

Richard Shank, Ph.D.
Senior Vice President
Regulatory and Governmental Affairs

January 31, 2012

Michael C. Gregoire
Deputy Administrator, Biotechnology Regulatory Services
4700 River Road, Unit 98
Riverdale, MD 20737

Re: Enhanced Turfgrass Quality St. Augustinegrass

Dear Mr Gregoire:

The USDA has previously concurred that the Scotts Miracle-Gro Company's (Scotts) genetically modified glyphosate tolerant Kentucky bluegrass (*Poa pratensis*) is not a "regulated article" and therefore not subject to the regulations in 7 C.F.R. Part 340. This letter is to inform you that Scotts is planning to begin field trials on another genetically modified turfgrass product that is glyphosate tolerant and has enhanced turfgrass quality using the same transformation methods previously described. Scotts intends to begin field trials on its Enhanced Turfgrass Quality St. Augustinegrass around July 1, 2012.

I. Enhanced Turfgrass Quality St. Augustinegrass (*Stenotaphrum secundatum*)

Transformation of St. Augustinegrass is stably integrated using purified trait DNA transferred by biolistics. DNA transfer does not involve Agrobacterium transformation or any other plant pest regulated under the Plant Protection Act. The genetically enhanced material is expressing a more glyphosate tolerant form of 5-enolpyruvylshikimate-3-phosphate synthase from *Arabidopsis thaliana*, and a gibberellic acid 2-oxidase from *Spinacia oleracea*. The resultant phenotype is a turfgrass with glyphosate tolerance and a shorter, thicker and greener turfgrass stand.

Donor Genetic Elements:

Glyphosate Tolerance:

- CBI

Enhanced Turfgrass Quality:

- CBI

II. Recipient St. Augustinegrass (*Stenotaphrum secundatum*)

St. Augustinegrass is not a federal noxious weed. It is commonly grown on both home and government lawns. *Stenotaphrum secundatum* grass is native to the Gulf of Mexico, West Indies, and Western Africa. The oldest records state St. Augustine grass has been reported as a seashore pioneer along the Atlantic coasts of Africa and the Americas. Prior to 1800, the species was reported in Uruguay, Brazil, Nigeria, Sierra Leone, the West Indies, Bermuda and South Carolina. In the Pacific, records are not nearly as old, but it was reported in Kauai prior to 1800. By 1840, *Stenotaphrum secundatum* had also been collected from Australia and New Zealand (Richard Duple, Texas Ag Ext). Several variants or strains of *Stenotaphrum secundatum* have been reported. The normal strain in early records has a white stigma and was found to be a fertile diploid with 18 chromosomes. A sterile triploid with purple stigmas was first collected around the Cape of Good Hope in 1791 (Richard Duple, Texas Ag Ext). Mullen and Shelton performed an extensive review of the use of *Stenotaphrum secundatum* for forage (Mullen and Shelton, *Tropical Grasslands* (1996)). In the Mullen and Shelton review, they noted that triploid types are sterile and vegetatively propagated.

Stenotaphrum secundatum has been planted for lawns in Florida since the 1890's. In the US, it is currently found from the Carolinas to Florida and westward along the Gulf Coast to Texas and in Southern and Central California. *Stenotaphrum secundatum* range is limited by weather and is extremely sensitive to freezing. It is widely used as a lawn and pasture grass in warm, subtropical and tropical climate regions (Busey in Turfgrass Biology, Genetics and Breeding).

Sincerely,

A handwritten signature in cursive script that reads "Rich Shank".

Richard Shank, Ph.D.
Senior Vice President, Regulatory and Government Affairs