

INTEGRATED PEST MANAGEMENT FOR LAWNS
- SELLING THE CONCEPT -

Thomas M. Smith
President, Grass Roots, Inc.
East Lansing, MI

Traditional lawn care programs blanket apply a tank mix containing fertilizer and pest control. While this system has worked well in the past, several factors are making this approach less desirable. First, increased regulation and consumer concern are raising questions about blanket applications. Second, recent research is beginning to show the negative impact that pesticides have on the turf ecosystem. Third, blanket applications do not allow much flexibility in treating lawns with unique conditions or problems. These factors will make an alternate approach to lawn care desirable and probably necessary in the near future. This is why an Integrated Pest Management (IPM) approach should be considered in lawn care. Let's first look at the three factors influencing the future of lawn care in more detail.

Pesticide labelling now requires pesticides to be applied at the specified rates, for the specified pest, and on the specified crop. This brings into question the concept of blanket applications, and it is most likely that a shift from blanket applications to target applications will take place in the near future, and in fact could be mandated if not done voluntarily. Recent regulations have already toughened licensing for pesticide applicators. This trend is likely to continue in our industry. Record-keeping, applicator training, and safety precautions are all requirements that will certainly increase in the future.

Consumer pressure will continue to influence regulations and the direction of the lawn care industry. Consumer attitudes are important for the continued success and growth of this industry. A positive and professional image must be presented, and the concept of safe and environmentally sound treatments is critical to keep consumers purchasing services.

The impact of our past actions in lawn care is becoming more evident with recent scientific research. This is expanding our knowledge about the complex system that exists between the soil, the turfgrass plants and the multitude of organisms that inhabit this environment - the so-called turfgrass ecosystem. Any treatment applied to the turf impacts this ecosystem to a greater extent than intended. As an example, recent work done at MSU demonstrates how thatch degradation can be inhibited with chlordane applications and conversely, can be enhanced by applying products containing active micro-organisms. Many more examples exist of treatment impact, and even more remain to be uncovered. What we are beginning to realize is that we cannot control this ecosystem through treatments alone, and pesticides in particular throw this equilibrium out of balance, sometimes with drastic and far reaching consequences. We must begin to recognize the complex power of nature and begin to work within its framework, not against it.

Many of our management problems arise due to a blanket approach. All lawns are not the same, and some flexibility in treatment regime and schedule is important. The more flexibility that can be provided, the better lawn care companies will be able to handle problem lawns and unique management conditions. This will reduce cancellations and will increase the lawn care market.

An Integrated Pest Management approach can deal well with these factors. Integrated Pest Management has become a commonly recognized term, but the words themselves do very little to define the concept. Perhaps a better term would be Total Plant Health or Plant Health Care, because the concept is concerned with more than pest management. IPM is based upon the fact that the easiest and most effective way to manage pests is to increase plant health and vigor. Pesticides are often used as a tool of last resort when other management strategies cannot arrest the problem, or the problem has reached a critical level. So the focus of IPM is really plant health, not pest management.

To understand IPM, and implement a "plant health" program, we must begin to recognize that a pest is usually not the problem, but only a symptom of the problem. The true problem is most often environmental - the plant is a poor variety, the growing conditions are unfavorable, the plant is in the wrong place, or a multitude of other factors related to these that may diminish the overall vigor and health of the plant. Much like you or I, when a plant is unhealthy, it becomes susceptible to a pest. Treating the pest will not correct the problem. It will only cause one symptom to be controlled, often for only a brief time. So, IPM requires one to look further. We must resist the knee-jerk reaction of asking "What is the pest and what do I spray?" and instead ask ourselves "Why is this plant infected and what can I do to improve plant health and vigor?". Many times, treatment of a pest symptom isn't even warranted, or it is too late to do any good.

How then do we sell this concept to our customers, or more importantly to ourselves. This is not always easy, but if you accept the reality of the factors discussed earlier, we better learn how. The first step is to shift this industry from one that sells applications to one that sells information. A legitimate option with IPM is to do nothing. If we are selling applications, we will quickly go broke if we elect to do nothing. So it becomes important to charge for a diagnosis. If we elect to treat, charge for treatment as well, much like a doctor charges for a shot.

This first step is probably the hardest to accomplish. We are ingrained with the words "Free Estimate". Professionals do not give away their expertise. If the man who fixed your washer charges for an estimate, we can certainly charge for our expertise. Lawn care is not a simple endeavor and we need to recognize this and stop being our own worst enemy. But we better be experts. The person on the lawn needs to be a well trained professional. So improved training becomes the second critical step. It is paramount that the lawn specialist recognize management problems and pest problems, and knows when treatment is unnecessary. A

thorough management program needs to be developed for the client. Improved training is happening already in our industry as evidenced by the new 2 year lawn care program at M.S.U.

The third step is to implement a system with the appropriate equipment to service accounts. The difficulty lies in meeting the specific and varied requirements of each account. Equipment to target apply various pesticides is needed. Fortunately, equipment is available to inject pesticides into a solution. This equipment can be used very well with an IPM approach. But more important than pest control, an IPM program must manage the turf correctly. This means proper fertilization, watering and mowing, which may all vary between accounts. Additional services such as soil testing, aerification, spot seeding, thatch control and even mowing and irrigation can expand revenue while still providing a solid IPM approach.

Finally, educate your customers. This really fits in with the first step and becomes an on-going objective. Most customers are not used to an IPM approach, so education is critical for marketing and for customer satisfaction. An IPM approach relies upon catching problems before they get out of control. Frequent monitoring is necessary to do this, but this becomes impractical for a company to do alone. So your customers can become your best asset in an IPM approach. Newsletters, extension bulletins, and in-house fact sheets can all help to educate a customer. All these extras help you to justify charging for a diagnosis and for inspection visits.

An IPM approach also makes sense for the bottom line, and this is critical because we are all in business to make a fair profit. Companies that have implemented a "plant health" approach have reduced pesticide usage by 40-60 percent. In addition, expanding services to each account provides more revenue per account and thus more profit. Smaller trucks can be used for service calls because you just don't need the liquid volume for target applications of pesticides. Labor costs may be higher because a well trained technician is critical to make IPM work. But the savings far outweigh the extra cost.

So the time to at least think about IPM is now. Changes beyond our control are happening that affect the lawn care industry, and they will continue to happen in the future. Our current approach will become obsolete. IPM can work very well. It makes sense from an environmental standpoint, a marketing standpoint and a financial standpoint. But don't wait too long to develop your particular system. Remember, we are turf managers and it is time we get back to managing turf.