

## AGRONOMIC EVALUATION OF HERBICIDE TOLERANT TURFGRASS VARIETIES.

Eric K. Nelson, Director of Turfgrass Development, The Scotts Company, 14111 Scottslawn Rd., Marysville, OH 43041.

Glyphosate tolerant bentgrasses (GTB) could provide multiple benefits to seed growers, golf course superintendents, golfers, and the environment. Performance characteristics of herbicide tolerant turfgrasses must be competitive with commercial cultivars across environments and management regimes to ensure broad market acceptance upon deregulation. Breeding, selection and testing of bentgrass germplasm used to develop GTB's was initiated prior to and concurrent with regulatory research and regulatory review by federal agencies. Multiple trial sites were established under USDA notification during each generation of variety development. GTB lines were compared to various standard cultivars including: Penncross, L-93, Providence, Penn A-4, Crenshaw and Penneagle under both putting green and fairway management. Turf quality, disease tolerance, shoot density, shade tolerance, wear tolerance and other agronomic performance characteristics were evaluated. GTB germplasm and varieties are comparable to widely accepted commercial cultivars in all performance characteristics examined. Varietal development and testing continues to enhance the performance and overall benefits of GTB for the golf course market.