

WEED CONTROL AT ESTABLISHMENT

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Research Project

Weed prevention is a critical step to proper turfgrass establishment. During the establishment process, weeds compete for nutrients and space with turfgrass seedlings, reducing uniformity and overall turfgrass establishment. A number of different practices are utilized to prevent weed competition during the establishment process. Preemergence herbicides are often used to prevent weed seed germination during the establishment process. These products, with few exceptions, must typically be applied after turfgrass seed germination. In recent years, preemergence herbicides capable of being applied at the time of seeding have become available to the turfgrass industry. These products are capable of selectively inhibiting weed seed germination, while having no effect on the germination of cool season turfgrass species.

Research Project Objectives

Evaluate the effects of the selective preemergence herbicide mesotrione, applied at the time of *Poa pratensis* L. (Kentucky bluegrass) seeding.

Research Project Hypothesis

The selective preemergence herbicide mesotrione, applied at the time of *Poa pratensis* L. (Kentucky bluegrass) seeding, will provide adequate preventive weed control, resulting in an uncontaminated turfgrass stand.

Treatments

1. Mesotrione (applied day of seeding)
2. Siduron (applied day of seeding)
3. Quinclorac (applied 30 days after seeding)
4. Dithiopyr (applied 30 days after seeding)
5. Control (no herbicide)

Experimental Design

Single Factor (herbicide application)
Randomized Complete Block Design
Three replications

Data

1. Crabgrass % cover
2. Kentucky bluegrass % cover
3. Visual color ratings (1-9 scale)