

**European Corn Borer Management in Potatoes - 2001:** 'Superior' potatoes were planted on April 6 on the Joseph Jackewicz Farm located near Magnolia, DE. Plots consisted of four 50 ft-long rows on 3-ft centers. Each treatment was replicated four times and arranged in a RCB design. Applications of Furadan were broadcast applied at a rate of 1 qt per acre and 3 treatment timings were evaluated: (1) Peak pheromone trap counts: first application 3-5 days after peak and second application one week later, (2) 700 DD, Base 50 starting Jan 1: first application 3-5 days after reaching 700DD and second application one week later, and (3) One Application at 300 DD, base 50, after peak catch in pheromone trap. Bravo was applied at a rate of 1 lb/acre on May 15, 24, 30; June 6, 13, 20 and 27. Provado was applied for CPB and leafhopper control at a rate of 3.75 oz/A on May 24, 30; June 13 and 27. An ATV 4 CO<sub>2</sub> pressurized ATV sprayer delivered 23gpa at 40 psi. Data were taken weekly from May 14 through June 27 from the center row of each plot and included the following: the number of CPB adults, egg masses, small and large larvae/5 randomly selected stems in each plot, the number of ECB damaged stems/ 10 randomly selected stems per plot on June 27, and the number of potato leafhopper adults and nymphs per 5 sweeps. One row of each plot was harvested on July 20 and all A- grade tubers were weighed. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

European corn borer pressure was moderate. Two applications of Furadan based on peak trap catches and 700 DD from Jan. 1 provided significantly better ECB control compared to the single application 300 DD after peak catch. No yield differences or phytotoxicity were observed.

Treatment and Rate/Acre	Date of Application	Timing of Application	Percent ECB Damaged Stems June 27	Yield CWT/Acre
Furadan 1 qt	May 24 and June 6	Based on Pheromone Trap Counts: 3-5 days after peak, then 7 days later	2.50c	350.56a
Furadan 1 qt	June 6 and June 13	Using Degree Days: calculated on base 50 starting Jan 1, first spray 3-5 days after 700 DD, second spray one week later	2.50c	368.03a
Furadan 1 qt	June 13	Used BLT peak catch then timed spray for 300DD (base 50) after peak	16.25b	356.06a
Untreated	-----	-----	32.50a	340.26a

Means within a column followed by the same letter are not significantly different (P=0.05, Ryan's q test).