Encouraging Spiders for Pest Control: Comparing Mulches

Final Report for FNE95-108

Project Type: Farmer

Funds awarded in 1995: \$938.00 Projected End Date: 12/31/1996

Region: Northeast State: New York Project Leader:

Sue Smith-Heavenrich

Project Information

Summary:

Note to readers, attached is the complete final report for FNE95-108.

One of the things we discovered is that we still had to control pests using hand-picking, although once we knocked the pest population down we did not have so much to do. Spiders and other natural enemies may be keeping the pests in check, but they do not eliminate them and you have to constantly monitor pest populations (methods that will not harm spiders, beetles and other beneficials) I think he will have a lower pest population. Hey mulches applied to crops like squash, tomatoes and the like do not interfere with crop management and harvest. If there is an economical way to apply hay (it takes an hour to mulch 70 row-feet to 6" depth if using fork and wheelbarrow), I think the increased population spider and other arthropods will benefit the farmers. However, I have no way of proving this economically. Working farmers don't have time to do this sort of thing- it takes a lot of field times and is more appropriate work for students.

I think there is merit in looking at cover crops grown for mulching and whether these provide attractive habitats for beneficials like spiders and ground beetles. Clearly one needs to consider the water requirements of non-cash crops and requirements for irrigation may make this option less attractive. If I were to continue this project, I would choose one or two crops where mulching would not change crop management...like tomatoes or squash. If water is a limiting resource, how would growing vetch cover crop in early August effect neighboring vegetables?

• FNE95-108 Final Report

• Article: Spiders and Mulch

Cooperators

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Research

Participation Summary

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture or SARE.



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