EFFECTS OF A SULFOMETURON-METHYL AND HEXAZINONE BLEND ON WEED CONTROL IN EASTERN CHRISTMAS TREE PRODUCTION. Marsha J. Martin, Susan K. Rick, and Ronnie G. Turner. Development Representative, Columbus, OH 43235, Development Representative, Waterloo, IL 62298 and Product Development Manager, Memphis, TN 38125. DuPont Crop Protection.

In 2006, testing of a 6.5% sulfometuron-methyl and 68.6% hexazinone premix (Westar™) continued in eastern Christmas tree production. Westar™, a water-dispersible, granular-blended herbicide was tested at 10 locations in CT, IL, MD, MI, NC, NY, OH, PA and WI, and at 4 rates, 4.51, 6.01, 7.51 and 9.01 oz ai/ac. Traditional small plot field techniques were employed and applications were made to dormant trees in the early Spring. 2006 crop safety results were excellent, predominantly zero injury on most Christmas tree types at most locations. In 5 tests for Frasier Fir, maximum average injury was 3%. In 3 tests for Colorado Blue Spruce, maximum average injury was 2.5%. In 4 tests for Douglas Fir, maximum average injury was 5% and for the 1 White Pine test, there was no injury. Tree ages ranged from 1 year to 8 years after field planting. 2006 efficacy results at 55 to 80 days after application for all 4 Westar™ herbicide rates showed excellent control (98-100%) of common ragweed, lambsquarters, large crabgrass, panicum species, foxtail species and dandelion. For quackgrass, yellow nutsedge and marestail, excellent control was seen at higher rates with fair to good control at lower rates. All 4 rates of Westar™ herbicide gave better control of quackgrass, yellow nutsedge, marestail and foxtail than 4 to 6 oz ai/acre flumioxazin, but on common ragweed, lambsquarters, large crabgrass, panicum and dandelion, Westar™ herbicide and flumioxazin gave similar results. Efficacy evaluations made between 85 and 120 days after application showed a similar pattern with all rates of Westar™ herbicide giving good to excellent control of common ragweed, lambsquarters, large crabgrass, marestail, panicum, foxtails, and dandelion. Yellow nutsedge and quackgrass showed the most dose response with the higher rates needed for good control.

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