



# The USDA IR-4 Research Program

Application Technology Research  
Wooster, OH



A national program to assist in registering pesticides for minor-use food and ornamental crops.

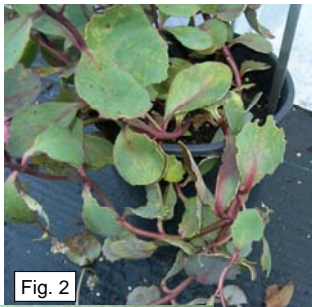
The Ornamental Program tests for effectiveness of new pesticides and plant safety.

Fig. 1) Adult black vine weevils caged on sedum plants treated with new insecticide.

Fig. 2) Black vine weevil feeding damage on sedum leaves.

Fig. 3) Adult black vine weevil.

Fig. 4) Black vine weevil larvae feeding on roots of sedum.



Leaf distortion caused by new insecticide/miticide applied to phlox plants. Fig. 5 is untreated and healthy, Fig.6 is damaged from insecticide treatment.



The Food-Use Program tests for pesticide residues for human safety.

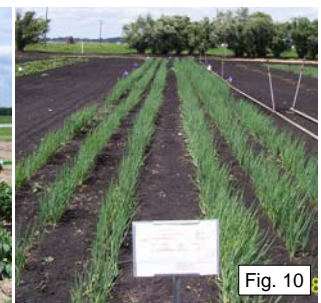


Fig. 7 CO<sub>2</sub> application of Goal on cabbage for annual weeds.

Fig. 8 Foliar application of Warrior on radish for cabbage maggot control.

Fig. 9 Foliar application: Courier on pepper for whitefly control.

Fig.10 Green onions on muck soil.



IR-4 can help you deal with a shortage of pest control products. Contact USDA IR-4 personnel and tell them your needs.

Ornamentals: Betsy Anderson  
Phone: 330-263-3898  
Email: [anderson.523@osu.edu](mailto:anderson.523@osu.edu)

Food-Use: Michele Giovannini  
Phone: 330-263-3844  
Email: [giovannini.1@osu.edu](mailto:giovannini.1@osu.edu)