

"ALLY" HERBICIDE
EPA REGISTRATION NO. 352-435

SUPPLEMENTAL LABELING
"ALLY" HERBICIDE
WEED CONTROL IN PASTURES

ENVIRONMENTAL HAZARDS

This herbicide is injurious to plants at extremely low concentrations. Nontarget plants may be adversely effected from drift and runoff.

IMPORTANT

Do not use on lawns, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas.

Do not use on grasses grown for seed.

Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:

Avoid all direct or indirect (such as spray drift) contact to crops other than pasture or land scheduled to be planted to crops other than pasture because most crops other than pasture are highly sensitive to "Ally".

Injury to or loss of subsequently sprayed crops may result from failure to observe the following procedures:

"Ally" herbicide must be cleaned from application equipment according to cleanup procedures described in the SPRAYER CLEANUP section of this label, prior to spraying crops other than grasses grown in pastures, rangeland, wheat, barley, or Conservation Reserve Program acres.

H-20516

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 88-8
DATE. 5-14-90

Dupont, Microfiching, PM-85

EPA REG. NO. 35A-435

COMPANY NAME Dupont

NO NEW LABEL _____

NEW LABEL ATTACHED

NEW CSF ATTACHED _____

_____ THIS IS AN ADDITIONAL BRAND NAME

_____ THIS IS A CSF PERMITTED UNDER PR NOTICE 88-6

_____ THIS IS A LABEL CHANGE PERMITTED UNDER PR NOTICE 88-6

THIS WAS SENT TO SIG FOR ~~CODING~~ AND/OR MICROFICHING

_____ FILE IN JACKET

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 88-3
DATE. 5-14-90

GENERAL INFORMATION

Du Pont "Ally" herbicide is a 60% active ingredient herbicide formulated as a dry flowable granule to be mixed in water and applied as a spray for selective weed control in grasses grown in pastures and rangeland.

"Ally" herbicide rapidly inhibits growth of susceptible weeds; however, typical symptoms (discoloration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending on growing conditions and weed susceptibility. Warm, moist conditions following treatment enhance the activity of "Ally"; cold, dry conditions delay activity. Weeds hardened off by cold weather or drought stress may not be fully controlled or suppressed and regrowth may occur. Rainfall received within 4 hours after application can reduce the level of weed control.

Degree of control and direction of effect depend on: weed spectrum and density; weed size; growing conditions prior to, at and following time of application; amount of precipitation, and spray coverage. With adequate rainfall for oil activation, short-term residual control of the more sensitive species may be obtained for a few weeks after application.

"Ally" 60DF is noncorrosive, nonflammable, nonvolatile and does not freeze.

DIRECTIONS FOR USE

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

"Ally" herbicide should be used only in accordance with recommendations on this label or in separate published Du Pont recommendations available through local dealers.

BEFORE USING "ALLY" HERBICIDE, READ AND CAREFULLY NOTE THE CAUTIONARY STATEMENTS AND OTHER PROCEDURAL INFORMATION APPEARING ON THE PRODUCT CONTAINER LABEL.

..... This bulletin contains new or supplemental instructions for use of these
: : products in combination which does not appear on the package label.
..... Follow the instructions carefully.

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

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APPLICATION EQUIPMENT AND TECHNIQUE

"Ally" herbicide may be applied to improved pasture by any properly calibrated ground equipment. Select a delivery system that will insure thorough coverage and a uniform spray pattern. (Flood nozzles may not provide adequate coverage for foliar contact.) Avoid overlapping, and shut off spray booms while starting, turning, slowing or stopping, or injury to the crop or following crops may result. Use of spray markers may provide more uniform weed control (i.e. less streaking).

NOTE: Do not use equipment and/or spray volumes that will cause spray to drift onto nontarget sites. DO NOT USE HOLLOW CONE NOZZLES AS THEY COULD CREATE EXCESSIVE DRIFT POTENTIAL.

NOTE: Do not make application during weather conditions which cause spray to drift onto nontarget sites.

Do not apply "Ally" to pasture or rangeland by any aerial application equipment.

Do not exceed one (1) application per year.

Do not apply "Ally" through any type of irrigation system.

SPRAY PREPARATION/GALLONAGE/SURFACTANTS

Spray Equipment Preparation: Prior to using "Ally", thoroughly clean sprayer (tanks, booms, hoses, nozzles, mixing cones, all mixing equipment, etc.). Follow sprayer cleanup instructions on the label(s) of the last product(s) used. If the label of the last product used does not have cleanout instructions, then

- 1) Partially fill the tank with clean water and add Nutra-Sol[2] at a rate of 32 ounces per 100 gallons of water. Complete filling the tank with clean water. Flush through boom and hoses and then allow to sit for 15 minutes with agitation (and recirculation, if possible). Drain the equipment taking care to flush nozzles and hoses thoroughly.
- 2) Nozzles, screens, and strainers should be removed and cleaned separately.
- 3) Thoroughly rinse sprayer, tanks, booms, nozzles, and hoses with clean water to remove Nutra-Sol[2].

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Product Measurement: The "Ally" volumetric measuring cylinder is to be used as a guide, since the degree of accuracy varies by plus or minus 7.5%. For more precise measurement, use scales calibrated in ounces.

Gallage: Use a minimum of 10 gallons of water per acre for weed control in improved pastures, ground application only.

Surfactant: Use a surfactant of at least 80% active ingredient at the rate of 1 pint to 1 quart per 100 gallons of spray solution (1/8 to 1/4% v/v). Antifoaming agents may be needed. DO NOT use liquid fertilizer in addition to or as a substitute for a surfactant. (If applying in liquid nitrogen fertilizer, see "Liquid N Carrier" section of this label, below).

NOTE: If applying "Ally" to fescue pastures do not exceed 1 pint surfactant/100 gallons (1/8% v/v).

Spray Preparation: Fill the spray tank with half the required amount of water for the acreage to be treated. Add the measured amount of "Ally", with the agitator running. After the "Ally" is in suspension, then add the measured amount of surfactant. Finish by adding the remaining amount of water for the acreage to be treated.

NOTE: Continuous agitation is required to keep "Ally" in suspension. If spray preparation is left standing without agitation, thoroughly agitate before reusing.

NOTE: Use spray preparation of "Ally" within 24 hours or product degradation may occur.

Liquid N Carrier: Slurry "Ally" in water; then thoroughly mix the slurry into the liquid fertilizer. DO NOT add a surfactant. Run a tank mix compatibility test before mixing "Ally" in fertilizer solution. DO NOT use with fertilizers having a pH of 3.0 or less as rapid product degradation can occur.

NOTE: When "Ally" is applied using liquid nitrogen fertilizer solution as spray carrier, early, temporary, crop yellowing and stunting may occur.

Do not use spray additives with "Ally" that lower the pH of the spray solution below pH 3.0, as rapid product degradation can occur.

CAUTION - AVOID SPRAY DRIFT

Follow these practices to minimize drift. Do not allow spray to drift onto adjacent crops or land, as even small amounts may injure other plants. When spraying near adjacent, sensitive crops or plants, do everything possible to reduce spray drift. This includes:

- o Stop spraying if wind speed becomes excessive. DO NOT SPRAY IF WIND SPEED IS 10 MPH OR GREATER. DO NOT SPRAY IF WINDS ARE GUSTY.
- o High temperatures, drought and low relative humidity increase the possibility of harmful spray drift. EXTREME CAUTION MUST BE USED WHEN THESE CONDITIONS ARE PRESENT AND SENSITIVE CROPS OR PLANTS ARE NEARBY, REGARDLESS OF WIND SPEED.
- o Do not apply when a temperature inversion exists.
- o Drift from ground equipment may be further reduced by:
 1. Adjusting nozzles orientation to an angle between straight down and straight back for ground applications.
 2. Reducing pressure (PSI). DO NOT EXCEED 40 PSI when applying "Ally".
 3. Applying as close to target plants as possible while still maintaining a good spray pattern.

GRASS SELECTIVITY

Bermudagrass, bluegrass, orchardgrass, bromegrass, timothy and native grasses such as bluestems and grama have demonstrated good tolerance to "Ally".

NOTE: Bermudagrass should be established for 60 days, and bluegrass, bromegrass, orchardgrass, and timothy should be established for 6 months, at time of application or injury may result.

Applications of "Ally" to fescue may cause stunting of the grass as well as seedhead suppression. These symptoms are more pronounced if applications are made early in the growing season. (To minimize these effects, do not exceed 0.2 ounces product per acre, and do not exceed 1/8% v/v surfactant, which is 1 pint/100 gallons.)

NOTE: A cutting of fescue may be lost if treated with "Ally".

Do not apply "Ally" to ryegrass (Italian or perennial ryegrass) pastures as injury to or loss of pasture may result. Ryegrass is highly sensitive to "Ally".

Broadleaf pasture species, such as alfalfa and the clovers, are highly sensitive to "Ally" and will be severely stunted or killed by application of "Ally".

Do not use this product on fine turf or turfgrasses in lawns, golf course, athletic fields, commercial sod operations, and other high-maintenance, fine turfgrass areas.

GRAZING

"Ally" has no grazing restriction.

WEED CONTROL, RATES, AND TIMING OF APPLICATION

Pensacola bahiagrass control in established bermudagrass:

Apply "Ally" herbicide at 3/10 ounce of product per acre plus surfactant for control of

Pensacola bahiagrass (Paspalum notatum)

in established bermudagrass pastures.

Apply after green-up in the spring but before bahiagrass seedhead formation. Application should be made in when adequate moisture is available to enhance grass growth.

"Ally" is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, use of "Ally" can result in areas that may be bare of useful forage until the bermudagrass has the time to recolonize the area. Therefore, in areas where heavy bahiagrass infestations exist, it is strongly advised that "Ally" not be applied to an entire farm or ranch in one year, but that treatments be spread out over a period of years. Fertilization (particularly with nitrogen and potassium) and/or re-seeding, may accelerate the process of recolonization by bermudagrass and boost the yields of the pasture.

Under heavy pressure or adverse weather conditions (heat and drought) some regrowth may occur.

Broadleaf weed control:

Apply "Ally" herbicide at the rate of 1/10 to 2/10 ounces product per acre for control of

Early Spring *(a)

buttercup (Ranunculus spp.)
mayweed (Anthemis corula)
Carolina geranium (Geranium carolinianum)
henbit (Lamium amplexicaule)
wild garlic (Allium vineale) *(b)

Late Spring/Early Summer *(c)

common broomweed (Gutierrezia dracunculoides)
bitter sneezweed (Helenium amarum)
wooly croton (Croton capitatus)
pigweed (Amaranthus spp.)
marestail (Erigeron canadensis)

Apply "Ally" herbicide at the rate of 2/10 to 3/10 ounce of product per acre plus surfactant for the control for

musk thistle (Carduus nutans) *(d)
western snowberry or
buckbrush (Symphoricarpos occidentalis) *(e)
Canada thistle (Cirsium arvense) *(f)

- *(a) Apply in the early spring, but before weeds are 4 inches tall or in diameter. Apply when weeds are actively growing.
- *(b) Apply in the early spring when garlic is less than 12 inches tall with 2 to 4 inches of new growth. Thorough spray coverage of all garlic plants is essential.
- *(c) Apply in the late spring or early summer, but before weeds are 4 inches tall. Apply when weeds are actively growing.
- *(d) Apply in the spring or early summer to the rosette stage, before bolting, for best control.

*(e) Buckbrush can be controlled or suppressed by "Ally". Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with the rate used, size of weeds and environmental conditions following treatment.

*(f) Canada thistle can be suppressed by "Ally". Apply when the Canada thistle is at least 6-10 inches tall and near flowering.

Western Ragweed Control:

Apply "Ally" herbicide at the rate of 1/10 to 2/10 ounce product per acre in combination with products labeled for control of this species. Follow the most restrictive label in the combinations as to pre harvest interval, grazing restrictions, and rotational crop guidelines.

Perennial Weed Control:

Broadcast applications: Apply "Ally" herbicide at the rate of 3/10 ounce of product per acre plus surfactant for the suppression* of

multiflora rose (Rosa multiflora)
blackberry (Rubus spp.)

Application should be made in the spring, soon after fully leafed. Multiflora rose must be less than 3 feet tall for a broadcast application to give effective control.

*Weed suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with the rate used, size of weeds and environmental conditions following treatment.

Spot application: Apply "Ally" herbicide at the rate of 1 ounce of product per 100 gallons of water, plus surfactant, for the control of

multiflora rose (Rosa multiflora)
blackberry (Rubus spp.)
Canada thistle (Cirsium arvense)

Apply as a foliar spray to runoff. Do not exceed 75 gallons of total spray per acre. Foliar applications should be made after brush is fully leafed. Complete coverage of all foliage and stems is required for control. Effectiveness may be reduced if rainfall occurs within 4 hours after application. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage. For Canada thistle, apply in the Spring when the Canada thistle is at least 6-10 inches tall and before flowering.

Where a rate range is given, use the lower rate of "Ally" on light infestations and the higher rate on heavy infestations, on larger weeds, where extended control is desired.

Do not apply more than 75 gallons per acre when making spot treatment applications.

CROP ROTATION GUIDELINES (INCLUDING OVERSEEDING AND PASTURE RENOVATION)

After application of "Ally", a period of time must elapse before the treated pasture can be overseeded, renovated, or rotated to other crops. This period of time is referred to as the Minimum Rotation Interval. In more technical terms, The Minimum Rotation Interval is the time in months from the date of the last application of "Ally" to the date of planting of any crop or forage.

Note: Failure to observe the Minimum Rotation Interval may result in injury to or loss of any planted crop or forage.

The length of the Minimum Rotation Interval depends upon the rate of "Ally" applied, the method of application (broadcast vs. spot), the pH of the soil, and the environmental conditions after application. In general, longer Minimum Rotation Intervals are associated with higher rates; higher soil pH's; cooler, drier environmental conditions; and shorter growing seasons. For the purposes of this label, geographic locations serves as an indicator of general environmental conditions, with shorter Minimum Rotation Intervals in the warm, humid South than in the colder North.

For maximum rotational flexibility, do not use "Ally" on all your pasture.

... soil pH greater than 7.9 (for example, highly calcareous soils) as extended soil residual activity could adversely affect Minimum Rotation Intervals for all crops.

Unless a Minimum Rotation Interval is specified, a FIELD BIOASSAY must be completed before rotating to any crop other than those listed below. See "FIELD BIOASSAY" section of this label.

SOUTH AND EAST (south of Interstate 70 which runs from Colorado to Pennsylvania, and east of Denver)

After treatment with "Ally" at 3/10 ounce product per acre, or less:

The Minimum Rotation Interval for overseeding with desirable broadleaf forage plants, such as alfalfa, red clover, white clover, sweet clover, is 14 months.

The Minimum Rotation Interval for overseeding or renovating with bermudagrass, bluegrass, orchardgrass, bromegrass, fescue or timothy is 6 months.

The Minimum Rotation Interval for rotating to winter or spring wheat is 1 month.

The Minimum Rotation Interval for rotating to durum wheat, barley, and oats is 10 months.

The Minimum Rotation Interval for rotating to all row crops except those listed above is 34 months, unless a FIELD BIOASSAY is performed.

NORTH AND WEST (north of Interstate 70 and west of Denver)

After treatment with "Ally" at rates of 1/10 ounce product per acre:

The Minimum Rotation Interval for overseeding with desirable broadleaf forage plants, such as red clover, white clover and sweet clover is 18 months.

The Minimum Rotation Interval for overseeding or renovating with bermudagrass, bluegrass, orchardgrass, bromegrass, or timothy is 18 months. For overseeding or renovating with fescue, the Minimum Rotation Interval is 18 months.

The Minimum Rotation Interval for rotating to winter or spring wheat is 1 month.

The Minimum Rotation Interval for rotating to durum wheat, barley, and oats is 10 months.

The Minimum Rotation Interval for rotating to all crops except those listed above is 34 months, unless a FIELD BIOASSAY is performed.

After treatment with "Ally" at rates of 2/10 to 3/10 ounce product per acre:

The Minimum Rotation interval for rotating to any crop or forage is 34 months unless a FIELD BIOASSAY is performed.

After treatment with spot application of "Ally" at rates of 3/4 ounce product per acre:

The Minimum Rotation Interval for rotating to any crop or forage is 34 months unless a FIELD BIOASSAY is performed.

Because of the potential long persistence of high rates of "Ally" in the soil, do not apply "Ally" at rates above 3/10 ounce product per acre except in spot applications.

FIELD BIOASSAY

"Ally" is a useful tool for weed control in pastures; however, under some conditions small amounts of "Ally" can remain in the soil and injure crops other than those listed on the "Ally" label under "Crop Rotation Guidelines" for 34 months or more after application; therefore, before you use "Ally" you should carefully consider your crop rotation plans during the three (or more) year period following treatment.

A field bioassay involves growing test strips of the crop or crops you plan to grow the following year in fields previously treated with "Ally". Crop response will indicate whether or not to rotate to the crop(s) grown in the test strips.

"Ally" breaks down most rapidly in soils that have high microbial populations. Factors that favor microbial activity include having annual rainfall of 10" or more and having long growing seasons with warm soil temperatures. Factors that reduce microbial activity, hence slow the disappearance of "Ally" in soils, are low rainfall and prolonged periods of soil temperatures less than 40 Deg.F.

Microbial activity, soil temperature, and to a large degree soil moisture, can vary greatly from year-to-year, and from area-to-area. Consequently, it is not always possible to accurately predict when areas treated with "Ally" can be rotated to crops other than those listed on the label.

A biological assay of your "Ally" treated field is the only sure way of determining when crops other than those listed on label can be grown and is conducted as follows:

1. The accuracy and reliability of any field bioassay is largely dependent on the location and number of strips planted. Be sure to select areas of the field previously treated with "Ally" that are representative of the various field conditions. Be sure to consider factors such as field size, soil texture, drainage, turnaround areas, eroded knolls or alkaline spots when selecting the sites that are most representative of the soil conditions in the field.

Even in small fields, more than one test strip is required to accurately determine whether it is safe to rotate to a crop not listed on the label. On large fields, several test strips will be needed in order to obtain reliable results based on the field variables mentioned above.

2. Plant the test strips perpendicular to the direction in which the field was sprayed. Each strip should be long enough to cross the width of several spray swaths. A large test strip area is more reliable than a small one. Suggested size is 1/4 to 1/2 acre per test strip.
3. Use standard tillage and seeding equipment to plant the bioassay.
4. Prepare a seed bed and plant the crop; and varieties you want the option of growing the following year. **IT IS IMPORTANT TO USE THE SAME PLANTING TIME, CONDITIONS, TECHNIQUES, AND CULTURAL PRACTICES YOU NORMALLY USE TO PLANT AND GROW THE BIOASSAY CROP(S).** If possible, plant into an adjacent area not treated with "Ally" to use as a comparison.
5. Do not overspray the test strips with herbicides that may damage the bioassay crop(s).

6. If the crop(s) in the test strip(s) grow to maturity with a normal harvest, the assay is positive and you may now rotate to the new crop. However, if crop(s) in the test strips dies, are stunted, or fail to yield a normal harvest, the assay is negative and you should not rotate to the new crop(s). Run the assay until positive results are obtained before rotating to the new crop(s).
7. If the bioassay indicates that "Ally" residues are still present, do not rotate to crops other than wheat, barley, oats, rye, or triticale or those listed on label until bioassay results indicate that the assay crop are growing normally.

SPRAYER CLEANUP

To avoid subsequent injury crops other than grasses grown in pasture, rangeland, wheat, barley, or Conservation Reserve Program acres, immediately after spraying and prior to spraying other crops, thoroughly remove all traces of "Ally" from mixing and spray equipment as follows:

1. Drain tank, rinse interior surfaces of tank; then flush tank, boom and hoses with clean water for minimum of 5 minutes.
2. Partially fill the tank with clean water, then add cleaning solution*. Complete filling of the tank with clean water. Flush solution through boom, hoses, and nozzles, then allow to sit for 15 minutes with agitation running; then drain.
3. Repeat Step 2.
4. Repeat Step 1.
5. Nozzles, screens, and strainers should then be removed and cleaned separately.
6. To remove traces of cleaning solution, rinse the tank thoroughly with clean water and flush through hoses and boom.
7. Flush boom and hoses with clean water for 5 minutes just prior to using the sprayer for the first time after the "Ally" application.

*Use any of the following cleaning solutions:

1. One gallon ammonia (containing 3% active ingredient) per 100 gallons of water.
2. Nutra-Sol[2] (carefully read and follow Nutra-Sol label directions).
3. Loveland Spray Tank Cleaner[3] (carefully read and follow Loveland Spray Tank Cleaner label directions).
4. Tank-Aid[4] (carefully read and follow Tank-Aid label direction).

PRECAUTIONS

Do not apply to any body of water, including streams, irrigation water or wells. Do not apply where runoff water may flow onto agricultural land, as injury to crops may result. Do not apply "Ally" during periods of intense rainfall or to water-saturated soils, or to frozen ground as off-target movement may occur.

In areas where sensitive crops are grown, make applications to soils whose surface has been settled by rain. Do not treat powdery dry soil or light sandy soils, when there is little likelihood of rainfall soon after treatment, as wind may cause off-target movement.

- [1] Registered trademark of E. I. Du Pont de Nemours and Company
- [2] Nutra-Sol is a Product of Thomas C. Kilfoil Company, Inc., San Bruno, California
- [3] Loveland Spray Tank Cleaner is a registered trademark of Loveland Industries, Inc.
- [4] Tank-Aid is manufactured for Cornbelt Chemical Company

**E. I. DU PONT DE NEMOURS & COMPANY
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WILMINGTON, DELAWARE 19880-0038**

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