

POSTEMERGENCE WEED CONTROL IN COTTON WITH SEQUENCE

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Abstract

Sequence is a new broad-spectrum herbicide that provides postemergence burndown weed control with residual activity in RR cotton. The active ingredients in Sequence are the K⁺ salt of glyphosate plus S-metolachlor. Sequence is formulated as a 5.25 lb per gallon soluble liquid. Each gallon of Sequence contains 2.25 lbs acid equivalent of glyphosate acid and 3.0 lbs ai per gallon S-metolachlor. Use rates range from 2.5 to 3.5 pints of product per acre. Sequence at 2.5 pints per acre delivers 0.7 lbs acid equivalent of glyphosate acid and 0.94 lbs active ingredient S-metolachlor.

Sequence may be applied post over the top of 3 inch RR cotton up to 5 leaf cotton with the fifth leaf the size of a quarter. Applications beyond the fifth leaf up to 12 inch cotton must be applied with a post-direct hooded sprayer.

Small plot replicated trials were conducted during 2002 and 2003. Results showed that Sequence applied at 2.5 to 3.0 pints of product per acre gave 88 to 93% control of common lambsquarters (*Chenopodium album*) and 83 to 87% control of annual grasses at 38 days after application compared to 71% control with Roundup Weathermax at 22 ounces. Sequence applied post over the top of 4 leaf cotton and followed with Suprend herbicide early post-direct gave greater than 95% control of Palmer amaranth (*Amaranthus palmeri*), sicklepod (*Senna obtusifolia*), barnyardgrass (*Echinochloa crus-galli*), pitted morningglory (*Ipomoea lacunosa*), and hemp sesbania (*sesbania exaltata*). Sequence applied post over the top of 4 leaf cotton and followed with Envoke herbicide post over the top of 14 inch cotton gave 96% control of redroot pigweed (*Amaranthus retroflexus*), 99% control of sicklepod (*Senna obtusifolia*), 94% control of crabgrass (*Digitaria sanguinalis*), and 95% control of pitted morningglory (*Ipomoea lacunosa*).