Protection Plants

TURF-SEED TAKES ACTION TO COMBAT CROSS-POLLINATION FEARS FROM SCOTT'S ROUNDUP READY BENTGRASS

By Frank H. Andorka Jr., Managing Editor

One Oregon turfgrass breeder has planted 250 of what he called “sentinel” plants in farmers’ fields that surround test plots of glyphosate-resistant bentgrass being grown by a competitor to see how far the pollen from those plots will travel under open-breeding conditions.

Bill Rose, chairman of Turf-Seed, told distributors at his company’s Field Day event that there were 400 acres of glyphosate-resistant turf being grown in Oregon, and he’s concerned about the possibility that it will cross-breed with non-glyphosate-resistant turf. So Rose approached farmers he knew in the Madras, Ore., region where the fields are located and asked them to let him plant his “sentinels” to monitor how far the pollen travels. The guard plants will be tested periodically to see if they’ve become glyphosate resistant.

The genetically modified turf is called Roundup Ready bentgrass and has been developed in a joint effort between The Scotts Co. and Monsanto. The companies have mechanically inserted a gene to modify the plant’s DNA and make it resistant to Monsanto’s nonselective herbicide Roundup. They hope to someday make it easier for superintendents to control turf weeds, especially Poa annua.

Rose says he’s also researching how far the prevailing winds can carry pollen from genetically engineered plants at his research facility in Canby, Ore. So far, the trials have confirmed that the pollen will travel at least 1,000 yards, but some tests have indicated that it can travel further, he says. He added that he’s working with the Environmental Protection Agency on the tests.

The Scotts Co. disputed Rose’s claims.

“We’ve conducted extensive research regarding pollen flow and outcrossing,” the company said in a prepared statement. “First, the only bentgrass being grown in the Madras area is within our Oregon Department of Agriculture-approved control area. There are no other bentgrass fields within 100 miles. That’s one of the reasons we chose to plant there.

“Second, bentgrass is not sexually compatible with other grass species, so there is no chance of outcrossing that would transfer the glyphosate-resistant trait to say, fescues or bluegrasses, for example,” the statement continued. “Additionally, the new variety is only resistant to glyphosate, so other herbicides can control bentgrass in seed production environments. Even if it does outcross to bentgrass plants growing on ditch banks, those hybrid plants can be controlled with other herbicides or by mechanical removal.”