

SequenceTM: A NEW POSTEMERGENCE HERBICIDE IN ROUNDUP READYTM SOYBEANS. Adrian Moses*, Dunk Porterfield and Chuck Foresman. Research and Development Scientists and Technical Brand Manager, Syngenta Crop Protection, Greensboro, NC 27419.

SequenceTM 5.5 EW herbicide is a pre-packaged mixture of S-metolachlor and the K⁺ salt of glyphosate from Syngenta Crop Protection. Sequence is formulated as a 630 g per liter soluble liquid. Each liter of Sequence contains 270 g acid equivalent of glyphosate acid and 360 g ai S-metolachlor. Use rates range from 2.9 to 4.1 liters of product per hectare. Sequence at 2.9 l/ha delivers 1934 g acid equivalent of glyphosate acid and 2579 g active ingredient S-metolachlor.

Sequence herbicide is a broad-spectrum herbicide that provides postemergence burndown weed control with residual activity in RR Soybean. Sequence may be applied preemergence, preplant burndown, or post over the top of RR soybeans. Soybean shows excellent tolerance to Sequence. Small plot replicated trials were conducted across the U.S. during 2002 to 2004. Results showed that Sequence applied at 2.9 to 4.1 liters of product per hectare gave > 90% control of Palmer Amaranth (*Amaranthus palmeri*) and annual grasses at 30 days after application compared to <75% control with glyphosate at 1.6 liters of product per hectare. Sequence applied at 2.9 to 4.1 liters of product per hectare gave 96% control of tall waterhemp (*Amaranthus tuberculatus*) at 30 days after application compared to 86% control with Roundup Weathermax at 1.6 liters of product per hectare.