



EPA Reg. No. 524-534

Control of Roughstalk Bluegrass (*Poa trivialis*) from Creeping Bentgrass (*Agrostis stolonifera*) in Golf Course Tees, Roughs and Fairways

This Fact Sheet is not a product label, but is issued to clearly describe use recommendations permitted under FIFRA Section 2(ee) as not being inconsistent with product labeling, or to highlight an approved use from the product labeling. The 2(ee) expiration date is December 31, 2007. This Fact Sheet has not been submitted to or approved by EPA. Always read and follow label directions. The applicable labeling for all products must be in the possession of the user at the time of herbicide application. It is a violation of federal law to use any registered pesticide product in a manner inconsistent with its labeling.

How to Control *Poa trivialis* in Creeping Bentgrass Turf

For low infestations of *Poa trivialis*:

For suppression of *Poa trivialis* in low infestations, apply 0.25 ounce of this product per acre. For control, up to two additional applications of 0.25 ounce of this product per acre at 14- to 21-day intervals may be made. Make all applications between June 1 and September 15.

When applying Certainty, always use a nonionic surfactant at 0.25 percent by volume (1 quart per 100 gallons of spray solution).

For severe infestations for *Poa trivialis*:

For severe *Poa trivialis* infestations, apply a single application of 0.75 ounce per acre of this product in late summer, 21 to 28 days prior to overseeding creeping bentgrass in a renovation approach. This treatment will result in temporary chlorosis and discoloration, and will temporarily affect the growth pattern of the desirable turf.

As *Poa trivialis* is controlled, bare patches may occur in the turf. Creeping bentgrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of *Poa trivialis* and to maintain overall turf quality.

Important Factors to Consider

***Poa trivialis* Stage of Growth and Levels of Infestations**

- The preferred stage for removal of *Poa trivialis* is before the individual plants are greater than 2 inches in diameter. Controlling larger clumps of *Poa trivialis* may create undesirable bare soil areas that are objectionable and may leave the opportunity for growth of other undesirable weeds. Creeping bentgrass, under good growing conditions, will quickly fill in where 2-inch diameter or less *Poa trivialis* is controlled.
- Ideally, removal of *Poa trivialis* should occur before sites reach 25 to 30% total infestation of the turf.
- When infestations exceed 30%, use the "severe infestation" recommendation above and consider treating only portions of a fairway at a time to minimize unacceptable turf thinning.
- Overseeding may begin at 14 days or later after the last application. Follow best management practices to restore turf quality.



Creeping bentgrass turf with large patches (greater than 4 inches in diameter) of *Poa trivialis* after treatment with Certainty. These bare patches will take longer to fill in and should be reseeded to maintain turf quality.



Creeping bentgrass turf with small patches (less than 2 inches in diameter) of *Poa trivialis* after treatment with Certainty. Healthy creeping bentgrass will quickly fill in these bare patches.

Factors Affecting Certainty Safety to Creeping Bentgrass

- To avoid undesirable turf injury from applications of Certainty, applications should be made during the recommended application window.
- Cool temperatures, below 50° F, accelerate the herbicide injury symptoms on desirable turf and may delay recovery.
- Soil conditions, such as heavy clay soils, compacted soils and excessive soil moisture may increase creeping bentgrass injury.

How Certainty Works

This product is a postemergence, systemic herbicide with limited soil residual activity. It is absorbed by both the roots and the foliage of plants and rapidly inhibits the growth of susceptible weeds. Susceptible weed growth stops within 24 hours of treatment even though visual symptoms are slow to develop. Susceptible weeds usually show yellowing or browning within 2 to 3 weeks. Warm, moist conditions following application will accelerate herbicidal activity. Cold, dry conditions will delay herbicidal activity. Weeds stressed by drought are less susceptible to this product.

What Results Can You Expect?

- When applied as recommended in this use guide, Certainty is able to selectively remove small clumps of *Poa trivialis* and will allow bentgrass to fill in the spaces previously occupied by the *Poa trivialis*.
- There may be a differential response of *Poa trivialis* cultivars to Certainty due to the wide variability in the genetic types of *Poa trivialis*.
- Some chlorosis or stunting of the desirable turf may occur following application. If turf discoloration occurs, skip or delay additional applications to allow turf to recover to a desirable quality.

Refer to product label for Complete Directions for Use. Always read and follow pesticide label directions.

Certainty turf herbicide is not currently registered in New York. Check the latest registration status with your Monsanto representative prior to use.

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