# Influence of foliar absorption, post-treatment wash-off, and application methodology on the control of turfgrass diseases with trifloxystrobin. (C05-weibel141508-Oral)

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## Abstract:

Trifloxystrobin (TS) is a new strobilurin fungicide that controls a broad range of turf diseases. Laboratory studies were conducted to determine the rate of foliar absorption (FA) of TS on Kentucky bluegrass (KBG), creeping bentgrass and tall fescue. Individual blades were spotted with a 2 micro-L spray solution containing Carbon-14 radiolabeled-TS. Blades were rinsed with 80% acetonitrile and rinsat was collected (0, 0.17, 0.5, 1, 2, 4, 8 and 24 h post-treatment). Maximum FA (32-49%) was attained for all species within 1 h, and further increases in FA were not observed beyond 4 h. KBG foliage treated with TS (304 g ai/ha) was irrigated (0, 0.08, 0.17, 0.5, 1, 2 and 4 h post-treatment) to determine the influence of wash-off on the control of powdery mildew (Erysiphe graminis). Complete control was obtained by 0.17 h. Field studies were also conducted to assess the impact of nozzle type, water volume, and clipping removal on brown patch (Rhizoctonia solani) control with TS. Efficacy was independent of nozzle type. The lowest water volume (203 L/ha) was least efficacious. Returning TS-treated clippings to the site reduced disease severity 25 to 49%.

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## Presentation Information:

Presentation Date: Tuesday, November 12, 2002
Presentation Time: 2:45 pm

## Keywords:

turfgrass diseases, fungicide (trifloxystrobin), foliar absorption