VOLUNTEER POTATO CONTROL IN FIELD CORN

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Fall tillage and cover crop use, combined with a series of mild winters, have led to an increase in volunteer potatoes in Wisconsin field crops. Overwintering tubers serve as a host for pathogens, while volunteer potato plants reduce crop yield. In response to this situation, a study was conducted in 1998 to identify postemergence herbicides that adequately control volunteer potatoes and prevent tuber formation in field corn, a crop that commonly follows potatoes. Dekalb 493 SR field corn was planted perpendicular to Russet Burbank potato rows that simulated overwintered tubers. Dual (2 lb/A PRE) was applied in all plots following corn planting. Weed control was similar in all plots, except where Liberty was applied. Liberty injured the non-resistant corn and decreased its' competitive ability with the potatoes and weeds. Despite corn injury where Banvel and 2,4-D were combined, corn yields were reduced only where Liberty was applied. Volunteer potato control was greatest where Starane was used alone and where Banvel was used alone or combined with 2,4-D. Volunteer tubers were formed where Liberty, Stinger, and cultivation were used individually.