

**EFFECT OF WEED SIZE AND BUCTRIL
RATE ON PRICKLY SIDA,
IVYLEAF MORNINGGLORY, VELVETLEAF,
AND SMOOTH PIGWEED CONTROL
T.C. Mueller, R. M. Hayes, W. T. Willian
University of Tennessee
Knoxville, TN**

Abstract.

Postemergence broadleaf weed control options are limited, although new products are available. Buctril use combined with BXN cotton allows for selective control over-the-top with excellent crop safety. Weed seeds were planted in 30 inch rows into tilled soil and irrigated to encourage germination. All other weeds were controlled by mechanical cultivation and hoeing. Different weed sizes from two separate plantings each year were sprayed with POST herbicides using hand-held CO₂ back-pack sprayers. Herbicides were mixed and sprayed in 18 GPA of water carrier at 38 psi. No surfactant was added to Buctril, and X-77 was added to Staple treatments. Environmental conditions were favorable for weed control in both years. Weed control was evaluated 3, 14, and 28 days after treatment. Prickly sida control was incomplete each year. Better morningglory control was obtained when Buctril was applied to small weeds, and Buctril provided control equal to Staple. Velvetleaf control required a sequential Buctril application, and control was more complete when sprayed on small velvetleaf. Smooth pigweed larger than 1 to 2 inches is not controlled by Buctril.