EFFICACY OF TEMBOTRIONE PLUS ISOXADIFEN-ETHYL ON SYMPTOMATICALLY BLEACHED GRASSES. John Hinz, Brent Philbrook, and Mark Wrucke, Field Development and Market Support Representative, Research Product Development Manager and Regional Manager Bayer CropScience, Raleigh, NC 27612.

Field trials were conducted to evaluate phytotoxicity and weed control efficacy with tembotrione plus isoxadifen when sprayed on previously bleached grass weeds. Grasses were bleached by applying 105 g a/ha mesotrione + crop oil concentrate + urea ammonium nitrate approximately 7 days prior to applying 138 g a/ha tembotrione and isoxadifen-ethyl + 560 g a/ha atrazine + crop oil concentrate + urea ammonium nitrate. At tembotrione plus isoxadifen-ethyl application, giant foxtail (*Setaria Faberia*), green foxtail (*Setaria viridis*) and shattercane (*Sorghum vulgare*) averaged 32%, 20% and 70% bleaching, respectively. Final weed control was not affected by the bleaching pretreatment. Tembotrione plus isoxadifen-ethyl controlled both bleached and non-bleached grasses equally well. Adding thiencarbazone-methyl to tembotrione plus isoxadifen-ethyl increased efficacy, but there was no difference in weed control between the bleached and non-bleached treatments. There was no effect of pretreatment on broadleaf weed control. All treatments provided nearly 100% of the broadleaf weeds in this study.