

PERENNIAL VINE CONTROL WITH TRICLOPYR AND HERBICIDE MIXTURES. R.J. Richardson, Assistant Professor, North Carolina State Univ., Raleigh, NC 27695; B.H. Zandstra, and R. H. Uhlig, Professor and Graduate Research Assistant, Michigan State Univ., East Lansing, MI 48824.

In 2003 through 2005 near Greenville, MI, field studies were conducted to evaluate perennial vine control in Fraser fir (*Abies fraseri*) Christmas trees. Twelve treatments were applied as directed sprays in late summer of each year. Tree injury and weed control were visually rated on a 0 to 100% scale. Virginia creeper (*Parthenocissus quinquefolia*) and wild grape (*Vitis* spp.) were present in the 2003 trial, while both weeds plus poison ivy (*Toxicodendron radicans*) were present in 2004. In the 2003 trial, tree injury at 1 month after treatment (MAT) was greatest with triclopyr (1.5 lb ae/A) plus halosulfuron (0.032 lb ai/A), triclopyr plus 2,4-D (1 lb ai/A), and triclopyr plus clopyralid (0.25 lb ai/A) at 12 to 16%. Injury in 2004 was greatest with 2,4-D, triclopyr plus halosulfuron, and triclopyr plus 2,4-D at 5 to 9%. Injury symptoms were predominantly needle necrosis or abscission with no observed long-term effects. Virginia creeper control in the 2003 trial at both 1 and 11 MAT was highest with herbicide mixtures containing triclopyr at 92 to 100%. Wild grape control at both ratings was greatest with triclopyr alone or in mixture at 93 to 100%, although 2,4-D was equivalent at 11 MAT with 83% control. In the 2004 trial at one MAT, Virginia creeper control was high with all triclopyr treatments, 2,4-D, and mesotrione (0.092 lb ai/A) plus hexazinone (0.5 lb ai/A) at 93 to 100%. Wild grape control was greatest with all triclopyr treatments, glyphosate (0.75 lb ae/A), hexazinone, and mesotrione plus hexazinone at 90 to 100%. Poison ivy control was greatest with all treatments containing triclopyr and mesotrione plus hexazinone at 92 to 95%. At 11 MAT, injury was 6% or less with all treatments. Virginia creeper control exceeded 97% with 2,4-D, and all treatments containing triclopyr. Wild grape and poison ivy control was similar with these treatments, although hexazinone did control both species and glyphosate controlled poison ivy.