

EFFECT OF FALL AND SPRING CULTURAL PRACTICES ON OVERWINTERING
OF THE ASPARAGUS APHID, BRACHYCOLUS ASPARAGI MORDVILKO

J. Eric Halfhill, George Tamaki, Jerald A. Gefre
Yakima Agricultural Research Laboratory, USDA, ARS, Yakim WA 98902

The effects of fall and spring cultural practices on the overwintering capabilities of B. asparagi are undocumented. We studied the effects of fall burning, mowing, or removal of the dormant fern growth followed by spring tillage. Fall egg counts were determined by sampling 5 at <30 cm tall ferns/plot. Spring aphid counts were determined by careful examination of spears and their bracts under a microscope.

There was no relationship between fall egg levels and the percent spears infested, the total number of funditrices, or the number of funditrices infesting each spear. Spring tillage alone reduced populations by 83% and reduced the number of spears infested by 44%. Fall crop destruction provided and 65-87% reduction in the remainder of the total population and 76-86% reduction in the number of spears infested. Mowing was 2X more effective than burning.