

**COMMAND 3ME AND ROUNDUP SYSTEMS FOR  
WEED CONTROL IN ROUNDUP READY  
COTTON**

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**Abstract**

Efficacy of Roundup Ultra for control of common lambsquarters (*Chenopodium album*), prickly sida (*Sida spinosa*), and velvetleaf (*Abutilon theophrasti*) is sometimes low while Command 3ME readily controls these weeds preemergence. Likewise, Command 3ME is poor on pigweed species (*Amaranthus spp.*) which can be controlled with Roundup Ultra. Treflan is commonly used PPI for grass and small-seeded broadleaf weed control in cotton (*Gossypium hirsutum*) but requires incorporation which is costly and may delay planting in wet years. Since Command 3ME PRE seems to fit well with Roundup Ultra systems, our objective was to evaluate Command 3ME PRE versus Treflan 4EC PPI in systems for weed control in Roundup Ready cotton. The study was conducted at Rocky Mount, NC in 1997. Treatments included: Command 3ME PRE at 1.3 pints/A (Command), Treflan 4EC PPI at 1 pint/A (Treflan), Command or Treflan followed by (fb) Roundup Ultra at 1.5 pints/A (RU), Command or Treflan fb Cotoran 4L PRE at 2 pints/A (Cot), Command or Treflan fb Cot fb RU, Command or Treflan fb RU fb Bueno 6 at 2.7 pints/A + Bladex at 1.6 pints/A Layby (layby), and Command or Treflan fb Cot fb RU fb layby.

Weed control was estimated visually six weeks after the layby applications for common ragweed (*Ambrosia artemisiifolia*), entireleaf morningglory (*Ipomoea hederacea* var. *integriuscula*), ivyleaf morningglory (*Ipomoea hederacea*), large crabgrass (*Digitaria sanguinalis*), Palmer amaranth (*Amaranthus palmeri*), and tall morningglory (*Ipomoea purpurea*). Also evaluated one week after layby applications were carpetweed (*Mollugo verticillata*), common lambsquarters, and purple nutsedge (*Cyperus rotundus*).

When applied alone, Command had more activity on common lambsquarters, common ragweed, and large crabgrass than Treflan. Treflan controlled more Palmer amaranth and carpetweed. Neither Command nor Treflan controlled entireleaf morningglory, ivyleaf morningglory, purple nutsedge, or tall morningglory. Roundup Ultra increased control of all weeds to near 100%. In this study, residual layby herbicides did not increase control over Roundup Ultra EPOST. Command yielded over 100 lb

more lint per acre than Treflan when used in conjunction with Cot and RU or Cot, RU, and layby herbicides.

Command 3ME may provide weed control comparable or better than Treflan 4EC in the Roundup Ready system while eliminating the need for incorporation. The advantage with Treflan would be increased pigweed control and the flexibility to use Temik.