# Weed Control in Roudup Ready Soybeans with Glyphosate Plus Manganese Mixtures. (A00parker135933-Poster)

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## Abstract:

Glyphosate-tolerant soybean is grown on about 80% of the acreage in NC. Soybean is often treated with manganese to correct deficiencies. In 2001, three experiments were conducted to determine if mixing manganese sulfate (MnSO4) with glyphosate affected weed control. Treatments consisted of a factorial arrangement of five rates of glyphosate (0.42, 0.63, 0.84, 1.05, and 1.26 kg ae/ha) plus three rates of MnSO4 (0, 1.75, and 3.50 kg/ha) and a nontreated check. The experimental design was a randomized complete block with treatments replicated four times. Weed control was visually estimated at 14 and 21 days after treatment. MnSO4 did not affect control of fall panicum, large crabgrass, broadleaf signalgrass and goosegrass by glyphoste. MnSO4, regardless of rates, reduced morningglory, velvetleaf, and common lambsquaters control by glyphosate at 0.42 kg ae/ha by 2-24%. Antagonism declined with increased rates of glyphosate. No antagonism was observed for any rate of MnSO4 plus glyphosate at 1.26 kg ae/ha. Treatments did not affect yield at any location.

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