

GENE FLOW FROM GLYPHOSATE RESISTANT CREEPING BENTGRASS FIELDS: MIGRATION VS. MITIGATION. Carol Mallory-Smith, Maria Zapiola, Claudia Campbell, and Marvin Butler, Professor, Graduate Student, Faculty Research Assistant, and Professor, Department of Crop and Soil Science, Oregon State University, Corvallis, OR 97331.

The Oregon Department of Agriculture approved a 4500 ha control area for the production of transgenic creeping bentgrass (*Agrostis stolonifera* L.). In 2002, 160 ha in Central Oregon were seeded to Roundup Ready® (glyphosate resistant) creeping bentgrass. The transgenic creeping bentgrass was a regulated article at the time of seeding and has not yet been deregulated. From the time of planting, growers were required to monitor for and remove any escaped plants or compatible relatives within 275 m of the fields. However in 2003, a wind storm after the crop was swathed, but before threshing, moved seed beyond the 275 meters from at least one of the production fields. A mitigation program to remove all glyphosate resistant plants was initiated. Glyphosate resistant plants were either dug and removed or treated with herbicides. The production fields were removed before flowering and seed set in 2004. In the spring and summer of 2005, Oregon State University personnel surveyed the water ways in the control area for glyphosate resistant plants, either creeping bentgrass or hybrids between creeping bentgrass and compatible relatives. Seed also was collected from the plants for further testing. Even after an intense mitigation program, transgenic glyphosate resistant plants are widespread throughout the control area.