

Section III

Root Feeding Maggots, Soil Arthropods, and other problems

A SUMMARY OF EFFORTS TO CONTROL BLACK VINE WEEVIL IN HOP

C.R. Baird and K.W. Dorschner

University of Idaho, Parma, Idaho 83660

The black vine weevil, *Otiiorhynchus sulcatus*, overwinters in the larval stage in the soil, pupates during April, and emerges as an adult in mid to late May. The primary damage results from larval feeding on hop root systems during late winter and early spring. Following the preovipositional period (mean=26 days), eggs are laid in June and July on the lower portions of the plant generally around the crown near the soil line.

Control efforts have been aimed at controlling adults after emergence but before oviposition using foliar sprays directed at the lower three feet of hop plants. No products are specifically registered for BVW on hop, however, methyl parathion among those registered on hop provided good control when applied in early evening in mid to late June. In extensive field testing and under several years of Section 18 emergency use permits, Furadan 4F has provided excellent control. Several pyrethroids also have provided good control as a directed spray in small scale tests. Two species of parasitic nematodes provided good control of larvae in small test plots. Rape seed meal applied as a spring soil treatment was ineffective.