# CHRISTMAS TREE, DECIDUOUS TREE FARMS AND TIMBER PRODUCTION SITES - PERENNIAL GRASS (GRASSES UP TO 12 INCH HEIGHT)

#### General Information

#### Restrictions and Limitations

- DO NOT use treated vegetation as pasture, hay, feed or forage.
- Avoid direct or indirect contact with any desired grass crop unless otherwise recommended on the Segment II label.
- DO NOT apply Segment II with another pesticide where one component of the tank mix is incompatible with additives, surfactants or oil adjuvants.
- DO NOT use recirculating sprayers to apply Segment II.
- DO NOT apply to grasses or ornamental crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control and injury may result.
- DO NOT apply through any type of irrigation equipment.
- Avoid using Segment II with adjuvants at temperatures above  $90^{\circ}$  F and relative humidity is at or above 60%, or any time the temperature exceeds  $100^{\circ}$  F, as injury may result.
- Only use Segment II on centipedegrass and fine fescue.

  Application to other turfgrass species will result in unacceptable injury or plant death.

#### **Product Information**

Segment II is a postemergence herbicide for control of annual and perennial grass weeds in turf, ornamentals, nonfood, and noncrop sites listed on this label. Segment II does not control sedges or broadleaf weeds. A program for total vegetation suppression may necessitate the use of a broadleaf herbicide. Segment II may be used in or around the following sites:

#### Ornamental

- Christmas tree and conifer nurseries and plantations
- Commercial and residential landscapes
- Container and field grown nursery production
- Industrial landscapes

- Perennial peanuts (nonfood)
- Potting soil and topsoil
- Forestry, reforestation, and tree nurseries and plantations

# **Turfgrass**

- Naturalized areas on golf courses
- Residential and commercial landscapes

**Professional Vegetation Management** 

- Airports
- Electrical transformer stations
- Exteriors of public buildings
- Industrial areas
- Nonagricultural fences and hedgerows
- Paved areas
- Pipeline pumping stations
- Recreation areas
- Rights-of-way
- Seedhead and growth suppression on roadsides
- Sewage disposal areas
- Storage yards
- Timberland sites
- Wildflowers in naturalized areas

#### Mode of Action

Sethoxydim, the active ingredient in Segment II, is a graminicide which inhibits the enzyme acetyl CoA carboxylase (ACCase), resulting in cessation of fatty acid synthesis which is essential for new growth. Segment II rapidly enters the targeted grass weed through the foliage and translocates throughout the plant. Whole plant death occurs over approximately 3 weeks. Sethoxydim is classified in Group 1 by the Weed Science Society of America (WSSA) and Group A by the Herbicide Resistance Action Committee (HRAC).

# Resistance Management

Weed resistance to ACCase-inhibiting herbicides (Group 1), is known to occur, and populations of resistant biotypes are known to exist. Resistance management practices include:

- Following labeled application rate and weed growth stage recommendations
- Avoiding multiple repeat applications of herbicides with the same mode of action

- Using tank mixes and sequential application with other effective herbicides possessing different modes of action

#### **Use Information**

Apply Segment II herbicide to actively growing weeds as a postemergence broadcast or spot spray in labeled ornamental, turfgrass and, professional vegetation management sites at the specified rates and growth state listed in Table 1. DO NOT exceed the labeled application rate or fail to comply with use specifications in Restrictions and Limitations.

For best results, weeds should be actively growing and not under stress from lack of water, excessive water, low fertility, mowing shock, excessive hot or cold temperatures, or injury from other herbicide applications.

To achieve consistent weed control, a crop oil concentrate (COC) or methylated seed oil (MSO) adjuvant is required.

See Table 5 for adjuvant and additive rates.

## Plant Tolerance and Phytotoxicity Notice

Segment II has been applied to a wide variety of common ornamental plants without observed plant injury. Refer to Table 10, Table 11, Table 12, Table 13, and Table 14 for the list of plant shown to be tolerant to Segment II. Not all species, varieties, and cultivars have been tested for tolerance to Segment II, possible tank mix combinations, pesticide treatments before or after those with Segment II, and combinations with surfactants or adjuvants. Local conditions can also influence plant tolerance and may not match those under which BASF has conducted testing. Because many cultivars within a plant species vary in tolerance to chemical applications and growing conditions, the grower must recognize these differences and test the product accordingly. At a minimum always test a small group of representative plants for tolerance to Segment II under local growing conditions and before large-scale use. Refer to Table 10, Table 11, Table 12, Table 13, and Table 14 for both tolerant and sensitive ornamental plants. Refer to Table 6, Table 7, Table 8, and Table 9 for use site specific instructions and restrictions. User assumes responsibility for testing ornamental suitability under local growing conditions by treating a small number of plants at the specified rate. At a minimum, this should include evaluating treated plants for several weeks following treatment for possible injury or other effects. To the extent consistent with applicable law, by applying Segment II, the user assumes responsibility for any plant damage or other liability associated with factors beyond the manufacturer's control, such as weather,

presence of other materials and manner or use of application inconsistent with this labeling.

## **Mowing Information**

To maximize weed control and minimize potential turfgrass injury DO NOT mow centipedegrass and fine fescue areas within 7 days before or after applying Segment II.

Increased weed control has been observed when mowing is delayed for 14 days after application. Grass weeds that have been mowed or have regrown from mowed stubble may be controlled poorly. Repeat application if new germination or regrowth occurs.

## Irrigation and Rainfall

If soil moisture is not sufficient for Segment II application, irrigation may improve weed control. Segment II is rainfast after one hour.

# **Application Instructions**

Applications (aerial, broadcast, band or spot spray) can be made to actively growing grass weeds at the rates and growth stages listed in Table 1, Table 2, Table 3, and Table 4 unless instructed differently in Crop-specific Information. The most effective control will result from making postemergence applications of Segment II early, when grass weeds are small. Delaying application permits weeds to exceed the maximum size stated and will prevent complete control.

DO NOT apply when conditions favor drift from the target area or wind speed is greater than 10 mph.

# **Ground Application (Broadcast)**

Apply with properly calibrated ground equipment in sufficient water per acre to provide uniform spray distribution (between 5 to 50 gallons spray solution per acre or 1 to 10 pints per 1,000 square feet). Apply Segment II using 30 to 60 psi. If weed or crop foliage is dense, use a minimum of 20 gallons of water and 60 psi.

# Spot or Small Area Application

Segment II can be applied using tank-type sprayers, backpack sprayers, high-volume equipment with handguns, or other suitable nozzle arrangements. Prepare a solution of Segment II in water according to Table 3 or Table 4. DO NOT make spot treatments in addition to broadcast treatment.

Limitations, Restrictions, and Exceptions

Christmas Tree, Deciduous Tree Farms and Timber Production Sites

Segment II herbicide can be used to control annual and perennial grasses during site preparation, establishment and/or maintenance of tree plantations, Christmas tree plantations, conifer and hardwood seedling nurseries, pulpwood farms and fiber farms. Segment II may also be used for hardwood and conifer regeneration on Conservation Reserve Program land or similar areas.

If a Christmas tree or deciduous tree is not listed in Table 10, the user may determine if Segment II can be used safely prior to broad use by applying the specified use rate to the target plant in a small test area under typical conditions. Any adverse effects should be visible within 7 days.

Segment II can be tank mixed with select herbicides to suppress desirable tall fescue and enhance efficacy by expanding the number of weed species controlled. Consult Table 6 and Table 7 for tank mix partners. Suppression of tall fescue grown for ground cover on tree farms must be actively growing at the time of application or injury may occur.

#### Method

Broadcast/Foliar Air
Broadcast/Foliar Ground
Spot treatment
Band application
Rates
field\_rates 0
field\_rates 1

•

Restricted Entry Interval

12 hours

Timings

Postemergence (Weed)