

PERENNIAL WEED CONTROL IN A JUNE BERRY ORCHARD. Harlene M Hatterman-Valenti and Collin P Auwarter, Associate Professor, and Research Specialists, Plant Sciences Department, North Dakota State University, Fargo, Fargo, ND 58105.

Currently no selective herbicides are registered for use on juneberry in an orchard. However, once the EPA revised pesticide tolerance crop-grouping regulations are completed; juneberry will be included in the berry group along with blueberry. In an orchard setting, perennial weed control is extremely important and very difficult. The objectives of the trial were to compare perennial weed control when herbicides were applied either in the fall after leaf drop or in the spring prior to bud break.

Spring-applied herbicides provided better common dandelion control compared to fall-applied herbicides. Application timing did not affect Canada thistle, perennial sowthistle, or quackgrass control. This may have been attributed to their lower densities and patchiness in comparison to common dandelion. None of the herbicides injured juneberry regardless of the application timing. Dichlobenil and rimsulfuron provided the best season-long control of the four perennial weeds, even though control decreased with time. Fumioxazin, sulfentrazone, and mesotrione generally provided poor control of the four perennial weeds. In 2006, perennial sowthistle numbers increased following the mesotrione applications compared to the untreated. Further research will focus on tank-mixes to broaden the spectrum and enhance perennial weed control.