

Starting an Integrated Pest Management Program

The first step to starting an Integrated Pest Management (IPM) program is to clear your head of all the miscommunicated information about IPM. It is time to stop listening to misinformed individuals and start realizing the importance of implementing IPM techniques and methods. IPM is a common sense approach to pest control based on monitoring, recording, and making intelligent pest management decisions. If you are interested in improving your pest management program and environmental stewardship, then IPM is the way to go.

Typical IPM Misinformation

“IPM will not work on my type of turfgrass setting.”

Wrong, IPM principles, techniques and strategies will work on every turfgrass situation. This includes high and low budget golf courses, residential lawns, school grounds, campuses, institutional grounds, parks, and athletic fields. Open your mind to develop methods to make IPM work on your turfgrass.

“With IPM I can not use pesticides.”

Wrong, pesticides are an important tool of an IPM program. IPM programs incorporate the use of pesticides and will continue to use them. IPM practitioners optimize the use of pesticides by increasing their knowledge base of turfgrass, turfgrass pests, monitoring, and timing of pesticide applications to maximize their efficacy and minimize their off-target hazards. Learn how to apply least toxic materials that are safe for the applicator and the environment.

“The Cornell IPM program will come into my operation and prescribe a program and the government will force me to follow it.”

Wrong, IPM programs are flexible. The members of the IPM program at Cornell are not regulatory. We are committed to improving your pest management program, not regulating it.

The intent of an IPM program is to enhance pest prevention and control on your turfgrass. The turf ecosystem is dynamic. Turfgrass, pests, and people are different from site to site. The Cornell IPM team will help lay the foundation for an IPM program. The success of the program is directly related to your input. It is up to you to make it happen.

The key to a successful IPM program is an open mind and a positive attitude. It is the responsibility of the turfgrass manager to take leadership and develop a site-specific IPM program for their

turfgrass setting. Utilize the guidelines as a foundation. Improve and enhance the guidelines according to your situation.

General Guidelines

Business Plan

A clear, concise business plan will help organize your IPM program. Design the business plan according to the type of turfgrass you manage. The golf course superintendent’s plan will obviously be different from that of a grounds manager. Important components of the business plan might include:

1. Statement of purpose: briefly list objectives and goals;
2. IPM program description: list and describe in detail the components of the new IPM program or service. Include alternative options and methods;
3. Budget: labor, equipment, least-toxic pesticides, and diagnostic services.

Establish an IPM Team

An integral part of an IPM program is communication. Who are the people involved in your program? Describe their roles and determine who will make pest management decisions. Arrange what, how and when information will flow to all members of your IPM team.

Background Information

What is your turfgrass management program? List and describe your current pest management and cultural practices. Identify previous pest problems. What time of the season were they present? Where were they a problem? Record the types of control methods. Include the type, amounts and frequency of pesticide applications. This historical perspective is invaluable when developing and evaluating your new IPM program.

Identify Resources

IPM programs are based on monitoring (scouting) the turf on a regular frequency. You can either train an employee to scout, hire a new person, or contract with a pest management consulting firm. Compile necessary pest information such as biology, life cycle, identifying features, and damage symptoms. Identify equipment and products. You may have to retro-fit or purchase new or special equipment. Locate and record the name of suppliers and distributors.

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IPM Corner

IPM is a common sense approach to pest control based on monitoring, recording, and making intelligent pest management decisions.

IPM principles, techniques and strategies will work on every turfgrass situation.

Pesticides are an important tool of an IPM program.



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Monitoring program

Pest Management Units

In order to design a realistic scouting schedule, divide the turfgrass site into pest management units (PMUs). The PMUs represent specific areas to a scout. Rank individual PMUs as either high, medium or low priority. Rankings are based on information such as (but not limited to) aesthetic value, visibility, intensity of required maintenance and plant material. The ratings will determine how frequently a PMU should be scouted. Discuss with your IPM team the best method to divide, name and rank the PMUs.

Scouting Procedures

Scouting procedures for turfgrass are based on visual observations of the turf. The key to a scouting program is making observations on a regular frequency throughout the entire season. Scout the turf at least once a week. However, if you are on a golf course, at certain times of the season it is better to scout two, three or even four times per week. Certain landscape settings may only require scouting once a month. Work with your IPM team and decide when and how frequent to scout each PMU. If you encounter unknown problems, remove a sample and send it to a diagnostic laboratory.

Outline a step by step scouting procedure for the scout. Incorporate where, when and how to scout. Include what and how to record plant and pest information. The scout must follow the same pattern each week.

Scouts

In order to effectively implement an IPM program, a person(s) must be assigned and trained to carry out the responsibilities of monitoring (scouting) the turfgrass. The responsibilities of the turfgrass scout include, but are not limited to, the following: 1) Monitor turfgrass or other landscape plants for insects, plant diseases, and weed infestations on a regular basis. 2) Record findings on

field data sheets. 3) Diagnose problem and rate severity based on diagnosis, priority of site, and turf value. 4) Routinely report findings to decision makers. 5) Follow-up after pest management action as been taken and evaluate results. Report results to decision maker.

Record Keeping and Evaluation

One of the biggest advantages of implementing an IPM program is documenting the real needs of the turf. Recording where, what and how many (severity) pests are present or absent is valuable information. Over time this data is necessary to develop action thresholds and is priceless when trying to justify control actions. The success or failure of a pest control program can easily be evaluated by combining pest and pesticide use data. In future articles I will discuss methods on how to evaluate pest and pesticide information.

Plan of Work

Outline a step-by-step plan to implement your new IPM program and include a time frame and target date for completion.

The intent of these guidelines is to lay a foundation. It is your responsibility to build a program. Take this information and tailor an IPM program for your site.

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Flooding will expose chinch bugs and other insects.