DUAL MAGNUM COMBINATIONS FOR YELLOW NUTSEDGE (Cyperus esculentus L.) MANAGEMENT IN WEST TEXAS PEANUT. B.L. Porter*, P.A. Dotray, J.W. Keeling, and T.A. Baughman. Texas Tech University, Texas Agricultural Experiment Station, Lubbock, and Texas Agricultural Extension Service, Vernon.

ABSTRACT

Field studies were conducted in Gaines County, Texas in 1999 and 2000 to evaluate yellow nutsedge (Cyperus esculentus L.) control and peanut response to Dual Magnum and Dual Magnum combinations. Dual Magnum applied alone was evaluated preemergence (PRE), at ground crack (GC), and early postemergence (POST); followed by Basagran POST and Tough POST at each application timing; with Strongarm PRE at each application timing; and with Strongarm PRE fb Basagran POST and Tough POST at each application timing. Florunner peanut was planted near Loop, TX in 1999, and near Denver City, TX in 2000. Dual Magnum at 1.27 lbs ai/A, Strongarm at 0.024 lbs ai/A, Basagran at 0.25 lbs ai/A, and Tough at 0.94 lbs ai/A was applied using a tractor-mounted compressed air sprayer that delivered 10 gallons per acre at 24 psi. Yellow nutsedge control and peanut injury was evaluated 24, 39, and 51 days after planting (DAP) in 1999 and 31, 53 and 71 DAP in 2000.

Dual Magnum PRE controlled yellow nutsedge > 78% at all rating dates. Strongarm PRE provided similar control. Dual Magnum GC and POST were less effective at all rating dates. The Dual Magnum timing/Strongarm PRE combinations controlled yellow nutsedge > 82% at all rating dates. Yellow nutsedge control was not improved when POST treatments were added to the Dual Magnum timing/Strongarm PRE combinations. Dual Magnum GC controlled yellow nutsedge < 70%. Dual Magnum GC fb Tough POST controlled yellow nutsedge > 90% by midseason. Dual Magnum GC fb Basagran POST controlled yellow nutsedge < 75%. Dual Magnum POST controlled yellow nutsedge < 45%. Dual Magnum POST + Tough POST controlled yellow nutsedge 79% at 51 DAP in 1999, but only 43% at 71 DAP in 2000. Similarly, Dual Magnum POST + Basagran POST controlled yellow nutsedge 70% at 51 DAP in 1999, but only 43% at 71 DAP in 2000. Dual Magnum PRE stunted plants < 13% in 2000, while stunting was observed in all Strongarm treated plots (2-15%). Peanut yields ranged from 726 to 1190 pounds per acre in 2000 and differences due to herbicide treatments were not detected.