HOW TO DEVELOP YOUR OWN PRODUCT EVALUATION PROGRAM

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Over the years, turfgrass managers have typically relied upon either industry sources or universities for evaluation of new fertilizers, cultural practices, and other products. As the number of new products, equipment, and cultural practices available increases, however, it becomes less likely that every product available to the turf managers will have been thoroughly tested. Thus, more and more turf managers are becoming interested in evaluating products themselves. A self testing program is desirable for several reasons.

Testing new products or management practices prior to implementing them on the entire course is good fiscal policy. Given the substantial cost of many products, it is desirable to evaluate materials under your management conditions before investing substantial money and time into implementing them.

A self testing program also enhances the turf managers image as well trained and professional. Customers who hear or read about experimental plots being run by a company, invariably show great interest in what is being evaluated. They view the organization as being more scientific in its approach and are more willing to accept input from the company.

Evaluating products in a testing program allows the superintendent to give products a test drive . Testing will reduce application mistakes and help to answer questions such as:

Does the product really do what it claims to do?
Does the product or practice work better than what we are doing now?
What rates will maximize efficacy and reduce potential discoloration to desirable turf?
Can the product be tank mixed with other materials?
Does it have an acceptable margin of safety if overapplied?

Any turf managers can institute an on-site testing program if they so desire. It is not necessary to have research training. Turf managers are naturally keen observers. Testing simply involves making accurate application of materials and then observing what happens.

The first step in testing a new product or practice is to gather as much information about the new procedure as possible. Determine whether the concept being tested makes sense agronomically based upon your training and experience. If it sounds too good to be true it probably is. Obtain any independent lab or university testing data which is available. Talk with other turf managers who might be using the product. Since management and environmental conditions can vary greatly among sites, the fact that a product works somewhere else does not insure that it will perform well under your conditions, however, it is a positive indication.

After obtaining the product to be tested and insuring that the spreader or sprayer is properly calibrated for application, testing can begin. Choose treatments to be applied based upon the questions you want to have answered. Apply the new product at several rates. Be sure to include several standard product treatments (including the product currently being used) to determine if the new product is better than what is currently being used. Always include a non-treated area, called a control, for comparison. Occasionally when making a routine pesticide or fertilizer application the applicator inadvertently includes a non-treated area; we call it a skip or miss. While these untreated areas are undesirable for routine applications, they allow us to see very easily whether or not the product applied was effective. Without a control it is impossible to determine the effect of the treatment. Perhaps good weather, less traffic, or a higher mowing height was responsible for improved quality.

When applying treatments, never apply a new material to a critical area. It is also desirable to avoid placing the test in wet, shady, or severely sloped areas which are not representative of where the materials will be typically used.

After treatments have been applied, the test is evaluated to determine product performance. Collecting and analyzing data need not be complicated. In fact, the turf manager constantly gathers data on routine product performance. Data collection includes: comparing plots to determine which has better quality or color; counting weeds, diseased areas or insects to determine pest control; using a soil probe or cup cutter to evaluate rooting depth; and noting clipping production to assess growth rate. Simply noting what treatment produces a higher quality, healthier turf is perhaps the most important observation of all.

In summary, on-site product evaluation is an activity which can be very beneficial to a turf manager. Development of a program is not difficult and is well worth the time and effort expended.

Additional reading: Developing a testing program on the golf course. By Nick Christians. 1990. Golf Course Management. 58(12):32-40.