

**STRATEGIES FOR LANCELEAF SAGE
(SALVIA REFLEXA) CONTROL IN TEXAS HIGH
PLAINS COTTON**

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while Command applied PRE Fb Staple controlled lanceleaf sage greater than 97% 10 weeks after planting.

Abstract

Lanceleaf sage (*Salvia reflexa*) can be a major weed problem for cotton producers on the Texas Southern High Plains. Field experiments in 1999 were conducted northeast of Lubbock in Floyd and Crosby counties evaluating weed control using Roundup Ready (glyphosate-tolerant), BXN (bromoxynil-tolerant), Staple (pyrithiobac), and Command (clomazone) systems in three independent trials. The first experiment included treatments of Staple applied preemergence (PRE) at 0.032 lb ai/A in combination with Caparol (prometryn) at 1.2 lb ai/A, the same treatment followed by (Fb) Staple applied postemergence (POST) at 0.047 lb ai/A, Roundup Ultra applied POST at 0.75 lb ai/A, Roundup Ultra at 0.75 lb ai/A plus Staple at 0.032 lb ai/A, Buctril applied POST at 0.50 lb ai/A, and Buctril plus Staple applied POST at 0.5 plus 0.047 lb ai/A. Treatments in the second trial were Staple applied POST at 0.032, 0.047, and 0.063 lb ai/A, Buctril applied POST at 0.38 and 0.50 lb ai/A, and tankmixes of Buctril plus Staple at all possible combinations of the previously mentioned rates. Treatments in the third trial were Command at 0.50 or 0.75 lb ai/A applied PRE in combination with Staple at 0.032 lb ai/A Fb Staple applied POST at 0.032 lb ai/A, Command applied PRE at 0.75 or 1.0 lb ai/A Fb Roundup Ultra at 0.56 lb ai/A, Command applied PRE at 0.75 or 1.0 lb ai/A Fb Staple POST at 0.063 lb ai/A, and Roundup Ultra applied POST alone at 0.56 lb ai/A. A blanket application of Treflan was applied preplant incorporated over all three trial locations at 0.75 lb ai/A and all POST applications were made to 1-4" weeds. Results from the first trial indicated that Staple plus Caparol Fb Staple or Roundup Ultra tankmixed with Staple controlled lanceleaf sage greater than 90% 10 weeks after planting. These treatments were more effective than Staple plus Caparol applied PRE, Buctril applied POST or a tankmix of Buctril plus Staple. Results from the second trial indicated that Staple applied POST alone at 0.063 lb ai/A or tankmixes of Buctril plus Staple (regardless of rate) controlled lanceleaf sage at least 95% 10 weeks after planting. Buctril plus Staple tankmixes controlled lanceleaf sage more effectively in this trial due to a smaller weed size at application. The third trial indicated that Command applied PRE Fb Roundup Ultra controlled lanceleaf sage 73-80% 10 weeks after planting,