

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

JUL 2 2002

Mr. Rafael Herrera
Dow AgroSciences
9330 Zionsville Road
Indianapolis, IN 46268

Subject: Frontrow Herbicide
EPA Registration No. 62719-299
Your amended labeling submitted March 21, 2002

Dear Mr. Herrera:

The amended labeling referred to above is acceptable. This labeling supercedes all previously accepted labeling for this product (except supplemental labeling). A stamped copy of the label is enclosed for your records.

If you have any questions about this letter, you may call Tobi Colvin-Snyder at 703-305-7801.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Tompkins", written over a large, stylized circular scribble.

Jim Tompkins

Product Manager (25)
Herbicide Branch
Registration Division (7505C)

(Base Label):

00XXXXXX

[Insert 2-Point Black Line]

(Logo) Dow AgroSciences

Frontrow*

A Co-pack Product for Postemergence Broadleaf Weed Control in Soybeans Containing FirstRate and Flumetsulam 80 WDG Herbicides.

FirstRate*

Active Ingredient:

cloransulam-methyl: N-(2-carbomethoxy-6-chlorophenyl)-5-ethoxy-7-fluoro(1,2,4)triazolo-[1,5-c]pyrimidine-2-sulfonamide 84%

Inert Ingredients..... 16%

Total..... 100%

Contains 0.84 pounds of active ingredient per pound of product.

US Patent Number: 5,163,995

Net Wt - 1, 1.5 oz (2 x 0.75 oz units) Water Soluble Packet

Flumetsulam 80 WDG

Active Ingredient:

flumetsulam: N-(2,6-difluorophenyl)-5-methyl-1,2,4-triazolo-[1,5a]-pyrimidine-2-sulfonamide 80.0%

Inert ingredients..... 20.0%

Total 100.0%

Contains 0.8 pounds of active ingredient per pound of product.

US Patent Numbers: 4,954,163 and 4,818,273

Net Wt - 1, 0.6 oz Water Soluble Packet

**ACCEPTED
with COMMENTS
In EPA Letter Dated**

JUL 2 2002

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

62719-299

Keep Out of Reach of Children**CAUTION PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes Eye Irritation • Harmful If Absorbed Through Skin

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as butyl rubber ≥ 14 mils, or natural rubber ≥ 14 mils, or neoprene rubber ≥ 14 mils or nitrile rubber ≥ 14 mils
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Flumetsulam has been identified in groundwater sampling from a field research site under vulnerable conditions. There is the possibility that flumetsulam may leach through soil to groundwater, especially, where soils are coarse and groundwater is near the surface.

Cloransulam methyl and its transformation products demonstrate the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

Cloransulam methyl can contaminate surface water through spray drift.

Under some conditions, cloransulam methyl, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent

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surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do Not Ship or Store with Food, Feeds, Drugs, or Clothing.

EPA Reg. No. 62719-299

XX XX
EPA Est. _____

Superscripts correspond to places 7 & 8 of lot number
900-000000 / 00000000

*Trademark of Dow AgroSciences LLC
Dow AgroSciences LLC • Indianapolis, IN 46268 U.S.A.

Herbicide

Net Weight _____

[Insert Bar Code FPO]
[Insert DOT shipping classification and diamond(s)]

Lot

(Label Booklet cover)

(Logo) Dow AgroSciences

Frontrow*

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FirstRate*

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Active Ingredient:
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 Inert ingredients..... 20.0%
 Total 100.0%
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Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE) and Directions for Use including Storage and Disposal.

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Herbicide

Net Weight _____

(Page one through end)

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Environmental Hazards

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Under some conditions, cloransulam methyl, and/or its transformation products, may have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks post-application. Vulnerable conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

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Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all directions before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exemptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves
- Shoes plus socks

Storage and Disposal

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

Storage: Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

Disposal: Wastes resulting from the use of this product may be disposed of on site according to label use directions or at an approved waste disposal facility.

Container Disposal: Dispose of empty package or overpacks in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

General Information

Frontrow* herbicide is a co-pack product, for postemergence broadleaf weed control in soybeans. Each co-pack of Frontrow contains 1.5 oz (2 x 0.75 oz units) of FirstRate* herbicide and 0.6 oz of Flumetsulam 80 WDG herbicide in separate water-soluble packets. Both packets are packaged together in a single overpack. Frontrow is formulated as water dispersible granules. **The individual components of the Frontrow overpack must be used together or a reduction in weed control will result. Do not mix and apply separately.**

When applications are made under adverse (dry or cold) conditions or when large weeds or less susceptible species are treated, less than acceptable control or weed suppression may be observed. Weed suppression is a visual reduction in weed competition (reduced population, size, and/or vigor) as compared to an untreated area. Degree of control can be increased by applying Frontrow under good growing conditions (i.e., adequate moisture and temperature).

Safe Pesticide Handling Procedures

Handling Precautions for Product Packaged in Water Soluble Packets: Do not remove water soluble packet from overpack except for immediate use. Do not allow water-soluble packet to come into contact

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with water prior to use. Do not handle water-soluble packet with wet hands or wet gloves. Carefully reseal overpack containing unopened water-soluble packets and protect package from moisture.

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over filling the spray tank.
- Do not discharge excess material on soil at a single spot in the field or mixing/loading station.
- Dilute and agitate excess spray solution and apply on approved crop site.

Sprayer Cleanup:

To avoid injury or exposure to nontarget crops, thoroughly clean all mixing and spray equipment on approved rinse pads or on the field site where an approved crop is to be grown. Do this immediately after application and prior to use on crops other than those registered for use on this label. Spray equipment should be cleaned at the end of each day by the following procedure:

1. Drain any remaining Frontrow from the spray tank and dispose of according to label disposal instructions.
2. Hose down the interior surfaces of the tank and fill the tank 1/2 full with water. Recirculate for 5 minutes. Spray part of the mixture through the hoses, boom and nozzles and drain the tank. All rinsate material should be collected in a suitable container and disposed of according to label directions (applied to cropland to be planted to crops recommended in this label) or in a locally approved manner (see "Storage and Disposal" section).
3. Remove the nozzles and screens and clean separately.
4. If the spray equipment will be used on crops other than those registered for use on this label, repeat steps 1 and 2 again and thoroughly wash the spray mixture from the outside of spray tank and the boom.

Placement of mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

General Use Precautions and Restrictions

- **Use of this product in Nassau and Suffolk counties in the state of New York is prohibited.**
- This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involved mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

- Do not apply this product through any type of irrigation system.
- Do not use flood irrigation to apply or incorporate this product.

- Product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.
- Do not apply more than 0.84 oz per acre of Frontrow (0.6 oz FirstRate + 0.24 oz Flumetsulam 80 WDG) per crop growing season. Following an initial application of 0.42 oz per acre, a second postemergence application of up to 0.42 oz per acre may be made to control late germinating weeds. If required, the second application should occur at least 14 days after the first.
- Do not exceed 0.07 lb cumulative application of the active ingredient flumetsulam (1.4 oz Flumetsulam 80 WDG) per year if using this product in sequential or tank mix applications with other products containing flumetsulam.
- Do not exceed 0.055 lb per year of the active ingredient cloransulam methyl (1.05 oz of FirstRate) cumulative application if using this product in sequential or tank mix applications with other products containing cloransulam methyl.
- Do not graze or feed treated soybean forage, hay or straw to livestock.
- Do not apply when air temperature is near freezing or when freezing conditions are expected for several days following application.
- **Aerial Application:** Refer to Dow AgroSciences supplemental labeling for instructions for aerial application. Supplemental labeling may be obtained at the Dow AgroSciences web site at www.dowagro.com. Supplemental labeling allowing aerial application of this product must be in the possession of the user at the time of aerial application. **Aerial application of this product is prohibited in New York State.**
- **Avoid all direct or indirect contact with non-target plants.** Do not apply near desirable vegetation and allow adequate distance between target area and desirable plants.
- **To prevent off-site movement due to runoff or wind erosion:**
 - Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
 - Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground.
 - Do not apply to soils when saturated with water.
 - Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.
- **Do not apply when weather conditions favor drift to non-target sites. To minimize spray drift to non target areas:**
 - Use low pressure application equipment capable of producing a large droplet spray.
 - Do not use nozzles that produce a fine-droplet spray.
 - Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
 - Keep ground-driven spray boom as low as possible above the target surface.
 - Spray when conditions are calm or wind speed is low. Do not spray when wind is gusting or steady wind speed is greater than 10 mph.
- Follow all applicable directions, precautions and restrictions on labeling for other products used in combination with Frontrow.
- **Preharvest Interval:** Do not harvest soybeans for 70 days after application of Frontrow.

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Rotational Crop Restrictions

When tank mixing with other herbicides, follow crop rotation guidelines on the label of each product used. The following rotational crops may be planted at the indicated interval following application of Frontrow. Unusual climatic or environmental conditions that may increase the likelihood of rotational crop injury include lower than normal rainfall and/or soil temperatures in the fall and spring; and/or soil pH extremes.

Crop	Rotation Interval (Months) (1)
wheat	3
corn, sorghum, cotton, peanuts, rice	9
tobacco (2)	30
sugar beets, sunflowers and other crops not listed (3)	30

1. Minimum number of months that must pass before planting these crops after application of Frontrow at up to 0.84 oz/acre postemergence.
2. Transplanted tobacco may be planted 10 months after application of 0.42 oz/acre of Frontrow. Tobacco in seedbed nurseries may be planted 18 months after application of 0.42 oz/acre of Frontrow and following a successful field bioassay. A rotation interval of 30 months and a successful field bioassay is required for all applications of Frontrow greater than 0.42 oz/acre.
3. Rotation to sugar beets, sunflowers and all other crops not listed require a 30-month rotation interval and a successful field bioassay.

Field Bioassay Instructions: In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample field conditions such as soil texture, soil pH, drainage, and any other variable that could affect the seed bed of the new crop. Field bioassay at any time between harvest of the treated crop and the planting of the rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination) chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the test rotational crop; plant only a labeled crop or crop listed in the table above for which the rotational interval has clearly been met.

Mixing and Application**Spray Volume and Application:**

- Apply in a total spray volume of 10 to 40 gallons per acre. Use sufficient spray volume to provide uniform coverage, for example for heavy weed pressure situations, use a minimum of 15-20 gallons per acre spray volume to improve coverage and product performance.
- To ensure a uniform spray mixture, continuous agitation is required during mixing and application. Apply within 48 hours after mixing. If product is allowed to settle, thoroughly agitate to resuspend the mixture before spraying.
- Apply with ground equipment using a standard low-pressure (20 to 40 pounds per square inch) herbicide sprayer equipped with nozzles that provide uniform coverage.
- Screens in spray tank lines should be no finer than 50 mesh (100 mesh is finer than 50 mesh).
- **Do not apply using liquid fertilizer as a carrier.**

Mixing Instructions - Frontrow Alone

Water Soluble Packaging: Each Frontrow overpack contains two water-soluble packets which must be removed from the overpack and added to the spray tank at the same time. Refer to Application Rates below to determine the number of overpack units that must be added to the spray tank for the acreage to be treated. Thorough mixing is required.

Mixing Order:

1. Fill the tank with 1/2 of the total amount of water or liquid fertilizer required.
2. Start agitation system.

3. Add the required number of overpack units (each containing two water soluble packets - product in transparent film) to the spray tank.
Note: Handling water-soluble packets with hands should be minimized. Do not handle if hands or gloves are wet. **Water-soluble packets must be removed from the overpack before adding to the spray tank.** This can be done by opening the overpack and adding the two water-soluble packets (product in transparent film) directly to the spray tank. **Do not open water-soluble packets.** Water-soluble packets will float on the surface until the soluble film dissolves and the product is released. Overpacks are **not** water-soluble and should not be placed in spray tank.
4. Continue agitation and complete filling the tank while the packets dissolve.
5. After water soluble packets of Frontrow have completely dissolved (approximately 5 minutes), add non-ionic surfactants or other adjuvant materials.
6. Before spraying, make sure packets have completely disintegrated and product is thoroughly mixed with water. Depending on the water temperature and the degree of agitation, the packet and its contents should be completely dispersed within 5 minutes from the time they were added to the spray tank.

Mixing Instructions - Frontrow in Tank Mix Combination

If a broader spectrum of weed control is needed, Frontrow may be tank-mixed with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed recommended application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See procedures for "Sprayer Cleanup" under "Safe Pesticide Handling Procedures", above.)
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Frontrow and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture.

Pre-mixing (other products): If pre-mixing is required for other dry or flowable products applied in tank mix combination with Frontrow, follow recommendations for pre-mixing of such products provided in their respective product labels.

Mixing Order for Tank Mixes:

1. Fill the spray tank to 1/4 to 1/3 of the total spray volume required with water.
2. Start agitation system.
3. Add different formulation types in the following order: (1) Compatibility agent, if required; (2) Frontrow and other dry flowables; (3) wettable powders; (4) aqueous suspensions, flowables and liquids. Maintain agitation and fill spray tank to 3/4 of total spray volume and add: (5) emulsifiable concentrates; (6) solutions; and (7) adjuvants. Allow time for complete mixing and dispersion after addition of each product.

4. Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application.
5. Weed control may be reduced when Frontrow has been mixed and allowed to stand for more than 48 hours prior to application.

If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

Application Rates

Each co-pack of Frontrow contains 1.5 oz (2 x 0.75 oz units) of FirstRate and 0.6 oz of Flumetsulam 80 WDG, packaged together in a single overpack. **Each overpack will treat 5 acres.** The following table provides per acre rates of Frontrow when applied according to label directions. **Note:** Open the overpack and add both of the water-soluble packets directly to the spray tank. **The overpack is NOT water-soluble.**

Determining the Number of Overpacks Required:

One overpack of Frontrow contains a 1.5 oz (2 x 0.75 oz units) packet of FirstRate and a 0.6 oz packet of Flumetsulam 80 WDG	Per Acre Application Rate	
	FirstRate (oz/acre)	Flumetsulam 80 WDG (oz/acre)
One overpack treats 5 acres	0.3	0.12

Rate Formula: Acres to be treated + Number of acres per overpack = Number of overpacks
One overpack will treat 5 acres

Sample Calculation: Acres to be treated = 30
30 acres + 5 acres per overpack = 6 overpacks

When the number of overpacks calculated does not equal a whole number, round to the nearest whole number that does not exceed the maximum allowable use rates per application and per season. You may round up only if the maximum allowable use rates are not exceeded.

Approved Uses

SOYBEANS

Postemergence Application

Frontrow may be applied any time prior to the 50% flowering stage of soybeans. Application prior to full emergence of the first soybean trifoliolate leaf may cause temporary yellowing or chlorosis of soybeans. Tank-mix partners may cause other effects regardless of the application timing. Application timing restrictions of tank-mix partners should be followed. Allow two hours after application without rainfall for optimum Frontrow effectiveness

Postemergence applications of Frontrow may provide residual soil activity on broadleaf weeds, excluding sicklepod (see postemergence weed list). Length and effectiveness of residual activity from postemergence applications will vary and is dependent on rainfall following application (0.5 inches or more of rainfall within a week of application), density of the weed and crop canopy at application, and the reserve of ungerminated weed seeds in surface soil

Environmental Conditions and Herbicidal Activity of Frontrow: Factors in effective weed control with Frontrow include application rate, weed size, daytime temperature, soil moisture prior to and following

application, and use of adjuvants. Best weed control results are obtained when Frontrow is applied to small, actively growing weeds, when daytime temperatures are warm (70°F or more), and soil moisture is adequate to support active weed growth prior to and following application. If weeds are under drought stress, especially common ragweed, giant ragweed, and marestail, consider delaying application until more favorable conditions resume. Application when weeds are moisture stressed or taller than the recommended height for control may result in only partial control.

- Frontrow is rainfast in 2 hours.
- Applications made immediately prior to, during, or immediately following periods of large day/night temperature fluctuations or where daytime temperatures do not exceed 60°F may decrease weed control.
- Poor weed control may result from applications made to plants under stress from:
 - ▶ abnormally hot or cold weather
 - ▶ environmental conditions such as drought, water-saturated soils, hail damage, or frost
 - ▶ prior herbicide applications

Apply Frontrow at a rate of 1 overpack (containing 1.5 oz [2 x 0.75 oz units] of FirstRate and 0.6 oz of Fiumetsulam 80 WDG) per 5 acres (0.42 oz/acre). Following an initial application of 0.42 oz per acre, a second postemergence application of up to 0.42 oz per acre may be made to control late germinating weeds. If required, the second application should occur at least 14 days after the first. Apply as a broadcast spray when weeds are actively growing and before weeds exceed the growth stages (number of true leaves per plant) indicated in the table below. Applications made to larger weeds or to weeds under stress may result in unsatisfactory control. Frontrow may be applied alone or in tank mix combination with other postemergence herbicides. Applications of Frontrow must include either a crop oil concentrate, a nonionic surfactant or a nonionic surfactant plus urea ammonium nitrate or ammonium sulfate.

Broadleaf Weeds Controlled and Optimum Stage of Growth:

The following weeds are controlled by Frontrow when applied postemergence at the indicated weed stage of growth. Frontrow does not control known ALS resistant biotypes of listed weeds.

Numbers in parentheses (-) refer to "Use Directions for Specific Weeds" below.

Weeds Controlled	Leaf Number at Application (Optimum to Maximum)	Maximum Height (inches)
cocklebur	2 to 8	6
Dayflower, Asiatic	2 to 6	NA
Dayflower, marsh	2 to 6	NA
Dayflower, spreading	2 to 6	NA
jimsonweed	2 to 4	4
mallow, venice	2 to 4	<3
horseweed (marestail)	2 to 4	6
marshelder	4 to 6	10
morningglory (annual) (1), including: entireleaf, ivyleaf, palmleaf, pitted, red, smallflower, tall	2 to 4	6
mustard, wild (2)	2 to 4	2
ragweed, including: common, giant	4 to 8 4 to 6	10 10
sicklepod (3)	cotyledon - to 1	<2
smartweed, Pennsylvania	2 to 4	6
sunflower, common	4 to 8	12
teaweed (prickly sida)	1 to 2	2

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velvetleaf	2 to 4	6
Weeds Suppressed		
burcucumber	2 to 4	6
Canada thistle	--	10
copperleaf, hophornbeam	1 to 2	4
hemp sesbania	Cotyledon to 1	<1
nutsedge, yellow	--	8
pigweed species, including: redroot, smooth, spiny	1 to 2	<1

Use Directions for Specific Weeds:

1. Momingglory: Apply before morningglory begins to send out runners.
2. Wild mustard: For optimum control, apply before wild mustard plants exceed four inches in diameter.
3. Reduced control will result if applications are made to sicklepod plants that are beyond the 1-leaf stage of growth. Additional herbicide treatment may be required to control sicklepod which germinates after application.

Spray Adjuvants

Either a crop oil concentrate, a nonionic surfactant or a nonionic surfactant plus ammonium nitrate solution must be included in the spray solution. Ammonium sulfate may be used as a substitute for ammonium nitrate.

Note: When tank mixing with other products that already contain adjuvants (as indicated by the label of the tank mix product, e.g., Roundup Ultra), it is not necessary to add additional adjuvants to the tank mix.

Adjuvant Systems for Postemergence Application

Use Frontrow in combination with one of the following adjuvant systems approved for application to growing crops:

- Crop oil concentrate at 1.2 gallons/100 gallons of spray mixture (1.2% v/v). **Note:** Crop oil concentrate may increase the potential for crop injury in soybeans.
- Nonionic surfactant at 1 to 2 pt/100 gallons of spray mixture (0.125 - 0.25% v/v) plus urea ammonium nitrate solution at 2.5 gal/100 gallons (2.5% v/v). Dry ammonium sulfate may be used at a rate of 2 lb per acre (8.5 to 17 lb/100 gallons of spray mixture) as a substitute for urea ammonium nitrate.
- Nonionic surfactant alone at 2 pt/100 gallons of spray mixture (0.25% v/v).

Tank Mix Options

For broader spectrum weed control, Frontrow may be tank-mixed with another registered herbicide. When applied in tank-mix combination with other herbicides, follow all applicable label instructions for each product used in the tank mixture.

Potential tank-mix partners include, but are not limited to, the following products:

Broadleaf Herbicides	Grass Herbicides
Basagran	Assure II †
Blazer	Fusion †
Cobra	glyphosate (Glyphomax,
Flexstar	Glyphomax Plus, or
Pursuit	Roundup Ultra) (1)
glyphosate (Glyphomax,	Poast Plus
Glyphomax Plus, or	Select
Roundup Ultra) (1)	Touchdown (1)

(1) Tank-mixtures of Frontrow plus glyphosate or sulfosate products such as Glyphomax, Glyphomax Plus, Roundup Ultra, or Touchdown may only be used postemergence over glyphosate-tolerant

soybeans (Refer to section below for specific use instructions for tank-mixing Frontrow with Glyphomax, Glyphomax Plus, and Roundup products).

- (2) Under certain conditions, tank-mixing Frontrow with postemergence grass herbicides may reduce their activity. However, broadleaf weed control with Frontrow will not be affected. Higher labeled rates of the postemergence grass herbicides in a tank mixture with Frontrow may overcome this antagonism. Sequential applications of Frontrow and Assure II or Fusion is the most effective method for reducing the potential for antagonism. Do not tank mix Assure II with Frontrow when the target weed is woolly cupgrass or fall panicum, as reduced control may occur.

Other Postemergence Herbicide Applications: Apply other postemergence herbicides at least 7 days before or 7 days after an application of Frontrow.

Frontrow + Glyphomax, Glyphomax Plus, Roundup Ultra or Roundup Original Tank Mix in Glyphosate-Tolerant Soybeans

Frontrow at 0.42 oz/A may be tank mixed with Glyphomax, Glyphomax Plus, Roundup Ultra, or Roundup Original (including any glyphosate formulation labeled for use in glyphosate-tolerant soybeans) to provide flexibility in use rates and to enhance control of key broadleaf weeds such as giant ragweed, morningglory, velvetleaf, and others listed under the "Postemergence Application" section of this label. Residual control from Frontrow may also reduce the potential need for subsequent postemergence applications.

Note: If Glyphomax or Roundup Original is tank mixed with Frontrow, a non-ionic surfactant is also recommended at the rate of 2 quarts per 100 gallons of spray mixture. Add the non-ionic surfactant before completing the filling process.

Do not add a non-ionic surfactant or crop oil concentrate to tank mixes with Glyphomax Plus or Roundup Ultra.

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