

Project Summary/Abstract

Project Title: Development of advanced integrated pest management for Northeastern apples.
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(i) Project Type: Joint Research-Extension

Requested funds:

Research (PL89-106): \$133,093

Extension (Smith-Lever): \$31,532

(ii) Summary Statement:

A partnership among land-grant and USDA researchers, Extension and growers, has brought a unique skill set into development of an advanced integrated pest management (IPM) protocol for apples. The collaborators, including several growers, have worked on development of individual components of this system over recent years. The unique aspect of this project is it brings the most promising of these tactics together in a single management system. While the vast majority of apple growers in the Northeast use IPM tactics, progress in reducing toxic chemical inputs has stalled in recent years. The proposed system will introduce advanced IPM tactics that eliminate use of organophosphate pesticides, minimize the use of pesticides in general, and moves towards practical biointensive alternatives. The most important apple pests, including plum curculio, apple maggot, leafrollers and internal Lepidoptera, apple scab and the sooty blotch/flyspeck disease complex, will be addressed. The project also stretches beyond pest management per se to test alternative fruit thinning methods that will eliminate use of a carbamate pesticide. Because researchers in the project also have Extension appointments or significant experience with Extension, and have developed on-farm research and demonstration collaborations with growers, successful tactics will rapidly move into commercial use. Web-based communication will facilitate research and will provide collaborating growers and eventually the industry in general with access to ways to implement advanced IPM. Traditional Extension methods, including widely read newsletters and journals, well-attended meetings, and on-farm demonstrations will insure broad industry awareness of the program.