

WHEAT (INCLUDING DURUM) - GIANT FOXTAIL, PERSIAN DARNEL AND ITALIAN (ANNUAL) RYEGRASS

General Information

GENERAL INFORMATION

NEXTSTEP NG Herbicide controls several grass weed species in all types of wheat (including Durum). Applied postemergence, NEXTSTEP NG Herbicide is rapidly absorbed by weed foliage and translocated to the growing points where it inhibits the acetyl CoA carboxylase (ACCase) enzyme. Susceptible weed species generally stop growing within 48 hours, turn yellow within one to three weeks, and are completely controlled within three to five weeks. Level and rate of control depend on weed species, growing conditions, crop competition, and coverage. Thorough coverage of the plants is essential for consistent control.

WEEDS CONTROLLED

NEXTSTEP NG Herbicide controls wild oat, volunteer oat, green foxtail, yellow foxtail, giant foxtail, barnyardgrass, canarygrass, Persian darnel, volunteer corn, and Italian (annual) ryegrass. Although NEXTSTEP NG Herbicide does not control broadleaf weeds, it can be tank mixed with a wide range of broadleaf herbicides to provide broad spectrum one-pass weed control. See the section entitled Tank Mixes of NEXTSTEP NG Herbicide with Broadleaf Weed Herbicides. Herbicides not approved on this label for tank mixing with NEXTSTEP NG Herbicide may be applied sequentially. Always apply NEXTSTEP NG Herbicide first and allow at least 4 days after application of NEXTSTEP NG Herbicide before applying these herbicides sequentially.

MANAGEMENT OF RESISTANT WEEDS

NEXTSTEP NG Herbicide is a Group 1 Herbicide (ACCase mode of action). Some naturally occurring populations of wild oat, green foxtail and Italian (annual) ryegrass have been identified as resistant to herbicides with the ACCase mode of action (herbicides with the same mode of action as NEXTSTEP NG Herbicide, such as: Achieve, Assure II, Axial, Fusilade, Fusion, Hoelon, Poast, Prism, Puma, and Select). Selection of resistant biotypes, through repeated use of these herbicides in

the same field, may result in control failures. A resistant biotype may be present if poor performance cannot be attributed to adverse weather conditions or improper application methods.

If resistance is suspected, contact your local Syngenta representative for assistance.

The following practices will delay selection for resistant populations of weeds:

- Apply postemergence herbicides to small, actively growing weeds.
- Ensure that good spray coverage is achieved with proper spray volumes and calibrated equipment.
- Use the full label rate of product.
- Avoid tank mixes that may cause antagonism and reduced weed control.
- Where possible, avoid the repeated use of herbicides with the same mode of action (i.e., same group number) in successive seasons either in cereal crops or rotational crops.
- Use a diverse crop/fallow rotation to extend the range of available herbicides and agronomic practices.
- Use cultivation, fertilizer regimens, seeding rates and row widths that enhance crop competitiveness.
- Prevent weed escapes from producing seed either in the crop or during fallow periods.

APPLICATION PROCEDURES

TIMING OF APPLICATION

Apply NEXTSTEP NG Herbicide to all types of wheat (including Durum) from the 2-leaf stage to pre-boot stage. Do not make an application to winter wheat in the fall. Refer to the Crop Use Directions section for grazing and harvest restrictions.

For optimum results, apply NEXTSTEP NG Herbicide to actively growing weeds. Weed control can be reduced or delayed under conditions of stress, such as drought, heat, insufficient fertility, flooding, and prolonged cool temperatures. Grass escapes or re-tillering may occur if application is made during prolonged conditions

of stress. Optimum weed control will be obtained if application of NEXTSTEP NG Herbicide is delayed until the conditions of stress have ended and weeds are once again actively growing. An early application will maximize crop yields by reducing weed competition.

Weeds emerging after application will not be controlled.

Precaution: Do not apply to a crop that is stressed by conditions such as frost, low fertility, drought, flooding, disease damage, or insect damage, as crop injury may result. Wheat is more susceptible to injury when exposed to temperatures below 40°F during the period 48 hours before or after NEXTSTEP NG Herbicide application.

TIMING OF APPLICATION TO WEEDS

Wild Oat, Volunteer Oat, Canarygrass

Leaves on Main Stem: 1 to 6-leaf stage on main stem

Tillers: Prior to emergence of the 4th tiller.

Green Foxtail, Yellow Foxtail, Giant Foxtail

Leaves on Main Stem: 1 to 5-leaf stage on main stem

Tillers: For optimum control, apply prior to emergence of the 3rd tiller and while weeds are actively growing.

Persian Darnel, Italian (Annual) Ryegrass, Barnyardgrass, Volunteer Corn

Leaves on Main Stem: 1 to 5-leaf stage on main stem

Tillers: For optimum control, apply before tillering and while weeds are actively growing.

Use Rates

Apply the recommended rate of NEXTSTEP NG Herbicide using ground equipment, in a minimum of 5 gal of water per acre, or apply aerially in a minimum of 3 gal of water per acre (see Application Procedures and Spray Equipment sections for exceptions).

RAINFASTNESS

NEXTSTEP NG Herbicide applied alone is rainfast 30 minutes after application.

Note: One case (2 X 2.5 gal) of NEXTSTEP NG Herbicide treats 40 acres at the 16

oz/A rate and 50 acres at the 12.8 oz/A rate.

SPRAY ADJUVANTS

Methylated Seed Oil: A non-phytotoxic methylated seed oil (MSO) (approved for use on growing crops) may be used at the rate of 0.25% v/v (2 pt/100 gal) of spray volume mixture. MSO can enhance weed control under low moisture or high temperature stress conditions or when spray volumes exceed 10 gallons of water per acre.

GROUND AND AERIAL APPLICATION PROCEDURES

For best accuracy, calibrate the sprayer before use.

Ground Applications

Spray Nozzles—80° or 110° flat fan nozzles are recommended for optimum spray coverage. Nozzles must be uniformly spaced along the boom to provide accurate and uniform coverage. Point the nozzles forward in the direction of travel at an angle of 45° for optimum coverage of grass weeds. Follow the nozzle manufacturer's recommendations for pressure and screens. Do not use flood or hollow cone type nozzles.

Pump—Must have capacity to maintain pressure (35–40 psi) and to maintain the product suspension through tank agitation. A centrifugal pump is recommended with an agitation rate of 20 gal/minute/100 gal tank size. Agitation must be maintained during mixing and spraying.

Screens—Use a screen or strainer with 16-mesh or coarser on the suction side of the pump. Do not place a screen in the recirculation line unless using a roller or piston pump. Use 50-mesh or coarser screens between the pump and boom, and at the nozzles.

Water Volume—Use an application rate of 5–10 gal of water per acre. Use 10 gal of water per acre under dry conditions or dense weed populations and when treating Persian darnel or Italian (annual) ryegrass. Application rates of greater than 10 gal of water per acre should be avoided as reduced grass control may occur.

Pressure—35–40 psi at the nozzles. Lower pressure may be used with extended range or low pressure nozzles.

Good weed coverage with the spray mixture is essential for optimum weed control results. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid large spray overlaps which result in excessive rates in the overlap areas. Also, avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. To reduce spray drift, do not apply under windy conditions. Allow adequate distance between target area and desirable vegetation to prevent drift to nontarget areas. Boom height for broadcast over-the-top application should be based upon the free-standing height of the crop, not height above the soil surface, and should be at least 12 inches above the crop.

Aerial Applications

Apply NEXTSTEP NG Herbicide in water using a minimum spray volume of 3 gal/A. Use a minimum of 5 gal/A under dry conditions or dense weed populations and when treating Persian darnel or Italian (annual) ryegrass. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft above the crop with low-drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to help assure accurate application within the target area.

Limitations, Restrictions, and Exceptions

WHEAT (INCLUDING DURUM)

NEXTSTEP NG Herbicide can be used on all types of wheat (including Durum). Do not allow spray to drift to adjacent fields seeded to crops other than wheat. Do not treat wheat underseeded to forages.

To avoid possible illegal residues:

- Do not graze livestock or feed forage from treated areas for a minimum of 30 days following application.
- Do not feed hay for 30 days following application.

- Do not harvest grain for 60 days following application.
- Make only one application per crop season.
- Do not make an application to winter wheat in the fall.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Pre-Harvest Interval

60 days

Rates

[field_rates 0](#)

[field_rates 1](#)

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Restricted Entry Interval

12 hours

Timings

[Postemergence \(Weed\)](#)

[From the 2-leaf stage to pre-boot stage.](#)