

# **COTTON - REGION A - ANNUAL GRASS SPECIES - BARNYARDGRASS, ETC.**

General Information

## **PRODUCT INFORMATION**

Read all label directions before using.

Fusion Herbicide is a selective postemergence herbicide for control of annual and perennial grass weeds in soybeans, cotton and highway rights-of-way. Fusion Herbicide provides effective control of grass weeds in conventional tillage, minimum tillage, and no-till plantings. Fusion Herbicide may be applied for control of emerged grass weeds before, during or after planting or after harvest of soybeans or cotton. Fusion Herbicide does not control broadleaf weeds or sedges (nutgrass).

Fusion Herbicide is a systemic herbicide which moves from the treated foliage into the shoots, roots, rhizomes, stolons, and growing points (meristematic regions) of treated grass weeds.

Rainfastness – Since Fusion Herbicide is rapidly absorbed by the grass foliage, rain occurring one (1) hour or more after application will not affect the activity of Fusion Herbicide. When tank mixing with broadleaf herbicides, observe the rainfast statement of the most restrictive label.

Control Symptoms – Growth of treated grass weeds stops soon after application. Symptoms include loss of vigor, yellowing and/or reddening, and eventual death of the treated grass plant. Symptoms are generally observed within one week after treatment, depending on grass weed species and environmental conditions.

## **INFORMATION ON WEED RESISTANCE**

Naturally occurring biotypes of certain grass species with resistance to this herbicide and related products (same mode of action) are known to exist. Selection of resistant biotypes, through repeated use of these herbicides, may result in control failures.

If poor performance cannot be attributed to adverse weather conditions or improper

application methods, a resistant biotype may be present. In such a case, additional treatments with this herbicide or related products are not recommended. Consult your local company representative or agricultural advisor for assistance.

## APPLICATION DIRECTIONS

Thorough coverage of all grass weed foliage is important for good activity. Optimum weed control is achieved when young actively growing grass weeds are treated that are not under stress from low soil moisture, extreme temperatures, low soil fertility, mechanical, or chemical injury.

Spray Additives - Only crop oil concentrate, nonionic surfactants and other adjuvants cleared for use on growing crops may be used in spray mixture. Under dry conditions, crop oil concentrate is the preferred adjuvant.

Always Add One of the Following:

- Crop Oil Concentrate (COC) – Add a non-phytotoxic crop oil concentrate or a once-refined vegetable oil concentrate containing 15-20% approved emulsifier, at 0.5-1% v/v (1-2 pints/25 gallons) of the finished spray volume. For aerial applications, add 1 pint of crop oil concentrate per acre.

- Nonionic Surfactant (NIS) – Add nonionic surfactant containing at least 75% surface-active agent, at 0.25-0.5% v/v (1/2-1 pint per 25 gallons) of the finished spray volume for ground sprays. For aerial application, add 1 pint of surfactant per acre.

- Other Adjuvants – Adjuvants other than COC or NIS may be used providing the product meets the following criteria:

1. Contains only EPA exempt ingredients.
2. Is nonphytotoxic to the target crop.
3. Is compatible in mixture. (May be established through a jar test.)
4. Is supported locally for use with Fusion on the target crop through proven field trials and through university and extension recommendations.

Always refer to the product label and follow recommendations concerning rates, target crops, environmental effect such as drought or weed stress, and use in tank

mix with other labeled pesticides.

## DIRECTIONS FOR GROUND APPLICATION

**Nozzle Selection** - The use of flat fan nozzles will result in the most effective application of Fusion Herbicide. Flood nozzles are generally not as good as flat fans since they produce large uneven droplets. The use of nozzles other than flat fans may result in reduced grass control due to inadequate coverage. Do not apply Fusion Herbicide with recirculating sprayers, rope-wick applicators, controlled droplet applicators (CDA) or any similar devices.

**Spray Volume and Pressure** - Use sufficient spray volume and pressure to ensure complete coverage of the target grasses. Apply in 5-40 gallons per acre of spray mixture with spray pressures of 30-60 psi at the nozzle tip. When grass foliage is dense, use 60 psi and a minimum of 20 gallons per acre to ensure coverage of weed foliage.

**Band Applications** - Use a minimum of two nozzles, one directed to each side of the planted row. Application with a single nozzle directed over the top of the row is not recommended. Cultivation of untreated areas may be needed following band applications.

When making band applications and cultivating in the same operation, position nozzles in advance of the cultivation device. This will reduce dust in the spray area. Dust can intercept the spray, reducing weed coverage resulting in less than adequate weed control.

Please refer to the label for the calculation of the ratio of water and the product if using band treatment.

Band applications to perennial grasses are not recommended, as reinfestation of the treated band from the untreated middle may result.

**Spot Treatments** - Mix Fusion Herbicide and crop oil concentrate or nonionic surfactant with water according to the amounts shown below. Spray to obtain thorough coverage, but do not spray to runoff. Re-treat if necessary. Please refer to the label for the rate recommendation.

**Chemigation** - Do not apply Fusion Herbicide through any type of irrigation system.

## DIRECTIONS FOR AERIAL APPLICATION

Use sufficient spray volume to ensure complete coverage of target grasses. A minimum of 5 gallons per acre should be applied. When grass foliage is dense, use a minimum of 10 gallons per acre to ensure coverage of weed foliage.

**Application Timing** - Best control of susceptible grasses is obtained when Fusion Herbicide is applied to actively growing grasses before they exceed the recommended growth stages shown on the label.

**Cultivation** - Cultivation of treated grasses is not recommended within 7 days prior to or within 7 days after application of Fusion Herbicide as weeds may be put under stress resulting in reduced weed control. Timely cultivation 2-3 weeks after applying Fusion Herbicide may assist weed control.

## PRODUCT USE PRECAUTIONS

- Apply to actively growing grasses. Avoid application to grasses which are stressed due to moisture, temperature, low soil fertility, mechanical or chemical injury.
- Apply at the directed rate to grasses at the listed growth stages as outlined in Tables 2, 3, 4 and 5.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment. Use the highest recommended rate for grasses in that population.
- Where irrigation is used as part of normal cropping practice, best results are usually obtained when Fusion Herbicide is applied within 7 days after irrigation.
- Best perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices (discing, plowing, etc.) to stimulate maximum emergence of grass shoots.
- Do not plant rotational grass crops such as corn, sorghum, and cereals within 60 days of last application of Fusion Herbicide.

- Avoid drift to all other crops and nontarget areas. Grass crops are highly susceptible to Fusion Herbicide. Avoid application when wind velocity exceeds 15 mph. Do not make ground or aerial applications during temperature inversions.
- Tank mixes of Fusion herbicide with other pesticides, liquid fertilizers or other additives except as specified on the label or on approved Syngenta supplemental labels may result in tank mix incompatibility, unsatisfactory performance and/or crop injury.
- Thoroughly clean spray tank with water and a commercial tank cleaner before and after each use.
- Do not apply Fusion Herbicide if rainfall is expected within 1 hour.

#### SPECIFIC RESTRICTIONS FOR SOYBEANS AND COTTON

- Do not apply to cotton after boll set.
- Make the last Fusion Herbicide application to soybeans before bloom.
- Do not graze or harvest for forage or hay.

Refer in the label regarding tank mix information.

#### Limitations, Restrictions, and Exceptions

#### COTTON – REGION A

Fusion Herbicide may be applied in the following states: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma (east of Interstate 35), South Carolina, Tennessee, Texas (east of Interstate 35), and Virginia.

#### NOTES:

- Retreatment at the recommended rate may be needed to control later germinating grasses or if regrowth occurs.
- See table on the label for proper rate of Fusion when applied in tankmix combination. The following are specific instructions for Fusion combined with other pesticides:

The lowest rate of Fusion Herbicide listed above may be used under the following conditions:

- (a) Application under favorable soil moisture and humidity conditions, normally within a few days after rainfall or irrigation. Avoid extreme air temperatures.
- (b) Application at earliest growth stages indicated on rate tables.
- (c) Application in highly competitive crop stands such as narrow row or drilled soybeans, or where cultivation is planned.
- (d) Application to light or moderate weed densities.
- (e) Application with 1% v/v crop oil concentrate only.

If the conditions above do not exist, use the high rate for the species indicated.

-Apply rate to grass at the recommended growth stage. Please refer to the label for the table for suggested weed growth stage.

Barnyardgrass, Green foxtail, Yellow foxtail: Special Fusion Rate When Used Alone 6 fl . oz./A

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

[Band application](#)

Pre-Harvest Interval

90 days

Rates

[field rates 0](#)

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Restricted Entry Interval

24 hours

Tillages

[Conventional](#)

No-Tillage

Minimum

Timings

Postemergence (Weed)