Guidelines for Using NTEP Trial Data

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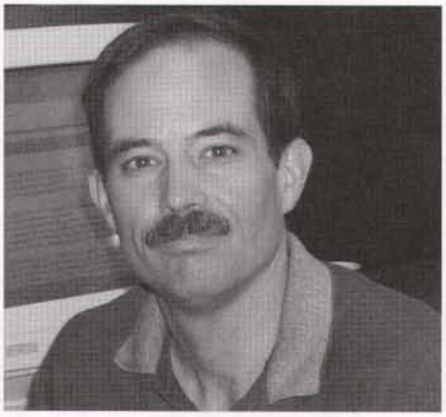

ONTARIO Turfgrass SYMPOSIUM

The National Turfgrass Evaluation Program (NTEP) was initiated in 1980 to coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. "Official" tests are conducted at universities with most states evaluating at least one NTEP test. On-site tests, a cooperative effort between NTEP, GCSAA and USGA, assess varieties on golf courses. Since its inception, NTEP has collected information on more than 50 turfgrass characteristics from over 1,000 experimental and commercial varieties encompassing 17 turfgrass species. Annual progress reports containing data collected the previous year are released for each species tested. A final report containing all data collected is produced at the end of the testing period. These progress reports are available by becoming an NTEP member (a $30 annual membership fee is required) and also on our website – visit http://www.ntep.org.

The First Step

The number of experimental and commercial varieties in NTEP tests has increased greatly in the last few years (the current national perennial ryegrass test has 134 entries) making decisions about varieties more difficult for consumers. So to utilize the NTEP information most effectively, it is important to know how to correctly interpret the progress reports. Final reports are helpful because they contain four to five years of data from a completed trial. Data from the first year of a trial mainly reflects performance during establishment and early maturity.

There are tables available for this interpretation process which give facts on soil type and pH, levels of soil phosphorous and potassium, whether the test was conducted in sun or shade, the amount of nitrogen and irrigation applied and the mowing height. For golf course on-site tests, more detail is provided such as date and rate of pesticide applications, cultivation practices used and fertilization rates, products and timing. Make sure the test locations you review are managed in a similar manner as your site. For example, data from a Kentucky bluegrass test mowed at one inch and irrigated to prevent any stress would be of little value to you if your site is a non-irrigated rough.

Another table will indicate locations and data collected. This is especially helpful for monthly quality as some locations may collect data for only three to four months in a year. Then this data presented for that location is not representative of a varieties' performance for an entire growing season. The "LSD Value" (Least Significant Difference), is a statistical tool used to determine if the difference in varieties is real or just happened by chance.

Turfgrass Quality Information

Turfgrass quality ratings are the most used and abused of all turfgrass data. They are collected monthly and are an overall visual evaluation of each grass. Quality ratings contain all the factors that affect the quality of a turf stand and include genetic colour, density, percent ground cover, disease and insect injury, heat and drought tolerance and uniformity. Depending on your location, you should be checking the test site closest to you geographically that has similar climatic conditions. If maintained in a similar way to your site, this data will be the most meaningful for your situation.

Percent Living Ground Cover ratings are normally gathered at several locations during the spring, summer or fall seasons. They are designed to express damage caused by insects, disease, drought, etc. These ratings are useful to determine the survival of turfgrasses through various stress periods and how well the grass recovered in the fall. Certain diseases such as leafspot, red thread, dollar spot and brown patch occur quite frequently and uniformly in test plots. It is advisable therefore to track the varieties' response to diseases over several years even though there may not be any data or indication in your geographic area. Many diseases occur infrequently or not at all in test plots. They do not distribute themselves uniformly across the test area, so it is difficult to estimate accurately either resistance or susceptibility.

Seeing for Yourself

NTEP tests are shown at field days in many states each year. This is a good opportunity to see first hand variety differences and discuss these with turfgrass researchers. ♦

Editor's Note: The GTI has had an NTEP trial on 134 entries of perennial ryegrass since 1999 and a Kentucky bluegrass NTEP trial in 2000 of 173 entries. If you have questions, Kevin Morris may be reached at NTEP, BARC-West, Bldg. 001, Room 245, Beltsville, Maryland 20705, phone 301-504-5125, fax 301-504-5167, email kmorris@ntep.org, website www.ntep.org.