Transgenic turf is a great opportunity for the Green Industry

ST. LOUIS – Scientists at the Monsanto Chesterfield, MO, research facility said that bioengineered turfgrass is proven technically and it will mean big changes for the Green Industry.

"The technology is very powerful and we will need to implement excellent stewardship to ensure the Green Industry gets the maximum benefit," said Don Suttner, Technical Manager for Industrial Turf and Ornamental at Monsanto, concerning the eventual commercial production of genetically modified turfgrasses. Speaking to a group of about 150 touring sports field managers in mid January, Suttner said that researchers at Rutgers University are helping look into stewardship issues involving the use of transgenic turfgrass.

Technological advances

Within the past decade, scientists have been able to insert DNA into the genome of a wide variety of plants to introduce beneficial traits that these plants did not already possess. This has led to the planting of millions of acres of crops in the United States grown from bioengineered seeds. Much of this acreage has been planted with seeds containing a gene that makes the plants resistant to Roundup, a herbicide produced by Monsanto.

Testing the commercial waters

Monsanto, in collaboration with turfgrass germ plasma providers, is pursuing development of a number of transgenic turf and ornamental species. No bioengineered turfgrasses are commercially available yet.

Some are in carefully monitored field trials, and more will be tested in the coming years. Monsanto and The Scotts Company are intensively researching the potential for bioengineered bentgrass and related grasses, and the two companies are also working on a framework to properly steward these products as they are brought closer to commercialization.

"We don't have a business plan yet for these plants because commercialization is still a few years away," said Suttner, explaining that Monsanto and Scotts are proceeding carefully in developing the genetically modified grasses. Scotts and Monsanto have an agreement to jointly develop turf and ornamental products, including bioengineered turfgrasses for the U. S. turfgrass market.

