Turfgrass Weed Control and Best Management Practices

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Introduction

A good definition of "Best Management Practices" as they relate to turfgrass weed control would be as follows:

"Methods or techniques found to be the most effective and practical in achieving high levels of turfgrass weed control, while minimizing environmental impact and utilizing resources in an optimal manner"

The objectives of this presentation are as follows:

- Describe best management practices (BMP) as they relate to turfgrass weed control.

- Demonstrate the use of BMP in real life and practical turfgrass weed control situations.

- Provide updated research information on the use of new techniques, products and strategies for turfgrass weed control.

Agronomic Perspectives for Best Management Practices

- Have weeds been accurately identified?
- Annual, biennial or perennial life cycle?
- Easy or difficult to control?
- What method of control is best?
- Is hand weeding an option?
- Can herbicides be used on site?

- If so, are preemergent, postemergent or non-selective herbicides appropriate?
- Where are the weeds located: mapping?
- Is there a monthly agronomic calendar in place with weed control action plans?

Employee Training and Proper Product Use for Best Management Practices

- Are products properly stored?
- Do storage facilities meet approved DPR standards and placarding?
- Are employees properly trained?
    - Know how to read and follow a label
    - Know how to operate and calibrate a sprayer
    - Know how to determine proper application rates based on spray volume
    - Know proper application techniques with backpack and hand can sprayers
- Are employees properly certified: QAC, QAL, PCA?
- Can employees transfer academic training to the field?
- Are trained employees qualified to train other employees?

Vision for the Site and Best Management Practices

- How do you want and expect the site to look one year from now, 3 years from now, 5 years from now, and 10 years from now?
- What are the surface quality expectations relative to turfgrass quality, density, recuperative potential and aesthetic value.
- Are any weeds acceptable?
- Is there a percent or number of weeds per unit area that is acceptable?
- Are there weed types that are acceptable?
- Or, weed types that are unacceptable?

Best Management Practices for Broadleaf Postemergent Weed Control in Turf

- 10-14 days prior to herbicide applications fertilize with a 50% slow release nitrogen fertilizer at approximately 1.25 lb/M; irrigate
- Do not mow for 24-48 hours prior to application
- Do not irrigate for 36 hours after application
- Follow all label directions and instructions
- Utilize 3-way or 4-way postemergent herbicides at label rates
- Post the site as required before and after applications
- Except for English daisy, a single postemergent herbicide application will result in approximately 70%-80% control of broadleaf weeds depending on specific weed type
- Sequential applications at 4-week intervals will result in very high weed control levels (95%-100%)
- Spring applications (April-May) or late summer/fall applications (September-October) are acceptable

Summary and Practical Perspectives

- Know your weeds, their life cycles and when they are most likely to appear in turf settings.
- Select turf types that are best adapted to your microclimate and require reduced inputs.
- Be open minded, creative and always utilize BMP to achieve high quality turfgrass conditions.

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