

**COMBINATIONS OF FLURIDONE AND FOMESAFEN FOR PREEMERGE WEED CONTROL IN
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Combinations of fluridone and fomesafen were evaluated at different rates to compare preemerge weed control against other commonly used residual herbicides. These trails were conducted in 2014 on 38in rows in Marianna and Rohwer, AR using Stoneville 4946 GLB2 cultivar.

Palmer amaranth (*Amaranthus palmeri*), pitted morningglory (*Ipomoea lacunose*), and barnyardgrass (*Echinochloa crus-galli* .) were over seeded at planting to provide a consistent weed population. Residual herbicides were applied at planting at 12 GPA (gallons per acre). Weed efficacy was evaluated 14, 30, and 40 days after preemerge (PRE) applications. Fluridone and fomesafen were applied alone and in tankmix combinations at rates 0.125, 0.2, and 0.25 lb ai/A. These applications were compared to fluometuron at 1 lb ai/A and an untreated check.

No significant differences among treatments in regards to weed control were noted at the Rohwer, AR location 14 days after treatment (DAT) . Obvious differences in weed control were noted at 30 DAT. Fluridone applied alone at any rate, did not provide equivalent control as industry standards fluometuron or fomesafen at 1.0 lb ai/A or 0.25lb ai/A, respectively. The combination of fluridone and fomesafen at 0.25lb ai/A provided the greatest control (80%) of Palmer amaranth and barnyardgrass at 30 days after treatment, but control was not significantly different than fomesafen applied alone at 0.2lb ai/A. It was also noted that fluridone at any rate alone did not provide equivalent control of morningglories as fluometuron at 1.0lb ai/A.

The highest control of Palmer amaranth and barnyardgrass at 20 days after application was achieved with fluometuron 0.75lb ai/A plus fomesafen 0.2lb ai/A and combinations of fluridone plus fomesafen at 0.2 or 0.25 lb ai/A. Morningglory control was less for fomesafen 0.125lb ai/A than any other treatment. By 40 days after treatment, weed control decreased for all treatments.