to the weeds, will control the following species:

1/2 to 1 quart/acre
tansy-mustard (Colorado and Kansas only)

1 to 2 quarts/acre

- | | | |
|--------------------------|----------------------|--|
| annual bluegrass | fiddleneck (tarweed) | salsify |
| blue mustard | field pennycress | seedling foxtail barley |
| cheatgrass (downy brome) | filaree | seedling orchardgrass |
| common chickweed | flixweed | shepherdspurse |
| common groundsel | Jim Hill mustard | spurry |
| dog fennel (mayweed) | London rocket | tansy-mustard (Except Colorado & Kansas) |
| English catchfly | miners lettuce | wild radish |
| | | yellow rocket |

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2 to 3 quarts/acreannual ryegrass
henbit

ivyleaf speedwell

purselane speedwell

2 to 3 quarts/acre will give partial control² of:common dandelion (spring only)
false dandelion
foxtail (Setaria spp.)
Mexican tea
perennial bluegrass (i.e., Canada bluegrass)prickly lettuce
quackgrass
seedling alfalfa
white cockle

²Partial control is observable reduction in weed competition as compared to an untreated area. Degree of partial control can vary with soil type, environmental factors, and size of weeds at the time of application.

Late spring and between cutting applications of 1 to 3 quarts/acre will control the following weeds: (For Northeastern & Midwestern states only)

common lambsquarters	foxtail (Setaria spp.)
crabgrass	jimsonweed
fleabane	redroot pigweed

"VELPAR" L FOR COMMERCIAL IMPREGNATION AND APPLICATION ON DRY BULK FERTILIZER (except in California or Arizona)

"Velpar" L Herbicide may be applied with dry bulk fertilizer for control of certain weeds; dry bulk fertilizer may be impregnated or coated with "Velpar" L for application to establish alfalfa. All recommendations, cautions and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling. Keep "Velpar" L from heat, sparks and open flame. (Refer to Material Safety Data Sheet for "Velpar" L.)

Application

Uniform application of "Velpar" L which has been impregnated on dry fertilizer is essential for satisfactory weed control. Accurate calibration of fertilizer application equipment is essential for uniform distribution to the surface. The recommended method of application is to apply 1/2 the recommended rate and overlap 50 percent. This results in the best distribution pattern.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to the alfalfa to avoid crop injury and/or poor weed control.

Impregnation

To impregnate, use a system consisting of a conveyor or closed drum which is used for dry bulk fertilizer blending. Any commonly used fertilizer can be impregnated with "Velpar" L, except ammonium nitrate or fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Do not use on limestone.

Apply using a minimum of 250 pounds dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre. To impregnate or coat the dry bulk fertilizer with "Velpar" L, the delivery nozzles must be directed to deliver a fine spray toward the fertilizer for thorough coverage and avoiding spray contact with mixing equipment. Uniform impregnation of "Velpar" L to dry bulk fertilizer will vary, and if the adsorptivity is not adequate, the use of an adsorptive powder may be required to produce a dry free-flowing mixture. Microcel E (JohnsManville Product Corporation) is the recommended adsorbent powder. When another herbicide is used with "Velpar" L, mix and impregnate immediately.

Apply immediately after impregnation unless experience has shown that impregnated fertilizer can be stored without becoming lumpy and difficult to spread.

Rates

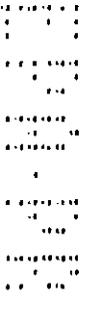
Select the rate of "Velpar" L to apply per acre from the appropriate section of this label and refer to the rate table to determine the amount of "Velpar" L which is to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be distributed on one acre.

Rate Chart for Impregnating Fertilizer with "Velpar" L
"Velpar" L Rate Per Acre

Fert. Rate Per Acre	1 Quart	1 1/2 Qts.	2 Qts.	3 Qts.
200 pounds	10 qts/ton	15 qts/ton	20 qts/ton	30 qts/ton
250 pounds	8 qts/ton	12 qts/ton	16 qts/ton	24 qts/ton
300 pounds	6.7 qts/ton	10 qts/ton	13.4 qts/ton	20.1 qts/ton
350 pounds	5.7 qts/ton	8.6 qts/ton	11.4 qts/ton	17.1 qts/ton
400 pounds	5 qts/ton	7.5 qts/ton	10 qts/ton	15 qts/ton
450 pounds	4.4 qts/ton	6.6 qts/ton	8.8 qts/ton	13.2 qts/ton

For rates other than those listed, use the following formula to calculate the amount of "Velpar" L to be impregnated per ton of dry fertilizer.

$$\frac{\text{Quarts "Velpar" L}}{\text{Per Acre}} \times \frac{2000}{\text{lbs. Fertilizer}} = \text{Quarts "Velpar" L Per Ton of Fertilizer}$$



REPLANTING:

Corn may be planted 12 months after the last treatment, except in areas of low rainfall (20" or less) where corn may be planted 12 months after the last treatment, provided the use rate did not exceed 1 1/2 quarts per acre. Do not plant treated areas to any other crop within two years after treatment as crop injury may result.

NOTE:

Because crop injury may result, do not apply to actively growing alfalfa nor to stubble between cuttings, except as recommended for certain northeastern* and midwestern* states. Do not apply to seedling alfalfa nor to alfalfa-grass mixtures; do not apply to alfalfa growing under stress from insect, disease, or winter injury, or showing symptoms of other stress conditions; do not use on hardpan, alkali or poorly drained soils. Extremely heavy rainfall or more than 1" of irrigation after application may result in crop injury or non-performance. Do not apply to snow covered or frozen ground. Do not use in low desert valleys in California or Arizona. Temporary alfalfa yellowing may occur following herbicide applications. Do not use in the states of Montana, North Dakota, South Dakota and Wyoming.

Do not graze or feed treated forage or hay to livestock within 30 days following application.

*Northeastern and Midwestern states are:

- | | | |
|-------------|---------------|---------------|
| Connecticut | Massachusetts | Ohio |
| Delaware | Michigan | Pennsylvania |
| Illinois | Minnesota | Rhode Island |
| Indiana | Missouri | Vermont |
| Kentucky | New Hampshire | Virginia |
| Maine | New Jersey | West Virginia |
| Maryland | New York | Wisconsin |

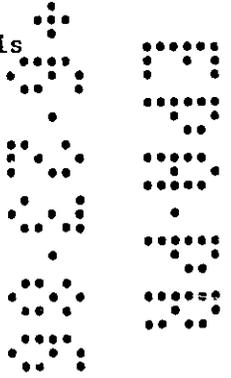
IMPORTANT

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This labeling must be in the possession of the user at the time of pesticide application.

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AGRICULTURAL BULLETIN



VELPAR® L HERBICIDE
ALFALFA

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
FOR CONTROL OF CERTAIN WEEDS IN ESTABLISHED ALFALFA

DIRECTIONS FOR USE

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

ACCEPTED
DEC 13 1985
EPA Reg. No. 352-392

GENERAL INFORMATION

Du Pont Velpar® L Herbicide is recommended for control of certain weeds in established hay alfalfa. It is also recommended for control of certain weeds in established seed alfalfa in the State of California.

Sufficient moisture is necessary to activate the herbicide. Best results are obtained when 1/2 to 1" of rainfall or sprinkler irrigation occurs within two weeks after application, and when soil is moist at time of application, and weeds have not germinated or are less than 2" tall or across.

Since the effect of "Velpar" L on alfalfa varies with soil conditions, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas.

HOW TO USE

Treat only stands of alfalfa established for one year or for one growing season, provided the alfalfa root system is well established and the crop is healthy, vigorous and not under stress from weather conditions, insect or disease damage. Do not use on seedling alfalfa nor on alfalfa-grass mixtures or on other mixed stands.

At elevations above 3,000 ft. do not use "Velpar" L on alfalfa that has been established with a cover or nurse crop until the alfalfa has gone through two summer growing seasons.

Dormant Varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre after it becomes dormant and before new growth begins in the spring.

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Non-dormant and semi-dormant varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre during winter months when alfalfa plants are in the least active stage of growth.

Exception:

- In certain northeastern* and midwestern* states, make a single application of 1 to 3 quarts per acre in the spring before new growth exceeds 2" in height or to stubble after cutting following hay removal and before regrowth exceeds 2" in height. Severe alfalfa injury may result following an after-cutting application if the regrowth is more than 2" high, or significant stubble is left after alfalfa cutting, and/or the air temperature is above 90°F.
- Do not exceed 1 1/2 qts/acre on alfalfa less than one year old.

Seed Alfalfa (California Only)

Do not use on fields with sandy loam or loamy sand soils having less than 1% organic matter.

Do not exceed 1 quart per acre on fields with sandy loam or loamy sand soils having between 1 and 2% organic matter.

Do not exceed 1 quart per acre on seed alfalfa that has been established for only one growing season.

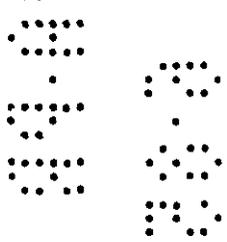
If abnormally dry conditions exist following application, restrict first irrigation to not more than 1/2 acre inch of water.

APPLICATION AND SPRAY VOLUMES

Apply "Velpar" L using a fixed boom power sprayer or aerial equipment. Before spraying, calibrate equipment to determine the quantity of water necessary to uniformly and thoroughly cover the vegetation in a measured area to be treated. The sprayer must be properly calibrated to a constant speed and rate of delivery. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping to prevent crop injury.

Add the "Velpar" L to a water-filled tank, mix thoroughly. Apply in at least 20 gallons of water per acre by ground and 5 to 10 gallons of water per acre by air, but use at least 5 gallons of water for every 1 gallon of

"Velpar" L. To avoid foaming problems, use anti-foam agents and minimal agitation. Only those anti-foam agents which are cleared for use on growing crops may be added to the spray mixture.



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USE RATES

Rate selection is to be based on soil texture and organic matter content as follows:

"Velpar" L (Quarts/Acre)			
Soil Texture	Soils With <1% Organic Matter	Soils With 1 to 5% Organic Matter	Soils With >5% Organic ¹ Matter

IMPORTANT

Do not use on gravelly or rocky soils, exposed subsoils, 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, hard pans, and clay lenses.

Coarse

loamy sand, sandy loam	1 to 1 1/2	1 to 1 1/2	2 to 3
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Medium

loam, silt loam, silt, clay loam, sandy clay loam	1 to 1 1/2	1 1/2 to 3	2 to 3
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Fine

silty clay loam, sandy clay, silty clay, clay	1 1/2 to 3	1 1/2 to 3	2 to 3
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¹On soils high in organic matter (>5%), the effectiveness of "Velpar" L can be significantly reduced and weed control may be unsatisfactory.

WEED SPECIES CONTROLLED

"Velpar" L when applied preemergence or early postemergence to the weeds, will control the following species:

1/2 to 1 quart/acre

tansy-mustard (Colorado and Kansas only)

1 to 2 quarts/acre

annual bluegrass	fiddleneck (tarweed)	salsify
blue mustard	field pennycress	seedling foxtail barley
cheatgrass (downy brome)	filaree	seedling orchardgrass
common chickweed	flixweed	shepherdspurse
common groundsel	Jim Hill mustard	spurry
dog fennel (mayweed)	London rocket	tansy-mustard (Except
English catchfly	miners lettuce	Colorado & Kansas)
		wild radish
		yellow rocket

2 to 3 quarts/acre

annual ryegrass	ivyleaf speedwell	purselane speedwell
henbit		

2 to 3 quarts/acre will give partial control² of:

common dandelion (spring only)	prickly lettuce
false dandelion	quackgrass
foxtail (Setaria spp.)	seedling alfalfa
Mexican tea	white cockle
perennial bluegrass (i.e., Canada bluegrass)	

²Partial control is observable reduction in weed competition as compared to an untreated area. Degree of partial control can vary with soil type, environmental factors, and size of weeds at the time of application.

Late spring and between cutting applications of 1 to 3 quarts/acre will control the following weeds: (For Northeastern & Midwestern states only)

common lambsquarters	foxtail (Setaria spp.)
crabgrass	jimsonweed
fleabane	redroot pigweed

"VELPAR" L FOR COMMERCIAL IMPREGNATION AND APPLICATION ON DRY BULK FERTILIZER (except in California or Arizona)

"Velpar" L Herbicide may be applied with dry bulk fertilizer for control of certain weeds; dry bulk fertilizer may be impregnated or coated with "Velpar" L for application to establish alfalfa. All recommendations, cautions and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling. Keep "Velpar" L from heat, sparks and open flame. (Refer to Material Safety Data Sheet for "Velpar" L.)

Application

Uniform application of "Velpar" L which has been impregnated on dry fertilizer is essential for satisfactory weed control. Accurate calibration of fertilizer application equipment is essential for uniform distribution to the surface. The recommended method of application is to apply 1/2 the recommended rate and overlap 50 percent. This results in the best distribution pattern.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to the alfalfa to avoid crop injury and/or poor weed control.

Impregnation

To impregnate, use a system consisting of a conveyor or closed drum which is used for dry bulk fertilizer blending. Any commonly used fertilizer can be impregnated with "Velpar" L, except ammonium nitrate or fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Do not use on limestone.

Apply using a minimum of 250 pounds dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre. To impregnate or coat the dry bulk fertilizer with "Velpar" L, the delivery nozzles must be directed to deliver a fine spray toward the fertilizer for thorough coverage and avoiding spray contact with mixing equipment. Uniform impregnation of "Velpar" L to dry bulk fertilizer will vary, and if the adsorptivity is not adequate, the use of an adsorptive powder may be required to produce a dry free-flowing mixture. Microcel E (JohnsManville Product Corporation) is the recommended adsorbent powder. When another herbicide is used with "Velpar" L, mix and impregnate immediately.

Apply immediately after impregnation unless experience has shown that impregnated fertilizer can be stored without becoming lumpy and difficult to spread.

Rates

Select the rate of "Velpar" L to apply per acre from the appropriate section of this label and refer to the rate table to determine the amount of "Velpar" L which is to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be distributed on one acre

Rate Chart for Impregnating Fertilizer with "Velpar" L
"Velpar" L Rate Per Acre

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For rates other than those listed, use the following formula to calculate the amount of "Velpar" L to be impregnated per ton of dry fertilizer.

$$\frac{\text{Quarts "Velpar" L}}{\text{Per Acre}} \times \frac{2000}{\text{lbs. Fertilizer}} = \text{Quarts "Velpar" L Per Ton of Fertilizer}$$

PLANTING:

Corn may be planted 12 months after the last treatment, except in areas of low rainfall (20" or less) where corn may be planted 12 months after the last treatment, provided the use rate did not exceed 1 1/2 quarts per acre. Do not plant treated areas to any other crop within two years after treatment as crop injury may result.

NOTE:

Because crop injury may result, do not apply to actively growing alfalfa nor to stubble between cuttings, except as recommended for certain northeastern* and midwestern* states. Do not apply to seedling alfalfa nor to alfalfa-grass mixtures; do not apply to alfalfa growing under stress from insect, disease, or winter injury, or showing symptoms of other stress conditions; do not use on hardpan, alkali or poorly drained soils. Extremely heavy rainfall or more than 1" of irrigation after application may result in crop injury or non-performance. Do not apply to snow covered or frozen ground. Do not use in low desert valleys in California or Arizona. Temporary alfalfa yellowing may occur following herbicide applications.

Do not graze or feed treated forage or hay to livestock within 30 days following application.

*Northeastern and Midwestern states are:

- | | | |
|-------------|---------------|---------------|
| Connecticut | Massachusetts | Ohio |
| Delaware | Michigan | Pennsylvania |
| Illinois | Minnesota | Rhode Island |
| Indiana | Missouri | Vermont |
| Kentucky | New Hampshire | Virginia |
| Maine | New Jersey | West Virginia |
| Maryland | New York | Wisconsin |

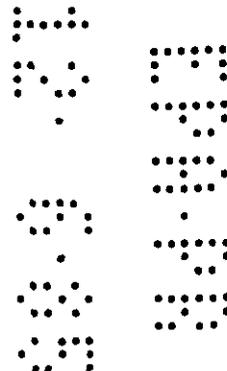
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AGRICULTURAL BULLETIN



VELPAR® L HERBICIDE
ALFALFA

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
FOR CONTROL OF CERTAIN WEEDS IN ESTABLISHED ALFALFA

DIRECTIONS FOR USE

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

ACCEPTED
OCT 25 1985
U.S. Environmental Protection Agency
Registration Number 352-392
EPA Reg. No. 352-392

GENERAL INFORMATION

Du Pont Velpar® L Herbicide is recommended for control of certain weeds in established hay alfalfa. It is also recommended for control of certain weeds in established seed alfalfa in the State of California.

Sufficient moisture is necessary to activate the herbicide. Best results are obtained when 1/2 to 1" of rainfall or sprinkler irrigation occurs within two weeks after application, and when soil is moist at time of application, and weeds have not germinated or are less than 2" tall or across.

Since the effect of "Velpar" L on alfalfa varies with soil conditions, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas.

HOW TO USE

Treat only stands of alfalfa established for one year or for one growing season, provided the alfalfa root system is well established and the crop is healthy, vigorous and not under stress from weather conditions, insect or disease damage. Do not use on seedling alfalfa nor on alfalfa-grass mixtures or on other mixed stands.

At elevations above 3,000 ft. do not use "Velpar" L on alfalfa that has been established with a cover or nurse crop until the alfalfa has gone through two summer growing seasons.

Dormant Varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre after it becomes dormant and before new growth begins in the spring.

16 Jul 37

Non-dormant and semi-dormant varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre during winter months when alfalfa plants are in the least active stage of growth.

Exception:

- In certain northeastern* and midwestern* states, make a single application of 1 to 3 quarts per acre in the spring before new growth exceeds 2" in height or to stubble after cutting following hay removal and before regrowth exceeds 2" in height. Severe alfalfa injury may result following an after-cutting application if the regrowth is more than 2" high, or significant stubble is left after alfalfa cutting, and/or the air temperature is above 90°F.
- Do not exceed 1 1/2 qts/acre on alfalfa less than one year old.

Seed Alfalfa (California Only)

Do not use on fields with sandy loam or loamy sand soils having less than 1% organic matter.

Do not exceed 1 quart per acre on fields with sandy loam or loamy sand soils having between 1 and 2% organic matter.

Do not exceed 1 quart per acre on seed alfalfa that has been established for only one growing season.

If abnormally dry conditions exist following application, restrict first irrigation to not more than 1/2 acre inch of water.

APPLICATION AND SPRAY VOLUMES

Apply "Velpar" L using a fixed boom power sprayer or aerial equipment. Before spraying, calibrate equipment to determine the quantity of water necessary to uniformly and thoroughly cover the vegetation in a measured area to be treated. The sprayer must be properly calibrated to a constant speed and rate of delivery. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping to prevent crop injury.

Add the "Velpar" L to a water-filled tank, mix thoroughly. Apply in at least 20 gallons of water per acre by ground and 5 to 10 gallons of water per acre by air, but use at least 5 gallons of water for every 1 gallon of "Velpar" L. To avoid foaming problems, use anti-foam agents and minimal agitation. Only those anti-foam agents which are cleared for use on growing crops may be added to the spray mixture.

USE RATES

Rate selection is to be based on soil texture and organic matter content as follows:

"Velpar" L (Quarts/Acre)

Soil Texture	Soils With <1% Organic Matter	Soils With 1 to 5% Organic Matter	Soils With >5% Organic ¹ Matter
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IMPORTANT Do not use on gravelly or rocky soils, exposed subsoils, 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, hard pans, and clay lenses.

Coarse

loamy sand, sandy loam	1 to 1 1/2	1 to 1 1/2	2 to 3
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Medium

loam, silt loam, silt, clay loam, sandy clay loam	1 to 1 1/2	1 1/2 to 3	2 to 3
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Fine

silty clay loam, sandy clay, silty clay, clay	1 1/2 to 3	1 1/2 to 3	2 to 3
---	------------	------------	--------

¹On soils high in organic matter (>5%), the effectiveness of "Velpar" L can be significantly reduced and weed control may be unsatisfactory.

WEED SPECIES CONTROLLED

"Velpar" L when applied preemergence or early postemergence to the weeds, will control the following species:

1 to 2 quarts/acre

- | | | |
|--------------------------|----------------------|-------------------------|
| annual bluegrass | fiddleneck (tarweed) | salsify |
| blue mustard | field pennycress | seedling foxtail barley |
| cheatgrass (downy brome) | filaree | seedling orchardgrass |
| common chickweed | flixweed | shepherdspurse |
| common groundsel | Jim Hill mustard | spurry |
| dog fennel (mayweed) | London rocket | tansy-mustard |
| English catchfly | miners lettuce | wild radish |
| | | yellow rocket |

2 to 3 quarts/acre

annual ryegrass	ivy leaf speedwell	purselane speedwell
henbit		

2 to 3 quarts/acre will give partial control² of:

common dandelion (spring only)	prickly lettuce
false dandelion	quackgrass
foxtail (Setaria spp.)	seedling alfalfa
Mexican tea	white cockle
perennial bluegrass (i.e., Canada bluegrass)	

²Partial control is observable reduction in weed competition as compared to an untreated area. Degree of partial control can vary with soil type, environmental factors, and size of weeds at the time of application.

Late spring and between cutting applications of 1 to 3 quarts/acre will control the following weeds: (For Northeastern & Midwestern states only)

common lambsquarters	foxtail (Setaria spp.)
crabgrass	jimsonweed
fleabane	redroot pigweed

"VELPAR" L FOR COMMERCIAL IMPREGNATION AND APPLICATION ON DRY BULK FERTILIZER (except in California or Arizona)

"Velpar" L Herbicide may be applied with dry bulk fertilizer for control of certain weeds; dry bulk fertilizer may be impregnated or coated with "Velpar" L for application to establish alfalfa. All recommendations, cautions and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling. Keep "Velpar" L from heat, sparks and open flame. (Refer to Material Safety Data Sheet for "Velpar" L.)

Application

Uniform application of "Velpar" L which has been impregnated on dry fertilizer is essential for satisfactory weed control. Accurate calibration of fertilizer application equipment is essential for uniform distribution to the surface. The recommended method of application is to apply 1/2 the recommended rate and overlap 50 percent. This results in the best distribution pattern.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to the alfalfa to avoid crop injury and/or poor weed control.

Impregnation

To impregnate, use a system consisting of a conveyor or closed drum which is used for dry bulk fertilizer blending. Any commonly used fertilizer can be impregnated with "Velpar" L, except ammonium nitrate or fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Do not use on limestone.

Apply using a minimum of 250 pounds dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre. To impregnate or coat the dry bulk fertilizer with "Velpar" L, the delivery nozzles must be directed to deliver a fine spray toward the fertilizer for thorough coverage and avoiding spray contact with mixing equipment. Uniform impregnation of "Velpar" L to dry bulk fertilizer will vary, and if the adsorptivity is not adequate, the use of an adsorptive powder may be required to produce a dry free-flowing mixture. Microcel E (JohnsManville Product Corporation) is the recommended adsorbent powder. When another herbicide is used with "Velpar" L, mix and impregnate immediately.

Apply immediately after impregnation unless experience has shown that impregnated fertilizer can be stored without becoming lumpy and difficult to spread.

Rates

Select the rate of "Velpar" L to apply per acre from the appropriate section of this label and refer to the rate table to determine the amount of "Velpar" L which is to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be distributed on one acre.

Rate Chart for Impregnating Fertilizer with "Velpar" L
"Velpar" L Rate Per Acre

Fert. Rate Per Acre	1 Quart	1 1/2 Qts.	2 Qts.	3 Qts.
200 pounds	10 qts/ton	15 qts/ton	20 qts/ton	30 qts/ton
250 pounds	8 qts/ton	12 qts/ton	16 qts/ton	24 qts/ton
300 pounds	6.7 qts/ton	10 qts/ton	13.4 qts/ton	20.1 qts/ton
350 pounds	5.7 qts/ton	8.6 qts/ton	11.4 qts/ton	17.1 qts/ton
400 pounds	5 qts/ton	7.5 qts/ton	10 qts/ton	15 qts/ton
450 pounds	4.4 qts/ton	6.6 qts/ton	8.8 qts/ton	13.2 qts/ton

For rates other than those listed, use the following formula to calculate the amount of "Velpar" L to be impregnated per ton of dry fertilizer.

$$\frac{\text{Quarts "Velpar" L}}{\text{Per Acre}} \times \frac{2000}{\text{lbs. Fertilizer}} = \text{Quarts "Velpar" L Per Ton of Fertilizer}$$

REPLANTING:

Corn may be planted 12 months after the last treatment, except in areas of low rainfall (20" or less) where corn may be planted 12 months after the last treatment, provided the use rate did not exceed 1 1/2 quarts per acre. Do not plant treated areas to any other crop within two years after treatment as crop injury may result.

NOTE:

Because crop injury may result, do not apply to actively growing alfalfa nor to stubble between cuttings, except as recommended for certain northeastern* and midwestern* states. Do not apply to seedling alfalfa nor to alfalfa-grass mixtures; do not apply to alfalfa growing under stress from insect, disease, or winter injury, or showing symptoms of other stress conditions; do not use on hardpan, alkali or poorly drained soils. Extremely heavy rainfall or more than 1" of irrigation after application may result in crop injury or non-performance. Do not apply to snow covered or frozen ground. Do not use in low desert valleys in California or Arizona. Temporary alfalfa yellowing may occur following herbicide applications.

Do not graze or feed treated forage or hay to livestock within 30 days following application.

*Northeastern and Midwestern states are:

- | | | |
|-------------|---------------|---------------|
| Connecticut | Massachusetts | Ohio |
| Delaware | Michigan | Pennsylvania |
| Illinois | Minnesota | Rhode Island |
| Indiana | Missouri | Vermont |
| Kentucky | New Hampshire | Virginia |
| Maine | New Jersey | West Virginia |
| Maryland | New York | Wisconsin |

IMPORTANT

BEFORE USING "VELPAR" L, READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE PRODUCT LABEL.

This bulletin contains new or supplemental instructions for use of this product which may not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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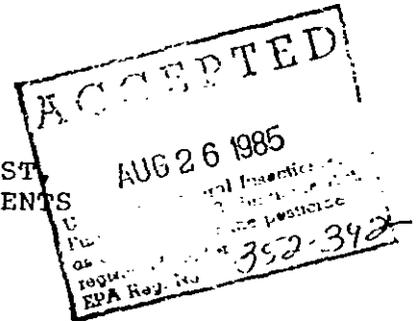
AGRICULTURAL BULLETIN



VELPAR® L HERBICIDE
FORESTRY
GRID APPLICATION

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
GRID APPLICATION FOR PINE PREHARVEST
SITE PREPARATION AND RELEASE TREATMENTS



DIRECTIONS FOR USE

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

Du Pont Velpar® L Herbicide is recommended for use in forestry site preparation, preharvest control of hardwoods, and pine release in pine-hardwood stands for growth enhancement of loblolly, slash, shortleaf and longleaf pine. The treatment provides control of many woody plants such as black cherry, blackgum*, dogwood*, elm, hawthorn, hickory*, oak, red maple*, sweetgum and sumac*.

HOW TO USE

Apply 3 to 12 qts. of undiluted "Velpar" L per acre for preharvest and site preparation, and 2 to 8 qts. of undiluted "Velpar" L per acre for pine release. Make the application using a "grid" pattern and rate (ml. per spot) as suggested in the table below. Do not apply "Velpar" L spots closer than 36" to seedlings or directly upslope from seedlings. Use an exact delivery handgun applicator and calibrate for precise delivery of the undiluted product.

Selection of the rate per acre and "grid" pattern will depend on soil texture and woody plant species composition. Use the higher rates on fine textured soils and when the major component of the hardwoods is a difficult-to-control species such as blackgum, dogwood, hickory and red maple. Use the lower rates on medium to coarse texture soils where elm, cherry, oak and sweetgum are dominant.

*considered hard-to-kill

TABLE OF SUGGESTED APPLICATION PATTERNS AND RATES
FOR UNDILUTED "VELPAR" L

For Site Preparation and Preharvest Control of Hardwoods

<u>SOIL</u>	<u>ML/SPOT</u>	<u>GRID (FT)</u>	<u>QTS./ACRE</u>
Coarse	1.0	4' x 4'	3
	3.0	4' x 6'	6
Medium/Fine	3.0	3' x 6'	8
	2.33	3' x 3'	12

For Pine Release

<u>SOIL</u>	<u>ML/SPOT</u>	<u>GRID (FT)</u>	<u>QTS./ACRE</u>
Coarse	2.0	6' x 7'	2 ⁺
	2.5	5' x 6'	3
Medium/Fine	2.0	4' x 6'	4
	2.33	3' x 6'	6
	1.5	3' x 3'	8

⁺Use on deep sands with pines four years of age.

"Velpar" L should be applied during the period from late winter (bud-break) to early summer. DO NOT BURN treated sites after initial foliage browning is evident. Burn only after brush has completely defoliated, at least once, from sufficient root uptake of the herbicide. Inconsistent results may occur if the site is burned 3 to 6 months prior to treatment.

NOTE: Use on 1-year old or 4-year old or older seedlings is acceptable; however, injury may result from use on 2-and 3-year seedlings where root growth is extensive but hardiness is lacking.

Results may be unsatisfactory where stump sprouts of less than one year's growth predominate.



AGRICULTURAL BULLETIN



VELPAR® L HERBICIDE
ALFALFA

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
FOR CONTROL OF CERTAIN WEEDS IN ESTABLISHED ALFALFA

DIRECTIONS FOR USE

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

ACCEPTED
AUG 26 1985
EPA REG. NO. 352-392

GENERAL INFORMATION

Du Pont Velpar® L Herbicide is recommended for control of certain weeds in established hay and seed alfalfa.

Sufficient moisture is necessary to activate the herbicide. Best results are obtained when 1/2 to 1" of rainfall or sprinkler irrigation occurs within two weeks after application, and when soil is moist at time of application, and weeds have not germinated or are less than 2" tall or across.

Since the effect of "Velpar" L on alfalfa varies with soil conditions, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas.

HOW TO USE

Treat only stands of alfalfa established for one year or for one growing season provided the alfalfa root system is well established and the crop is healthy, vigorous and not under stress from weather conditions, insect or disease damage. Do not use on seedling alfalfa nor on alfalfa-grass mixtures or on other mixed stands.

At elevations above 3,000 ft., do not use "Velpar" L on alfalfa that has been established with a cover or nurse crop until the alfalfa has gone through two summer growing seasons.

Dormant Varieties

Make a single application of "Velpar" L at 1 to 3 quarts per acre after it becomes dormant and before new growth begins in the spring.

Non-dormant and semi-dormant varieties:

Make a single application of "Velpar" L at 1 to 3 quarts per acre during winter months when alfalfa plants are in the least active stage of growth.

Exception:

- In certain northeastern* and midwestern* states, make a single application of 1 to 3 quarts per acre in the spring before new growth exceeds 2" in height or to stubble after cutting following hay removal and before regrowth exceeds 2" in height. Severe alfalfa injury may result following an after-cutting application if the regrowth is more than 2" high, or significant stubble is left after alfalfa cutting, and/or the air temperature is above 90° F.
- Do not exceed 1 1/2 qts/acre on alfalfa less than one year old.

Seed Alfalfa

Do not use on fields with sandy loam or loamy sand soils having less than 1% organic matter.

Do not exceed 1 quart per acre on fields with sandy loam or loamy sand soils having between 1 and 2% organic matter.

Do not exceed 1 quart per acre on seed alfalfa that has been established for only one growing season.

If abnormally dry conditions exist following application, restrict first irrigation to not more than 1/2 acre inch of water.

APPLICATION AND SPRAY VOLUMES

Apply "Velpar" L using a fixed boom power sprayer or aerial equipment. Before spraying, calibrate equipment to determine the quantity of water necessary to uniformly and thoroughly cover the vegetation in a measured area to be treated. The sprayer must be properly calibrated to a constant speed and rate of delivery. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping to prevent crop injury.

Add the "Velpar" L to a water-filled tank, mix thoroughly. Apply in at least 20 gallons of water per acre by ground and 5 to 10 gallons of water per acre by air, but use at least 5 gallons of water for every 1 gallon of "Velpar" L. To avoid foaming problems, use anti-foam agents and minimal agitation. Only those anti-foam agents which are cleared for use on growing crops may be added to the spray mixture.

USE RATES

Rate selection is to be based on soil texture and organic matter content as follows:

Soil Texture	"VELPAR" L (QUARTS/ACRE)		
	Soils with <1% Organic Matter	Soils with 1 to 5% Organic Matter	Soils with > 5% Organic ¹ Matter

IMPORTANT

Do not use on gravelly or rocky soils, exposed subsoils, 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, hard pans, and clay lenses.

Coarse

loamy sand, sandy loam	1 to 1 1/2	1 to 1 1/2	2 to 3
------------------------	------------	------------	--------

Medium

loam, silt loam, silt, clay loam, sandy clay loam	1 to 1 1/2	1 1/2 to 3	2 to 3
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Fine

silty clay loam, sandy clay, silty clay, clay	1 1/2 to 3	1 1/2 to 3	2 to 3
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¹On soils high in organic matter (>5%), the effectiveness of "Velpar" L can be significantly reduced and weed control may be unsatisfactory.

WEED SPECIES CONTROLLED

"Velpar" L when applied preemergence or early postemergence to the weeds, will control the following species:

1 to 2 quarts/acre

- | | | |
|--------------------------|----------------------|-------------------|
| annual bluegrass | fiddleneck (tarweed) | salsify |
| blue mustard | field pennycress | seedling foxtail |
| cheatgrass (downy brome) | filaree | barley |
| common chickweed | flixweed | seedling orchard- |
| common groundsel | Jim Hill mustard | grass |
| dog fennel (mayweed) | London rocket | shepherdspurse |
| English catchfly | miners lettuce | spurry |
| | | tansy-mustard |
| | | wild radish |
| | | yellow rocket |

2 to 3 quarts/acre

annual ryegrass	ivyleaf speedwell	purslane speedwell
henbit		

2 to 3 quarts/acre will give partial control² of:

common dandelion (spring only)	prickly lettuce
false dandelion	quackgrass
foxtail (Setaria spp.)	seedling alfalfa
Mexican tea	white cockle
perennial bluegrass (i.e., Canada bluegrass)	

²Partial control is observable reduction in weed competition as compared to an untreated area. Degree of partial control can vary with soil type, environmental factors, and size of weeds at the time of application.

Late spring and between cutting applications of 1 to 3 quarts/acre will control the following weeds: (For Northeastern & Midwestern states only)

common lambsquarters	foxtail (Setaria spp.)
crabgrass	jimsonweed
fleabane	redroot pigweed

"VELPAR" L FOR COMMERCIAL IMPREGNATION AND APPLICATION ON DRY BULK FERTILIZER (except in California or Arizona)

"Velpar" L Herbicide may be applied with dry bulk fertilizer for control of certain weeds; dry bulk fertilizer may be impregnated or coated with "Velpar" L for application to established alfalfa. All recommendations, cautions and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling. Keep "Velpar" L from heat, sparks and open flame. (Refer to Material Safety Data Sheet for "Velpar" L.)

Application:

Uniform application of "Velpar" L which has been impregnated on dry fertilizer is essential for satisfactory weed control. Accurate calibration of fertilizer application equipment is essential for uniform distribution to the surface. The recommended method of application is to apply 1/2 the recommended rate and overlap 50 percent. This results in the best distribution pattern.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to the alfalfa to avoid crop injury and/or poor weed control.

Impregnation:

To impregnate, use a system consisting of a conveyor or closed drum which is used for dry bulk fertilizer blending. Any commonly used fertilizer can be impregnated with "Velpar" L except ammonium nitrate or fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Do not use on limestone.

Apply using a minimum of 250 pounds dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre. To impregnate or coat the dry bulk fertilizer with "Velpar" L, the delivery nozzles must be directed to deliver a fine spray toward the fertilizer for thorough coverage and avoiding spray contact with mixing equipment. Uniform impregnation of "Velpar" L to dry bulk fertilizer will vary, and if the adsorptivity is not adequate, the use of an adsorptive powder may be required to produce a dry free-flowing mixture. Microcel E (JohnsManville Product Corporation) is the recommended absorbent powder. When another herbicide is used with "Velpar" L, mix and impregnate immediately.

Apply immediately after impregnation unless experience has shown that impregnated fertilizer can be stored without becoming lumpy and difficult to spread.

Rates:

Select the rate of "Velpar" L to apply per acre from the appropriate section of this label and refer to the rate table to determine the amount of "Velpar" L which is to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be distributed on one acre.

Rate Chart for Impregnating Fertilizer with "Velpar" L
"Velpar" L Rate Per Acre

Fert. Rate Per Acre	1 Quart	1 1/2 Qts.	2 Qts.	3 Qts.
200 pounds	10 qts/ton	15 qts/ton	20 qts/ton	30 qts/ton
250 pounds	8 qts/ton	12 qts/ton	16 qts/ton	24 qts/ton
300 pounds	6.7 qts/ton	10 qts/ton	13.4 qts/ton	20.1 qts/ton
350 pounds	5.7 qts/ton	8.6 qts/ton	11.4 qts/ton	17.1 qts/ton
400 pounds	5 qts/ton	7.5 qts/ton	10 qts/ton	15 qts/ton
450 pounds	4.4 qts/ton	6.6 qts/ton	8.8 qts/ton	13.2 qts/ton

For rates other than those listed, use the following formula to calculate the amount of "Velpar" L to be impregnated per ton of dry fertilizer.

$$\frac{\text{Quarts "Velpar" L}}{\text{Per Acre}} \times \frac{2000}{\text{lbs. Fertilizer}} = \text{Quarts "Velpar" L Per Ton of Fert.}$$

See EAB review dated 7/23/85

REPLANTING:

Corn may be planted 12 months after the last treatment, except in areas of low rainfall (20" or less) where corn may be planted 12 months after the last treatment, provided the use rate did not exceed 1 1/2 quarts per acre. ✓ Do not plant treated areas to any other crop within two years after treatment as crop injury may result.

3/4 lb ✓

NOTE:

Because crop injury may result, do not apply to actively growing alfalfa nor to stubble between cutting, except as recommended for certain northeastern* and midwestern* states. Do not apply to seedling alfalfa nor to alfalfa-grass mixtures; do not apply to alfalfa growing under stress from insect, disease, or winter injury, or showing symptoms of other stress conditions; do not use on hardpan, alkali or poorly drained soils. Extremely heavy rainfall or more than 1" of irrigation after application may result in crop injury or non-performance. Do not apply to snow covered or frozen ground. Do not use in low desert valleys in California and Arizona. Temporary alfalfa yellowing may occur following herbicide applications.

Do not graze or feed treated forage or hay to livestock within 30 days following application.

*Northeastern and midwestern states are:

Connecticut	Maine	New Hampshire	Vermont
Delaware	Maryland	New Jersey	Virginia
Illinois	Massachusetts	New York	West Virginia
Indiana	Michigan	Ohio	Wisconsin
Iowa	Minnesota	Pennsylvania	
Kentucky	Missouri	Rhode Island	

IMPORTANT

BEFORE USING "VELPAR" L, READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE PRODUCT LABEL.

This bulletin contains new or supplemental instructions for use of this product which may not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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AGRICULTURAL BULLETIN

DU PONT 1/23/85

VELPAR® L HERBICIDE
FORESTRY SITE PREPARATION
EAST OF THE ROCKY MOUNTAINS

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

USE OF VELPAR® L HERBICIDE ALONE OR IN TANK MIXTURE WITH TORDON®¹ 101 MIXTURE WEED AND BRUSH KILLER FOR SITE PREPARATION IN REFORESTATION AREAS EAST OF THE ROCKY MOUNTAINS

ACCEPTED
JUL 29 1985
U.S. DEPARTMENT OF AGRICULTURE
EPA REG. NO. 352-392

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its label.

Use of Velpar® L Alone

Du Pont Velpar® L Herbicide is recommended for use in forestry site preparation areas East of the Rocky Mountains where Austrian Pine, Balsam fir, Black spruce, Loblolly pine, Longleaf pine, Ponderosa pine, Red pine, Red spruce, Scotch pine, Shortleaf pine, Slash pine, Spruce, Virginia pine and white spruce will be planted.

How to Use

When used as directed, "Velpar" L provides both contact and residual control of many herbaceous and woody plants. Herbaceous species include: annual bluegrass, asters, barnyardgrass, bentgrass, Canada thistle*, catsear*, common groundsel, common ragweed, crabgrass*, curly dock*, dandelion*, false dandelion, fescue*, fleabane, foxtail, goldenrod*, heathaster*, horseweed*, orchardgrass*, oxeye daisy, Pennsylvania smartweed, pinegrass, quackgrass*, ryegrass*, velvetgrass, wild carrot, willowweed (fireweed).

Woody species include: ash, aspens, (bigtooth, trembling), balsam poplar, birch, elm, flowering dogwood*, hawthorne, hazel, hickory, honeysuckle*, oaks, red maple*, sourwood*, sweet gum, wild cherry, and willows.

Apply 1 to 3 gallons of "Velpar" L per acre using at least 5 gallons of water for each gallon of "Velpar" L. For aerial application, apply at least 8 gallons of spray per acre, using appropriate aerial equipment to obtain thorough coverage. For ground application, use conventional spray equipment with enough water for thorough coverage,

*Considered hard-to-kill. Partial control or suppression only

usually 25 gallons per acre over the treated area. On fine textured soils and hard-to-kill species, use the higher rates of "Velpar" L; for coarser soils use a lower rate. To reduce drift, use a precise application spray boom and/or add a spray thickening agent such as NALCO-TROL². If a spray thickening agent is used in the tank mixture, follow all label directions.

Add the "Velpar" L to a water filled tank and mix thoroughly. A surfactant such as Du Pont Surfactant WK may then be added at a rate of 1 quart per 100 gallons of spray. After thorough mixing, a defoaming agent such as Dow Corning "Antifoam A" or Hodag Anti-foam F-I may be added at the rate of 1 to 5 ounces per 1000 gallons. Agitate thoroughly to disperse the defoaming agent.

Use of Velpar[®] L plus Tordon[®] 101 in Tank Mixture

Du Pont Velpar[®] L Herbicide is recommended for use as a tank mix with "Tordon" 101 applied as a foliar treatment for woody plant control for pine site preparation. In addition to species listed above, this treatment controls woody plants such as: blackgum, pine, prunus spp., sassafras and sourwood.

How to Use

Apply 1 to 3 gallons of "Velpar" L plus 1 to 2 gallons of "Tordon" 101 per acre with appropriate aerial or ground spray equipment to obtain thorough foliage coverage. Mix at least 5 gallons of water for each gallon of "Velpar" L.

Use 1 1/2 to 2 gallons of "Tordon" 101 per acre when the major component of the hardwood composition to be controlled are species other than elm, oak, and sweetgum.

When oak, elm, sweetgum, blackberry and prunus predominate, use 1 1/2 to 3 gallons of "Velpar" L with 1 gallon of "Tordon" 101.

When blackgum, dogwood, sourwood and red maple predominate, use 1 to 3 gallons of "Velpar" L with 1 1/2 to 2 gallons of "Tordon" 101.

When to Apply

"Velpar" L, alone or in a tank mix, should be applied during the period from late spring to early summer after the trees have reached full leaf stage but before leaf tissue hardens; or, in Maine, Michigan, Minnesota, New Hampshire, New York, Vermont and Wisconsin, after bud break. Do not burn treated sites after initial contact (browning) effect on foliage (ten weeks or more). Burn only after brush has completely defoliated at least once from sufficient root uptake of "Velpar" L, usually 60 to 90 days after adequate rainfall.

32 of 37
7/24/85 ct

NOTE:

- 1) Pines planted sooner than six months after treatment with "Tordon" 101 may be injured in the South. For all conifers the waiting period between treatment and planting should be 8 to 9 months in the lake states and the Northeastern U.S.
- 2) Do not use on wet or poorly drained sites.

IMPORTANT ✓

BEFORE USING "VELPAR" L OR "TORDON" 101, READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE RESPECTIVE PRODUCT LABELS. NOTE IN PARTICULAR THAT "TORDON" 101 IS A 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.

This bulletin contains new or supplemental directions for use of these products which may not appear on the package labels. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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1. Registered trademark of the Dcw Chemical Company
 2. Registered trademark of Nalco Chemical Company



AGRICULTURAL BULLETIN



VELPAR® L HERBICIDE
FORESTRY
GRID APPLICATION

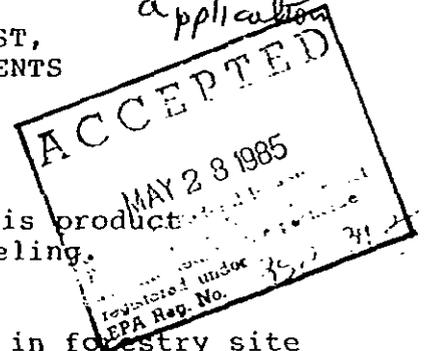
SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
GRID APPLICATION FOR PINE PREHARVEST,
SITE PREPARATION AND RELEASE TREATMENTS

DIRECTIONS FOR USE

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

*Same site
new type of
application*



Du Pont Velpar® L Herbicide is recommended for use in forestry site preparation, preharvest control of hardwoods, and pine release in pine-hardwood stands for growth enhancement of loblolly, slash, shortleaf and longleaf pine. The treatment provides control of many woody plants such as black cherry, blackgum*, dogwood*, elm, hawthorn, hickory*, oak, red maple*, sweetgum and sumac*.

HOW TO USE

Apply 4 to 12 qts. of undiluted "Velpar" L per acre for preharvest and site preparation, and 2 to 8 qts. of undiluted "Velpar" L per acre for pine release. Make the application using a "grid" pattern and rate (ml. per spot) as suggested in the table below. Do not apply "Velpar" L spots closer than 36" to seedlings or directly upslope from seedlings. Use an exact delivery handgun applicator and calibrate for precise delivery of the undiluted product.

Selection of the rate per acre and "grid" pattern will depend on soil texture and woody plant species composition. Use the higher rates on fine textured soils and when the major component of the hardwoods is a difficult-to-control species such as blackgum, dogwood, hickory and red maple. Use the lower rates on medium to coarse texture soils where elm, cherry, oak and sweetgum are dominant.

*considered hard-to-kill

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TABLE OF SUGGESTED APPLICATION PATTERNS AND RATES FOR UNDILUTED "VELPAR" L

For Site Preparation and Preharvest Control of Hardwoods

SOIL	ML/SPOT	GRID (FT)	QTS./ACRE
Coarse	1.0	4' x 4'	4
	3.0	4' x 6'	6
Medium/Fine	3.0	3' x 6'	8
	2.33	3' x 3'	12

repeated 6 lbs./acre reforestation areas = 7

For Pine Release

SOIL	ML/SPOT	GRID (FT)	QTS./ACRE
Coarse	2.0	6' x 7'	2 ⁺
	2.5	5' x 6'	3
Medium/Fine	2.0	4' x 6'	4
	2.33	3' x 6'	6
	1.5	3' x 3'	8

[†]Use on deep sands with pines four years of age.

"Velpar" L should be applied during the period from late winter (bud-break) to early summer. DO NOT BURN treated sites after initial foliage browning is evident. Burn only after brush has completely defoliated, at least once, from sufficient root uptake of the herbicide. Inconsistent results may occur if the site is burned 3 to 6 months prior to treatment.

NOTE: Use on 1-year old or 4-year old or older seedlings is acceptable; however, injury may result from use on 2-and 3-year seedlings where root growth is extensive but hardiness is lacking.

Results may be unsatisfactory where stump sprouts of less than one year's growth predominate.

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IMPORTANT

BEFORE USING "VELPAR" L , READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE PRODUCT LABEL.

This bulletin contains new or supplemental instructions for use of this product which may not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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AGRICULTURAL BULLETIN



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VELPAR® L HERBICIDE
REFORESTATION
SPOT-AROUND-SEEDLING
APPLICATION

SUPPLEMENTAL LABELING
EPA REG. NO. 352-392

VELPAR® L HERBICIDE
MICRO-SITE PREPARATION AND STAND ESTABLISHMENT
"SPOT-AROUND-SEEDLING" APPLICATION

DIRECTIONS FOR USE

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

Du Pont Velpar® L Herbicide is recommended as a soil treatment for pine micro-site preparation and stand establishment in the Southern pine region where loblolly pine and slash pine are planted. The treatment controls competitive woody plants, such as dogwood, elm, hickory, oaks, prunus spp., and sweetgum; and suppresses growth of some herbaceous weeds such as common ragweed, dogfennel, fireweed, goldenrod, horseweed, and panicums.

HOW TO USE

Apply undiluted "Velpar" L in 1 ml spots three feet out from and around newly planted seedlings. Dilutions of 1 ml to 1 ml water, or 1 ml to 5 ml water may be applied at 2 ml and 6 ml per spot.

Apply five to eight spots per seedling depending on the number of seedlings planted per acre and the soil texture. Use the higher rates (8 spots) for fine textured soils - silty clay, sandy clay, silty clay loam, sandy clay loam and clay loam; intermediate rates (6 to 7 spots) for medium textured soils - silt, silty loam and loam; lower rates (5 to 6 spots) for coarse textured soils - sandy loam, loamy sand and sand.

Use an exact delivery handgun applicator and calibrate for precise delivery of the undiluted or diluted solution.

The best results can be expected from treatments applied from winter to early summer.

NOTE: Results may be unsatisfactory where stump sprouts of less than one year's growth predominate.

Do not apply when soil is saturated with water and rain is imminent within 24 hours.

Do not apply "Velpar" L spots directly upslope or closer than 36 inches from newly planted seedlings.

Do not use around seedlings after their first year of growth, as injury may occur.

IMPORTANT

BEFORE USING "VELPAR" L, READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE PRODUCT LABEL.

This bulletin contains new or supplemental instructions for use of this product which may not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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