

# **WHEAT AND BARLEY - BROADLEAF WEEDS CONTROL (BEDSTRAW, CATCHWEED; COCKLEBUR, COMMON, ETC. )**

## General Information

### PRODUCT INFORMATION

Axial Star Herbicide is a postemergence systemic herbicide for the control of annual grasses and broadleaf weeds in all varieties of spring wheat (excluding durum), winter wheat, and barley not underseeded with legumes.

Axial Star Herbicide is absorbed by foliage and is rapidly translocated to the growing points of leaves and stems of target weeds with growth stopping within days of application. Susceptible grass weeds turn chlorotic (yellowing) within one to three weeks and are completely controlled within three to five weeks. Susceptible broadleaf weeds exhibit twisting and curling of stems (epinasty) and leaf cupping followed by growth inhibition and eventual plant death within weeks. Level and rate of control depend on weed species, growing conditions, crop competition, and coverage. Thorough spray coverage of target weeds is essential for consistent control.

### Rainfastness

Axial Star Herbicide is not affected by rain falling 1 hour or more after application.

### Management of Resistant Weeds

Axial Star Herbicide contains a Group 1 (ACCase inhibitor) herbicide and Group 4 (synthetic auxin) herbicide. Some naturally occurring weed populations have been identified as resistant to Group 1 and 4 herbicides. 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 Axial Star Herbicide to all varieties of spring wheat (excluding durum), winter wheat, and barley from the 2-leaf stage to pre-boot stage. Refer to the Crop Use Directions section for grazing and harvest restrictions.

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.

For optimum results, apply Axial Star Herbicide to actively growing weeds. An early application will maximize crop yields by reducing weed competition. Weed control following application of Axial Star Herbicide alone or in combination with other herbicides can be reduced or delayed under conditions of stress, such as drought, heat, insufficient fertility, flooding, and prolonged cool temperatures. Optimum weed control will be obtained if application of Axial Star Herbicide is delayed until the conditions of stress have ended and weeds are once again actively growing.

Weeds emerging after Axial Star Herbicide application will not be controlled.

## GROUND AND AERIAL APPLICATION PROCEDURES

For best accuracy, calibrate the sprayer before use.

### Ground Applications

**Water Volume** - Use an application volume of 8 to 10 gallons of water per acre. Use 10 gallons of water per acre under dry conditions or dense weed populations. Application rates of greater than 10 gallons of water per acre should be avoided as reduced weed control may occur.

**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 weeds. Follow the nozzle manufacturer's recommendations for pressure and screens. Do not use flood or hollow cone type nozzles.

**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.

**Pressure** - 35-40 psi at the nozzles. Lower pressure may be used with extended range or low pressure 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 gals./minute/100 gals. tank size.

Agitation must be maintained during mixing and spraying.

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 Axial Star Herbicide in water using a minimum spray volume of 5 gals./A. 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.

Refer in the label regarding tank mix information.

### Limitations, Restrictions, and Exceptions

#### WHEAT AND BARLEY

Axial Star Herbicide can be used on all varieties of spring wheat (excluding durum), winter wheat, and barley. Do not allow spray to drift to adjacent fields seeded to crops other than wheat or barley. Do not treat wheat or barley underseeded with legumes.

To avoid possible illegal residues:

- Do not graze livestock or harvest forage for hay from treated wheat and barley for a minimum of 30 days following application.
- Do not harvest grain for 60 days following application.
- Do not feed treated wheat or barley straw to livestock for a minimum of 60 days following application.
- Do not apply Axial Star Herbicide, Discover NG Herbicide, Axial TBC Herbicide or Axial XL Herbicide products to the same crop in the same season.

Refer in the label for specific weed size or growth stage for optimum control.

### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[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

48 hours

Timings

[Postemergence \(Crop\)](#)

[Postemergence \(Weed\)](#)

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

[Less than 4 inches tall](#)