

ESTABLISHED GLYPHOSATE RESISTANT ALFALFA REMOVAL WITH HERBICIDES.
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Periodically growers have the need to terminate an old alfalfa stand. Glyphosate is an effective herbicide for killing weed and legume species commonly found in old alfalfa stands. However, with the recent introduction of glyphosate resistant alfalfa, herbicide options without the use of glyphosate are needed. Field research was conducted from 2003-2007 at three sites in Michigan to examine the efficacy of fall and spring applied 2,4-D ester or dicamba. Glyphosate resistant alfalfa control was evaluated at 10, 20 and 30 days after spring application. Final glyphosate resistant alfalfa stands were then determined 30 days after spring application. Initial observations of dicamba applied in the fall, at 11b ai/A provided 96 percent control or better of glyphosate resistant alfalfa over all three years when evaluated at the spring application timing. Spring applications of 2,4-D ester and dicamba were more effective at controlling glyphosate resistant alfalfa than the fall applications, providing 83 and 94% control, respectively. Alfalfa stand count reduction was greatest (93%) when dicamba was spring applied. Control of glyphosate resistant alfalfa following spring applications increased from 10 to 30 days after application; however, control following fall applications decreased during the same time period. Dicamba applied in the spring was the most effective glyphosate resistant alfalfa stand removal option evaluated.