Broadleaf weed control with split and reduced Bentazon rate in soybean 
(Glycine max L.) crop

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Abstract

Soybean is a major crop in the United States, and broadleaf weeds are a significant problem. Control of broadleaf weeds in soybean is critical to achieving high yields. The objective of this study was to evaluate the effectiveness of a split application of Bentazon at a reduced rate in controlling broadleaf weeds in soybean. The experiment was conducted in 2010 at the University of Wisconsin-Madison Agriculture Research Station in Wood County, WI. Two split applications of Bentazon at 0.5 and 0.25 lb ai/acre were applied 21 days after planting (DAP). The reduced rate treatment was compared to a full rate of 0.75 lb ai/acre. The study was conducted as a split-plot design with four replicates. The main plots were the three Bentazon treatments, and the sub-plots were three broadleaf weed species: Palmer amaranth, waterhemp, and lambsquarters. The results showed that the split application of Bentazon at a reduced rate controlled broadleaf weeds as effectively as the full rate treatment. The reduced rate treatment also had a lower environmental impact. This study provides valuable information for growers looking to reduce their use of herbicides and protect the environment.

Key words: Soybean, broadleaf weeds, Bentazon, split application, reduced rate, weed management.