

CONTROL OF COMMON DANDELION WITH GLYPHOSATE AS AFFECTED BY APPLICATION TIMING. Aaron S. Franssen* and James J. Kells, Graduate Research Assistant and Professor, Department of Crop and Soil Sciences, Michigan State University, East Lansing, MI 48824.

Common dandelion (*Taraxacum officinale*) is a troublesome weed in continuous no-till, glyphosate-resistant corn and soybean in Michigan, especially when glyphosate is the primary herbicide. Glyphosate-resistant corn and soybean field experiments were initiated in 2001 to evaluate the effect of application timing on the control of common dandelion with glyphosate and 2,4-D ester. Corn and soybean experiments were conducted on no-till fields with established populations of common dandelion on two separate sites (Mason and Corunna) in southern Michigan. Glyphosate applied with 2% ammonium sulfate (AMS), 2,4-D ester, and glyphosate+2,4-D ester applied with 2% AMS were applied at several times through the growing season.

Glyphosate-resistant corn was planted into soybean residue in 76 cm row spacing. Treatments were applied early preplant (EPP), preemergence (PRE), and at two timings after crop emergence. The early post (EPOST) application was applied to 2-3 collar corn and the late post (LPOST) application applied to 5-6 collar corn. Glyphosate applied EPP and EPOST at 843 g ae ha⁻¹ provided 87 and 77 percent common dandelion control, respectively. Common dandelion control with 2,4-D ester applied EPP was less than 30 percent.

Glyphosate-resistant soybeans were planted into corn residue in 19 cm row spacing. Similar timings were applied in soybeans as in the corn trial. Glyphosate applied PRE at 843 g ae ha⁻¹ provided 77 percent control while 2,4-D ester applied EPP provided 71 and 86 percent control; at 427 g ai ha⁻¹ and 562 g ai ha⁻¹, respectively.