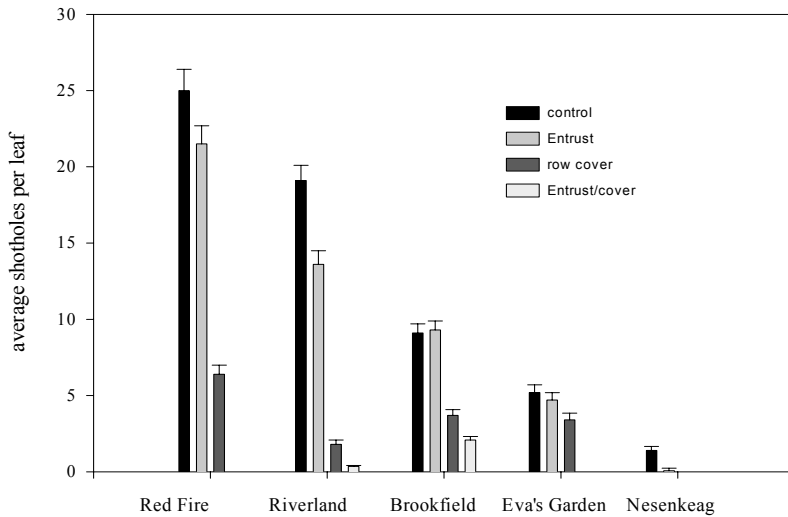


# VEGETABLE RESEARCH PROJECTS

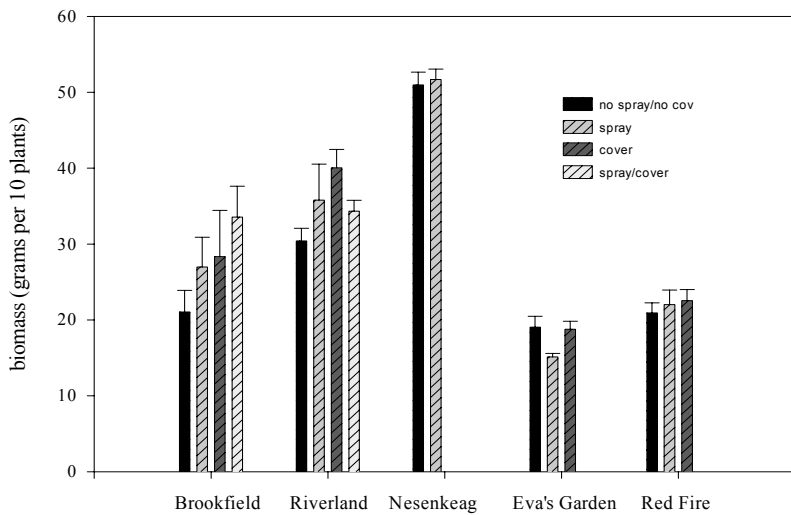
UMass Research Farm Field Day, August 13, 2003

## Flea Beetle Management in Brassicas: On-Farm Trials Summer 2003

Flea Beetle Feeding Injury on Arugula



Plant Weight at Harvest



Chris Bergweiler, R Hazzard, F. Mangan, C. Andersen, University of Massachusetts and Kim Stoner, Connecticut Agricultural Experiment Station. *Funded by Northeast SARE, USDA/Risk Management Agency*

To date we have completed five on-farm trials focused on flea beetle management. Taking advantage of a high level of grower participation in the set up and management of experiments, we looked more closely at various IPM methods using row covers and Entrust®, the new organic formulation of spinosad (Spintor®). Results thus far, although mixed, tend towards showing a moderate level of flea beetle control achieved by using Entrust®, as evidenced by increased plant weights at 21-25 day harvests and reduced feeding injury in arugula test plots. The best results were achieved with floating row covers, or a combination of row covers and weekly sprays. Because of distinct variation in planting methods, planting densities, soil factors, local weather (on-farm sites ranged from southern NH to SE coastal Massachusetts), and the unique flea beetle history of

each individual farm, no direct comparison between farms is possible. Rather, the

presence of consistent trends as influenced by the growing methods studied represent a positive outcome for this project.

Ongoing we have several more grower-participant trials designed to find out more about effective row cover anchoring methods, row covers of various weights and their usefulness in Asian leafy green cropping systems, and the effectiveness of field rotation in overall flea beetle management strategies. This work is taking place during the latter half of the summer during peak activity of the 2<sup>nd</sup> generation of flea beetle populations.