

SULFOSULFURON FOR THE SELECTIVE REMOVAL OF CREEPING BENTGRASS (AGROSTIS STOLONIFERA) FROM KENTUCKY BLUEGRASS (POA PRATENSIS). Neal R. Hageman and Domingo C. Riego, Monsanto Company, St. Louis, MO 63141-7843 and Monsanto Company, Carmel, IN 46033-9396.

Field studies were conducted at West Lafayette, IN and Columbus, OH to characterize the performance of sulfosulfuron (Certainty™ 75 WDG) for control of creeping bentgrass and selectivity in Kentucky bluegrass. Rates of sulfosulfuron from 14 – 84 gai/ha were applied to creeping bentgrass stands at West Lafayette or Kentucky bluegrass stands infested with creeping bentgrass at Columbus. Separate crop injury studies on Kentucky bluegrass were conducted at West Lafayette. Application timing ranged from 9/18/03 to 10/30/03. Both single and sequential applications were made during this timeframe.

Single applications were unsuccessful in providing any significant control of creeping bentgrass. Triple applications as sequentials were effective in reducing populations of creeping bentgrass at both locations. Mid-Fall application timing provided highest levels of control. Late-Summer and early-Fall application timing was less successful. Higher rates of application and sequentials of higher rates showed the greatest potential for creeping bentgrass control. Injury to Kentucky bluegrass was observed with higher rates at mid-Fall application timing at evaluation in late 2003. Evaluations in Spring, 2004 indicated that Kentucky bluegrass was fully recovered from injury the previous year at both locations.