



*Current testing standards are inadequate in identifying contaminated seed lots. If problems are not detected in a 2.5-gram test (equivalent to a tablespoon), as much as a train car of seed will be sold as weed free based on this one sample.*

## **POA TRIVIALIS CONTAMINATION**

*An increase in testing standards would benefit superintendents.*

by **MATT LEVY, RST**

**P**OA TRIVIALIS contamination in creeping bentgrass continues to be a serious problem in many new golf courses in the northern part of our country. When a superintendent starts to see patches of different-colored grasses appearing in collars and fairways, everyone scrambles to find the sources of the contamination and a solution to the problem. Unfortunately, after the fact, answers to both of these questions are hard to find.

Two years ago, in an attempt to gain information about possible sources of *Poa trivialis* contamination, an independent seed testing laboratory conducted a study and came up with some significant findings. The laboratory, located in Marysville, Ohio, invited ten of the top seed companies in the country to submit bentgrass samples

for comprehensive testing. Of the 90 samples the laboratory received and tested, 41 contained *Poa trivialis*, *Poa annua*, or other problem species. Almost 50% were unsuitable for use on most golf course fairways!

These results contradict the theory of some seed company experts who are convinced that existing seeds in the soil are the likely source of the *Poa trivialis* problem. Also at odds with the soil theory of contamination is the fact that much of this *Poa trivialis* found in many fairways appears to be plants of the new improved varieties. Reliable sources report that the color, leaf texture, and growing habits of the plants found in so many new courses are quite different from common *Poa trivialis*. It seems highly unlikely, therefore, that in the few years that the new varieties

have been in existence, we would find seeds occurring naturally in the soil of so many golf course sites.

Another significant finding of the laboratory's study demonstrated that current testing standards are inadequate in identifying contaminated seed lots. In the study of 90 samples, only 6 were found to contain problems at the current 2.5 gram testing levels. This is the amount normally used by seed companies and all certification agencies. If a company does not find contaminants in this one sample, about a tablespoon of seed, as much as a truckload or more will be sold as problem-free. It wasn't until the laboratory tested the submitted samples at 50 grams that it was able to identify all 41 samples containing *Poa trivialis* and other unwanted species.

The accompanying table demonstrates the importance of increasing testing amounts.

If the rate of contaminated seed lots is close to 50%, why are companies looking for problems in the soil? Not all are. Many seed companies are aware of the problem and are taking steps to correct it. However, to resolve this issue, some changes may have to be made, including where companies plant their fields, how their fields are inspected, and how they clean, blend, and bag their seed. In the meantime, how will a company market contaminated lots?

You know the present condition of your course and what you want it to look like in the future. Seed plays a very important role in your course's overall appearance. What you plant today is what your guests will see, walk on, putt on, and hit out of in the future. You deserve the best information available to make a wise seed-buying decision. Testing is by far the most dependable, widely used, and economical way to determine the potential quality of any seed lot.

Here are some easy steps you can take to protect your turf from contamination:

1. Ask your supplier to submit a test report based upon a minimum of 50

RESULTS OF INCREASING TESTING AMOUNTS OF SEED			
	2.5-Gram Test	10-Gram Test	50-Gram Test
<b>Number of Samples Tested</b>	90	90	90
<b>Percent Containing <i>Poa trivialis</i></b>	3	6	30
<b>Percent Containing Other Species</b>	6	17	41
<b>Contaminants Found</b>	<i>Poa annua</i>	<i>Poa annua</i> chickweed tall fescue	<i>Poa annua</i> chickweed ryegrass tall fescue timothy and others

grams for each lot of bentgrass seed you buy.

2. If they cannot provide you with a test report, ask them to submit a sample to an independent laboratory for a 50-gram test. (Refuse to buy any seed that has been tested at less than the 50-gram level.)

3. When your seed arrives, make certain that every bag contains exactly the same lot number as found on your clear test report.

4. To evaluate seed on hand or for information about other testing ques-

tions, call (937) 644-0888 for sample packets and mailing instructions, or contact another independent seed-testing laboratory.

A 50-gram test greatly reduces the risk of planting problems with your golf course seed.

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*Poa trivialis* in creeping bentgrass seed is a serious problem in many new golf course projects. *Poa trivialis* from a contaminated seed lot is seen filling in thin fairway areas left by an outbreak of take-all patch disease.