

WINTER ANNUAL WEED CONTROL IN EMERGING CORN

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INTERPRETIVE SUMMARY

Conservation tillage systems rely on herbicides to remove winter vegetation prior to planting corn. Winter weed control is often incomplete and weeds often regrow or new weeds emerge before planting. Corn is planted in late February and throughout March in Louisiana. As a result, winter weeds do not die out naturally before interfering with corn and severely reducing yields. Questions from producers and consultants on controlling winter weeds after corn is planted are common and increasing. Burndown herbicides (Roundup, Gramoxone, Harmony Extra, and 2,4-D) used to manage these weeds before planting are either non-selective or restricted to ground application after corn emerges. The effectiveness of postemergence herbicides registered for use in corn against many winter weeds is unknown. Studies were conducted in 1998 and 1999 to evaluate selected postemergence herbicides used in

corn for controlling winter weeds common to northeast Louisiana. All studies were conducted in a randomized complete block design with three to four replications at the Northeast Research Station near St. Joseph, LA. Weed control was estimated using a scale of 0 to 100%, where 0 equaled no control and 100 equaled complete control. All data were subjected to analysis of variance and means were separated using Fisher's Protected LSD at $P = 0.5$. In 1998, herbicides containing atrazine, cyanazine, or metribuzin controlled swinecress 90 to 100%. Accent, Banvel, 2,4-D, Beacon, and Scorpion did not control swinecress. In 1999, herbicides containing atrazine controlled swinecress and primrose greater than 90%. Cyanazine and metribuzin also controlled swinecress. Marksman and Banvel were the only herbicides, besides 2,4-D, that controlled dock. Accent, Basis Gold, and Celebrity controlled ryegrass greater than 90%. These studies are being repeated in 2000.