Knowledge is the foundation of a successful integrated pest management (IPM) program. Pest management professionals wishing to employ IPM must understand the cultural requirements of the plants under their care and the biology of the pests that invade those plants. Beyond that, they should know how to develop a site survey, how to monitor pest populations, how to improve plant health through cultural strategies, how to maintain the records crucial for decision-making, and how to determine when pesticide use is appropriate in an integrated approach.

Urban areas present special pest management problems, both actual and perceptual. High population density means more people sharing less space. Parks, lawns, golf courses, right-of-ways, public buildings, and other aspects of city infrastructure have specific pest control needs. Yet urban populations tend to be both well educated and vocal. They are concerned about the use of pesticides and tend to express a preference for less chemical means of pest suppression. Integrated approaches can help address the complex scientific and social issues of the urban environment.
Western Washington, particularly the north-south corridor along Interstate 5, is urban in nature. Consequently, much of the pest management in western Washington is urban pest management. The management of landscape and turf is a large component of the pest management spectrum in western Washington, as in any predominately urban area.

Like all pest management professionals, landscape and turf managers need a broad base of knowledge if they wish to be successful in implementing IPM. These factors led to the development of the Washington State University (WSU) IPM Certification Program for landscape and turf professionals.

**Spreading the Word**

The dissemination of practical knowledge is the fundamental concept behind Cooperative Extension. Our Pesticide Education Program is part of the Cooperative Extension program at WSU. This program provides education for individuals to prepare them for the various Washington State Department of Agriculture (WSDA) pesticide applicator exams as well as continuing education (“recertification training”) to licensed pesticide applicators, helping them stay current, expand their knowledge, and, through a clock-hour accounting system, renew their license without retesting.

This pesticide applicator training program provided a logical vehicle for implementing an IPM certification program. In fact, much of the coursework we had been offering through the Pesticide Education Program reflected IPM principles.

In February 2000, we were approached by the FQPA Specialist from EPA Region 10, Sandra Halstead. She pointed out that many of our courses were specifically targeted at landscape and turf professionals (appropriately enough, as our western Washington Pesticide Education audiences are about 80% non-crop public applicators, most of whom manage landscape and turf applications) and suggested that developing a certification program might provide additional incentive for this audience as well as an enhanced organizational structure for this training.

**Something Old, Something New**

Sandra was right. The idea of an IPM certification program for landscape and turf professionals quickly began to take shape. But we wanted to do more than rehash and re-label existing coursework.

Beginning in the spring of 2000, and continuing throughout that summer, we organized meetings of experts within the three main pest disciplines. These plant pathologists, entomologists, and weed specialists helped develop the curriculum for what they felt would be a rigorous but attainable IPM certification program for landscape and turf professionals. They came to agreement on what principles to teach and on which pests to focus. Early in the process, it was decided that the curriculum content should be specific and prescriptive as
possible, rather than a broad-brush, theoretical overview. We integrated the best of our existing coursework with brand-new materials including PowerPoint presentations, fact sheets on each pest group, and videos. A description of our program and some of the educational materials we have created can be viewed on our Website at http://pep.wsu.edu/IPMcert.html.

The “nuts-and-bolts” structure of the certification process was determined during these meetings in 2000 as well. Certification would require thirty hours of training, at least twelve of which would have to be obtained in hands-on IPM workshops.

The program was launched in November 2000. Participants attended an initial “Integrated Pest Management for Landscapes and Turf” session for which they received six IPM credit hours. They also received WSDA recertification credits for their pesticide license. Sessions were held throughout that winter in a number of locations in western Washington. Those enrolling in the certification program received a program notebook at their first course, which they brought to subsequent sessions as they accrued their remaining twenty-four credit hours.

Landscape and turf professionals have embraced the IPM Certification Program for a variety of reasons. Independent contractors find that a university certification can be a marketing advantage. Applicators working within municipal, state, and other agencies have been able to use the certification as a promotional strategy.

A Little Help from Our Friends

In the winter of 2001, we applied for a small grant through EPA Region 10 (ED. NOTE: This was one of the mini-grants to which we referred in the introductory article, "IPM: Big and Small, We Need It All.") As part of a program called Alternative Pest Management Strategies for Integrated Pest Management, we were awarded $7612.50. This enabled us to fund some clerical support crucial in preparing the program handouts and developing a system to keep track of participant credits.

Results and Impacts

During the 2001 and 2002 seasons, six-hour sessions were offered at twelve locations to approximately 3000 individuals. Of the attendees at the WSU Education Programs, 743 licensed applicators (about 25% of the total attendees) registered for the WSU IPM Certification
Program. One applicator completed the 30 hours of IPM coursework during the first season of the WSU IPM Certification program. An additional seventeen attendees received their IPM certificate after two years in the program. We expect a typical participant to complete the coursework during a three to five-year period.

A sample of program participants was surveyed to determine their attitudes and intent regarding the IPM practices taught in the workshops and recertification courses. Survey responses showed that 81% planned to adopt an integrated approach to managing pest problems in turf and landscape areas and 12% reported that they already practiced IPM. Ninety-seven percent of those surveyed reported that the training increased their diagnostic skills for identifying pest problems in turf and landscape areas. Improved diagnostic skills and the intent to adopt IPM strategies for managing landscape and turf problems should lead to improved problem management and decreased pesticide use.
Looking Ahead

The WSU IPM Certification Program is now in its third season. Courses are scheduled from November through March or April. This year, the basic “Integrated Pest Management for Landscapes and Turf” course was offered in nine different locations. Our workshop offerings have expanded to include more hands-on opportunities, including a new pruning workshop. Our initial hands-on workshop, “Integrated Plant Health Management (IPHM),” is still popular as well. This three-day workshop covers all three major pest groups and provides participants the opportunity to earn 18 IPM Certification credits while they earn 15 WSDA recertification credits. A new “Advanced IPHM” course is now being offered for those who have previously attended the basic IPHM course.

Other program enhancements have included the incorporation of additional, relevant pest management videos from around the country. In 2002, we produced our own video as well, entitled, Exploring Biocontrol in Agriculture and Landscapes. Using other grant funds, we were able to purchase eleven microscopes that are being used in the hands-on training sessions beginning with a Christmas tree workshop last fall.

The certification program for landscape and turf professionals has been successful so far. Having a respected, high-visibility pesticide education training program in place before initiating this certification program was key to its success. The current program addresses the lion’s share of western Washington public pesticide applicators. Agricultural and other non-turf/landscape applicators’ needs are not being addressed yet, and some interest has been expressed on the part of these constituencies to have the ability to participate in a similar program geared toward their needs. We plan to expand the WSU IPM Certification Program to other applicator groups and in our capacity as extension educators, we will stay alert for funding opportunities as the demand increases.

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The work described in this article is just one of many integrated pest management (IPM) efforts underway in Washington State. Several other Washington IPM projects are detailed in the March and April issues of Agrichemical and Environmental News, available on the Internet at http://aenews.wsu.edu. For additional information on IPM in Washington State, please consult the following resources:

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