HILDE, D.J., R.E. ELLINGSON, American Crystal Sugar Co., 101 North 3rd St., Moorhead, MN 56560. A.W. ANDERSON, 269 Hultz Hall, North Dakota State University, Fargo, ND 58105. - 1992 sugarbeet root maggot survey and IPM program - Red River Valley.

With heavy root maggot pressure forecast for the 1992 sugarbeet crop, more precise information was needed for growers to determine the optimum period for post insecticide treatments. There was also a need to determine the geographical extent of the root maggot problem. American Crystal Sugar Company in cooperation with North Dakota State University, conducted a broad based survey that included all the sugarbeet growing townships in the Red River Valley, an area 175 miles long and 90 miles wide. One field per township was selected for the survey for a total of 250 fields. Eighteen field scouts were hired on a full time basis from May 1 to August 1, supervised by each of the five factory agricultural staffs. Three sticky stake traps were placed in each field and fly counts were taken 3 times per week. Daily fly counts were communicated to growers via DTN (satellite data transmission network), factory telephone recordings and personal contact. Two key dates, first fly emergence and peak fly activity became the basis for an integrated pest management program (IPM). In mid July, field scouts examined the survey fields for larval root damage using a visual scale from 0 to 5. Survey results indicated that research predictions of first fly emergence and peak fly activity were practical in field observations and useful to growers. Geographical areas with varying degrees of root maggot pressure were identified.