WILSON, ROBERT G.* and GARY L. HEIN, University of Nebraska, 4502 Ave. I, Scottsbluff, NE 69361. - Interaction of insecticides applied at planting with triflusulfuron (Upbeet) herbicide applied postemergence.

ABSTRACT

A two-year field experiment was conducted near Scottsbluff, NE, to determine the influence of aldicarb, chlorpyrifos, and terbufos applied at planting with desmedipham plus phenmedipham and triflusulfuron applied after sugarbeet emergence on crop stand, vigor, and root yield. Aldicarb, chlorpyrifos, and terbufos were applied as bands at recommended and 2x rates over the crop row. In addition chlorpyrifos was also applied postemergence when sugarbeets were in the cotyledon stage of growth. Triflusulfuron and desmedipham plus phenmedipham were applied alone or in combination as split treatments once when sugarbeets were in the cotyledon stage of growth and, again 7 days later when the crop was in the 2-true-leaf stage of growth. Observations of early season sugarbeet vigor suggested there was no interaction between aldicarb applied at planting and postemergence applications of triflusulfuron or desmedipham plus phenmedipham. Sugarbeet vigor declined when the 2x rate of chlorpyrifos applied preplant or postemergence was applied to sugarbeets also receiving a postemergence application of triflusulfuron or desmedipham plus phenmedipham. One of two years sugarbeet vigor declined when the 2x rate of terbufos was applied preplant and followed by a split application of triflusulfuron postemergence. Later season observations of sugarbeet stand and root yield did not suggest there was an interaction between aldicarb, terbufos, or chlorpyrifos with triflusulfuron or desmedipham plus phenmedipham.