

# PLANT HEALTH CARE AND THE PUBLIC<sup>1</sup>

by John Ball

**Abstract.** Plant health care has replaced integrated pest management as the new standard of the arboricultural profession. The focus of plant health care is on the tree and its owner, not the pest. This will require a change in how arborists market this new service. This paper presents some of the current attitudes homeowners have regarding gardening, pest management and plant care and how to use this information to market plant health care programs.

Plant health care (PHC) has become the new direction of the arboricultural industry. We are casting aside integrated pest management (IPM) and adopting this new name and philosophy as part of our business practices. But what is PHC and how can it be employed to better serve our patients, the trees, and their owners, our clients?

Plant health care is a program of scheduled inspections and proactive strategies and tactics to improve the appearance and vitality of landscape plants within the expectations of the client. Plant health care should be viewed as an expansion of, rather than a departure from IPM. Plant health care does not displace IPM, rather IPM becomes an integral part of the PHC strategies.

**The PHC focus.** Plant health care expands on the IPM philosophy in three aspects. First, PHC focuses on the plant, not the pest. Clients purchase PHC programs, not for pest control, but to improve the appearance of their landscape. With the exception of a few entomophobic individuals, the value of PHC programs will be judged by the quality of the landscape rather than the quantity of insects present. Second, PHC regards plant vitality, rather than pesticide applications, as the front line of defense against insects, mites and diseases (24). Current research has demonstrated that trees possess an active defense system (6,23). Their defenses, however, are dependent upon a surplus of energy beyond the tree's maintenance requirements (3). If the tree's vitality is reduced,

the tree may lack the resources to adequately defend itself. Our primary function as PHC practitioners is to monitor and maintain plant vitality. Third, PHC recognizes human activity as the primary influence on plant vitality. While pests, and insects in particular, are the most visible problems, they are usually secondary, responding to the tree's reduced defensive abilities (15). Human activity, through its influence on plant selection, placement and environmental modifications has created highly stressful environments. Our task as PHC practitioners is to identify and moderate these stresses.

**Marketing PHC.** While the philosophy of PHC is one readily accepted by most arborists, it may not be as quickly embraced by clients. The arboricultural industry saw a proliferation of IPM programs in the last decade. Many, however, experienced slow growth (17) and some have reverted to a traditional spray service. Tree care companies run a similar risk with PHC programs if a carefully crafted marketing approach is not used.

To successfully market PHC programs requires an understanding of the public's perception of tree care and pest management. The key question is; what do homeowners think about their outdoor living environment and how does that relate to the philosophy of PHC? Over the last two decades there have been numerous studies conducted to survey the public's attitude towards gardening, pest management and plant care. The results may surprise you. We often hear that the public is against the use of pesticides. That is true if you are referring to parks or other public land (9), however, the public has a different view of pesticides when it comes to their own property. Suburban lawns and gardens receive a greater quantity of pesticides

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per acre than any other land use (25). Despite the environmental movement, many homeowners still use pesticides and are satisfied with the results of the applications.

Three studies indicated that over seventy percent of the households surveyed used pesticides (2,10,14). Another survey found approximately fifty percent of the households used pesticides outdoors (9). Surveys have also noted that the greater the income, the more likelihood that pesticides are being used on the yard (18). Most important, the segment of the population most receptive to PHC is not strongly opposed to pesticides (23). One survey of an IPM program participants reported only two percent of the homeowners believed pesticides should never be used (12). While there will be individuals attracted to a nonchemical approach to plant care, this market segment may be too small to generate an adequate profit. That pesticides are a part of your PHC program will be accepted by the vast majority of potential clients.

Surprisingly, many people still harbor unrealistic views on the purpose and effectiveness of pesticides. Forty percent of the households surveyed wanted to eliminate pests (2, 14) and when asked would they be willing to accept slight damage on plants in return for less pesticide applications, thirty percent said no (14). While sixty percent said yes, research indicates that there is a very narrow range of acceptable plant damage (20). Individuals may notice five percent of leaf injury and will consider plant damage unacceptable if the landscape damage exceeds ten percent (4). Thus, PHC programs must operate in a very narrow range of action thresholds. Clients are not going to accept modest damage levels in return for reduced pesticide use.

Some might view this data as presenting a bleak picture for the future of PHC. Homeowners have a relatively low tolerance of plant damage, particularly if they are paying someone to care for their landscape. Expectations are important and program renewal rates will be low if clients assume purchasing PHC programs equate to no plant damage. We can achieve less damage with our programs, but no damage is unrealistic. Fortunately, PHC is more than pest management.

**Excelling with PHC.** Where can we excel at satisfying the needs of a PHC client? Information. In surveys, homeowners have expressed a strong desire for more plant information (2,14). A pilot IPM program reported that clients wanted advice on many non-pest issues such as fertilizing, pruning and watering (11). The public wants more information on insect and disease problems and cultural practices to improve the appearance and vitality of their landscape (2,14,24). Lawns are the number one concern of most homeowners, followed by ornamental trees (14). Lawns account for the greatest use of pesticides in urban areas (25) and most homeowners take great pride in their lawn. Lawn care is the third most popular leisure activity after watching television and listening to music (1). Lawns and trees are the most dominate features in the typical residential landscape and represent the largest share of their landscape investment.

Where do homeowners obtain their information on lawn and tree care questions? Not from us, tree care companies rank low, right behind libraries and the Cooperative Extension Service (2). The most common sources of information are garden centers and friends (2,10,14,18). Most people will contact their city forester before an arborist (16). Here is a real opportunity for PHC programs. We need to promote that as professionals in the plant health care field we are information specialists. Unfortunately, the public does not view arborists as professionals.

The public views our industry as one that provides poor or inconsistent service. Our employees are inexperienced and do not know what they are doing (24). We are not considered information specialists. Anyone can call themselves an arborist, a common warning often given to the public (21). How many of you have come across individuals who lack a basic knowledge of tree physiology or even tree identification, yet are making treatment recommendations for trees. Physicians have a saying, "Prognosis without diagnosis is malpractice". How many arborists would be guilty of this if our practices were held to the same level of accountability?

If the public has so many concerns about our industry, why do they hire us? The most common

reasons given were that tree care companies have the knowledge and equipment to properly care for their landscape (19,24). The other frequent response was that contracting with a service was a convenient way to care for their landscape. While saving time ranked high, very few indicated that they would hire a service to save money.

Now translate this data into a strategy for developing your company's PHC program. A new product or service is more likely to be successful if it represents a truly novel way of solving a client's problem. A study of new products observed that almost seventy percent of the successes were dramatically different from existing products while almost seventy percent of the failures were not (7). The problem presented by our potential clients is that they lack the time, equipment and knowledge to properly care for their landscape. Plant health care represents a new approach to solving this problem.

**Barriers to adoption.** But this new approach, if too different, may ask clients to learn new behavior patterns. Clients will only change if the perceived benefit is sufficient, but inertia is strong. Barriers to adoption can be divided into five major categories, communicability, relative advantage, compatibility, complexity and divisibility (12). Your PHC program must be developed in such a way to minimize these barriers. The first barrier, *communicability*, means how easy is the new service to describe to yourself, your employees and your clients. A good rule-of-thumb is you should be able to describe the essences of any program in twenty-five words or less. Long, or confusing, description, which were common with many IPM programs, will meet much resistance by potential clients. The definition of PHC includes the phrase; "within the expectations of the client." Unless your program's goals and objectives are clearly understood by all; you, your employees and your client may have entirely different set of expectations.

*Relative advantage*, the second barrier, is the perceived superiority of the service to existing services. The PHC approach is superior to IPM in many respects, but perhaps the most important is that of turning the focus more on the client. A good example of the importance of client focus is Taco

Bell. This fast-food restaurant chain has shown remarkable growth in an otherwise stalled market. Part of their success is attributed to focusing on serving the customer, rather than preparing food (21).

Two other barriers are *compatibility*, how easy does it fit with existing values or behaviors, and *complexity*, how difficult is the service to understand? These two barriers need not be insurmountable. Plant health care blends well with the current medical philosophy. In previous decades, medical thinking was dominated by the search for a "magic bullet", drugs that could be injected into the body to cure or control health problems. Patients were viewed less as people and more as a collection of body parts (5). Now medicine is returning to the whole person. With the primary exception of HIV, our health concerns are no longer communicable diseases, but illnesses that have an environmental basis such as heart diseases and cancer. The focus in human health care now is on the whole patient and their environment, precisely the direction of plant health care.

*Divisibility*, or how easy can the client try the product on a limited basis, is probably the toughest barrier. Since trees often respond very slowly to care, it is not possible to see dramatic improvement in their vitality or appearance with short-term care. But a short trial period should give the client a sense of your knowledge, skill and dedication. Studies have shown that many people receptive to plant health care programs want to be involved with their landscape (2). Again, there is an analogy with the medical profession, most patients want to be kept informed of their progress and be part of the decision-making process, though not make the decision. Maintain frequent contact with the new clients that highly value this aspect of a PHC program. Provide all clients with periodic progress reports so they can better appreciate your efforts. They have to know your skill and knowledge is the reason their landscape is flourishing, not just random luck. They will not know unless you tell them.

**Levels of PHC.** Price is often mentioned by arborists as a potential barrier to selling PHC programs. This is not often the case. In fact, some IPM programs experienced low retention despite

extremely low prices (11). People interested in their landscape tend to have higher than average incomes(1,24). A higher price is not necessary a barrier to the adoption of a new service or product. Relatively high prices and good promotion have been successful for those services that are different (8). Thus, the public is willing to pay more for a service if they perceive a greater value. There are limits, of course. Most people set an upper value to the trees in their landscape. Unlike themselves, their family or even their pets, most people will not spend large sums of money to "save" their trees.

Plant health care can be performed at many levels of scale and intensity. It can be as minimal as inspections and occasional treatments to manage a single specimen tree in a residential landscape. However, PHC reaches its maximum efficiency and effectiveness if extended to the client's entire landscape with all the cultural practices under the management of a single company. What does this mean for the future? No longer lawn services, landscape services and tree services, but an integrated company.

Be aware that PHC is a direction, not an end. A step closer to a comprehensive approach to managing one of the most unique life forms on this earth, trees. Regardless of how you develop your own program, keep in mind that the primary service you have to offer is the knowledge, dedication and skill to properly care for your patients. And remember, any program or course of treatments, not firmly based upon an understanding of the tree's physiology violates the fundamental rule of medicine; do no harm.

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*Horticulture, Forestry, Landscape and Parks Department*  
*South Dakota State University*  
*Brookings, SD 57007*

**Résumé.** Le concept des soins «au maintien de la santé des végétaux» (*Plant health care — PHC*) a remplacé celui de la gestion intégrée des insectes et maladies (*Integrated pest management — IPM*) comme nouvelle philosophie dans la profession arboricole. Ce concept met l'emphase sur l'arbre et son propriétaire, et non plus sur le parasite. Ceci va exiger un changement pour les arboriculteurs dans la manière de vendre leurs services. Cet article présente quelques-unes des attitudes courantes des propriétaires face à leur jardin, la gestion des insectes et maladies et l'entretien des plantes ainsi que la façon d'utiliser cette information pour vendre cette nouvelle philosophie.

**Zusammenfassung.** Der Pflanzenschutz hat die integrierte Schädlingsbekämpfung ersetzt und ist als neuer Standard in das Berufsbild Baumpflege eingegangen. Beim Pflanzenschutz liegt das besondere Augenmerk beim Baum und seinem Besitzer, nicht auf der Erkrankung. Das erfordert eine Änderung darin, wie die Arboristen ihre Dienste vermarkten. Diese Studie präsentiert die gegenwärtige Einstellung von Hauseigentümern bezüglich Gartenarbeit, Pflanzenschutz und Pflanzenpflege, und wie diese Informationen zu nutzen sind, um Pflanzengesundheitsprogramme zu vermarkten.