

EFFICACY AND CROP TOLERANCE OF SULFENTRAZONE ON STRAWBERRIES. Rodrigo Figueroa, Douglas Doohan and John Cardina, Graduate Student and Associate Professors, Department of Horticulture and Crop Science, The Ohio State University, Wooster, OH 44691.

Field studies were conducted at Wooster, Ohio (81°58' W longitude, 40°45' N latitude, elevation 310 m) during 2000, 2001 and 2002. Herbicides were applied to strawberries one week after planting. Herbicides included were terbacil and simazine w/wo napropamide, as well as new herbicides reported to be selective on strawberries: pendimethalin, dimethenamid, S-metholachlor, ethofumesate and sulfentrazone. Based on 2000 results, sulfentrazone along with flumiclorac, were selected and compared against registered products in 2001. Plant growth evaluations at 1, 3, 6 and 18 weeks after treatment (WAT) shown no significant difference between treated plants, but higher values than hand weeded plants. Plants sprayed with sulfentrazone at the highest rate evaluated (300 g ai/ha) produced similar fruit yield to terbacil treated plants but less plant stunting (1 and 3 WAT). Because of reports indicating pH effect on sulfentrazone activity in other crops, we evaluated this on strawberries in 2002. Data suggest reduced crop tolerance to sulfentrazone when soil pH is above 6.5.