Maine IPM State Report

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The UMaine Cooperative Extension IPM Program delivers pest management education, monitoring, forecasting, diagnostics, and individualized problem solving. In addition to commodity-specific outreach programs, the Insect and Plant Disease Diagnostic Lab and the newly instituted Tick ID Lab, provide local, statewide, and regional support. The efforts of the lab and program staff help a variety of commercial and non-commercial stakeholders with effective, efficient, environmentally sensitive, and safe pest management.

The Extension IPM Program collaborates with the Maine Department of Agriculture, Conservation, & Forestry (ME DACF), grower organizations, other university departments, and other New England universities in order to best serve the people of Maine and the region.

The different programs have reached a number of underserved audiences, including Somali farmers in central Maine, Maine's Native American tribes, and Maine's growing Amish population.

TREE FRUIT

Apples are the dominant tree fruit in Maine, with peaches a distant second. The main program components are the Maine Tree Fruit Newsletter (which covers horticulture, marketing and other topics in addition to IPM), the Ag-Radar apple pest/horticultural tracking/forecast system, a pest scouting cooperative subsidized by the Maine State Pomological Society, an annual full-day preseason IPM meeting, presentations at other meetings, and individualized telephone and field visit support. Observations from the scouting coop are shared with over 400 commercial and hobbyist growers through the newsletter.

In the year-end program survey, 100% of the 20 apple growers who participated in the scouting co-op said that the visits were useful to their decision making. Ninety-two percent of surveyed growers said they had benefitted from an Apple IPM Program presentation or consultation, and 100% said that the newsletter had helped them with pest management decisions. On average, growers estimated that support from the Apple IPM Program helped them reduce pest damage losses by 37%, while also reducing production costs by an average of $205 per acre. The Apple IPM Program had an estimated $5.5 million impact on Maine's apple crop.

SWEET CORN

The Sweet Corn IPM Program reaches over half of Maine's commercial sweet corn growers through farm scouting and the weekly growing season newsletter. The program impacts over two thirds of the state's acreage, and has had an estimated $725,000 annual impact. The post-season survey indicated that 93% of growers receiving information from the Sweet Corn IPM Program were able to decrease production costs as a result. Nearly 40% of participants were able to reduce their insecticide applications. Many of the farmers found that participating in the program improved crop profitability, some by more than 100%. All of the responding farmers found that following program recommendations helped improve crop quality and said that they want to continue receiving this type of information in the future.

CRANBERRIES

The Cranberry IPM Program includes monitoring for insect pests and providing online educational resources for growers. As a result of the program's outreach, Maine cranberry growers have seen an industry wide increase in annual yield of approximately 20-30% (roughly $250,000-$400,000 in berry value or $1,000-$1,500 additional yield per acre).

In the year-end grower survey, nearly 70% of growers surveyed wanted even more information regarding cranberry pest management and would greatly appreciate additional Extension pest monitoring. Expected outcomes of the proposed activities include pesticide minimization, increased crop yield, and increased implementation of IPM.

POTATOES

The Potato IPM Program maintains 200 specialized insect traps, coordinates a statewide network of electronic weather stations, and surveys 100 potato fields on a weekly basis. The estimated economic impact of the Potato IPM Program's insect monitoring in 2016 was $11,494,500. The program distributes information through a potato pest hotline, weekly growing season newsletter, the annual Maine Potato Conference, and the annual Maine Potato Pest Management Conference,

SMALL FRUIT

Eight farmer volunteer sites are monitored by Extension IPM scouts each growing season and the pest management recommendations are delivered to over 65 growers statewide through weekly newsletter, e-mail, and blog updates. Outreach is also conducted through Small Fruit and Vegetable Field Day, Twilight meetings (8), and Vegetable and Small Fruit Schools (4). A recent focus has been field trapping and weekly reports on spotted wing drosophila. Additionally, we have worked with growers to adopt alternative strategies such as pest resistant cultivars, biological controls, and insect barriers. The year-end evaluation of growers indicate that an overwhelming majority of participants have reduced pesticide applications (84%) and costs (100%) as a result of the program. Additionally, growers now time sprays in response to pest monitoring results, and most have adopted at least one non-chemical alternative pest management strategy.

HOME & GARDEN/PUBLIC HEALTH

Through the continued outreach efforts of the Home & Garden IPM Program and the Tick Identification Program, we have significantly increased the number of direct contacts with the general public regarding pest management options and the safe, judicious use of pesticides. An annual Tri-State Greenhouse IPM Conference serves the commercial ornamental plant industry.

The initiation of the Tick ID Program has allowed us to delve deeper into some of the vector-borne public health issues plaguing our state and region. In conjunction with the ID program, a tick website has been developed to increase public knowledge of tick biology, ecology, management, and personal protection. Outreach on ticks, mosquitos and bed bugs through multiple public speaking engagements and media interviews has also helped increase public awareness. Aditional outreach has continued on a number of home and garden pests including Japanese beetles, white grubs, and brown-tail moth.