Roundup Ready control area aims to prevent contamination

By Andrew Overbeck

MADRAS, Ore. — The Scotts Co., Monsanto and the Oregon Department of Agriculture (ODA) have established a control area to protect against the danger of cross-pollination with conventional creeping bentgrass. Four hundred acres of the genetically altered turfgrass will be planted this fall in Jefferson County, which is more than 110 miles away from the country’s primary bentgrass production region in Oregon’s Willamette Valley.

“We feel really good about the safeguards that have been put in place that will protect conventional production,” said ODA spokesman Bruce Pokarney. “The whole point was to tighten down any possibility of cross-pollination of conventional bentgrass, which is grown exclusively, at this time, more than 100 miles away on the other side of a major mountain range.”

Dr. Kevin Turner, director of seed research and production for the Scotts Co. will oversee the control area.

“We started working with the state of Oregon 14 months ago, making presentations on this technology and our projects,” he said. “One of the things that came out of that concern over outcrossing into other species and agrostis varieties. However, studies show that the levels of outcrossing are very, very low.”

As a result of the concerns, however, Turner worked with the ODA to create the control area guidelines to insure against any contamination (see box).

“We will have dedicated seed cleaning plants and equipment, and will monitor the production fields,” Turner said. “We have a multi-faceted plan to manage the fields and prevent outcrossing.”

Once approved, Roundup Ready creeping bentgrass will first be available as a fairway turfgrass variety. Data is still being collected on its ability to function on greens, but a greens-specific variety will be released in the next two to three years, said Harriman. The fairway variety can be sprayed with Roundup at 32-ounce per acre rates.

Wayne Horman, director of seed sales and marketing, estimates the initial market for Roundup Ready creeping bentgrass at 2,000 to 3,000 courses.

“IGM expects to see genetically-altered turfgrass banned in the United States. My goal is to try to not get it banned,” Rose said. While he views the ODA’s decision to allow the control area as a setback, Rose is still pressing forward with his own plan to develop herbicide resistant turfgrass that is male sterile. Rose said sterility could be demonstrated as early as the end of this summer. From there, commercial production of the seed could occur within three years.

CONTROL AREA GUIDELINES

• Conventional bentgrass cannot be grown less than a quarter mile from the Roundup Ready creeping bentgrass.
• Open bodies of water, such as lakes and ponds, will be hand-weeded for 165 feet on the outside of the bentgrass fields to prevent outcrossing.
• A seed cleaning plant will be located within the area.
• The plant will only clean Roundup Ready creeping bentgrass.
• Seed will be harvested with a dedicated combine.
• Seed will be put into sealed containers for transport from the field to the cleaning plant.
• Processed seed will not leave control area except in sealed commercial containers.

Field will be rotated every three to four years.

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