LONG-TERM WEED CONTROL IN APPLE, PEACH, AND BLUEBERRY WITH FALL APPLIED HERBICIDES. Joseph G. Masabni, Fruit and Vegetable Extension Specialist, University of Kentucky Research and Education Center, Princeton, KY 42445.

Flumioxazin (Chateau 51WG) is an herbicide for the preemergence control of broadleaves and grasses. Chateau also has a postemergence activity for the burndown of emerged weeds. Chateau was recently labeled for use in non-bearing fruit trees and bearing grapes. Long-term weed control in apple, peach, and blueberry was investigated following fall application of herbicides.

Treatments consisted of simazine 2.5 lb ai, norflurazon 2 lb ai, napropamide 2 lb ai, and oryzalin 2 lb ai were applied on November 11, 2003. Flumioxazin was also applied at 0.19 and 0.38 lb ai on apple and peach, and at 0.08 and 0.38 lb ai on blueberry. Flumioxazin rates of 0.19 and 0.38 lb ai/A are the labeled rate recommended by Valent Company. All treatments included glyphosate 1 lb ai for burndown control of preexisting weeds.

Weed control evaluation in mid-April or 4 months after application showed that flumioxazin-treated plots had no weeds present and no weeds germinating. Plots treated with napropamide, norflurazon, and oryzalin showed significant regrowth of dandelion, common ragweed, and chickweed. Simazine plots had fewer weeds germinating than the other herbicides.

By early June or 6 months after application, no differences in residual weed control were observed for all treated plots when compared to the control. All plots were equally weedy and required immediate floor management measures. It appears that flumioxazin weed control benefit was exhausted by 6 months after application, compared to 4 months for all other herbicides.

Fall application of flumioxazin can eliminate the need for early spring weed control. This time saved can be spent on other important activities such as pruning and disease and insect control.