

Something Old, Something New

Encouraging greenhouse growers to use IPM



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A brief overview of the NYS greenhouse industry

- Range in size but many small (2013)
 - 401 - under \$100,000 gross sales
 - 161 - \$100-500,000
 - 58 - over \$500,000
- 22 million sq ft of covered structures
 - Mostly plastic film covered
- Most production is bedding plants
 - Increase in protected culture of vegetables to harvest



Where were we in terms of IPM?

- Surveys in 2000 and 2007
 - Over 90% do preseason sanitation
 - Over 95% scout for disease and insect pests
 - About 80% identify unknown pests before control
 - About 15% use biological control (predators/parasites)
 - About 40% discard diseased plants in an open container
 - About 30% record scouting results



Biocontrol as an example of increasing adoption of IPM

- Brilliant ideas, helpful accidents and lots of help
- Interest from growers but lots of confusion
- Outside funding
 - NY Farm Viability Institute
- Support from University faculty

2007 Tour of Canadian Greenhouses

- Graeme Murphy helped organize
- 15 attended
 - Growers, IPM scouts, educators,
 - Wide range in experience with biocontrol
 - Only 1 grower had an integrated active biocontrol program









Did it work?

- Surveyed growers in 2008
 - Of 7 farms, 4 were using or had tried biocontrol
- What had the greatest effect?
 - The helpful accident



Mischler's Greenhouse
Buffalo

Mark Yadon

Grower to grower exchange essential

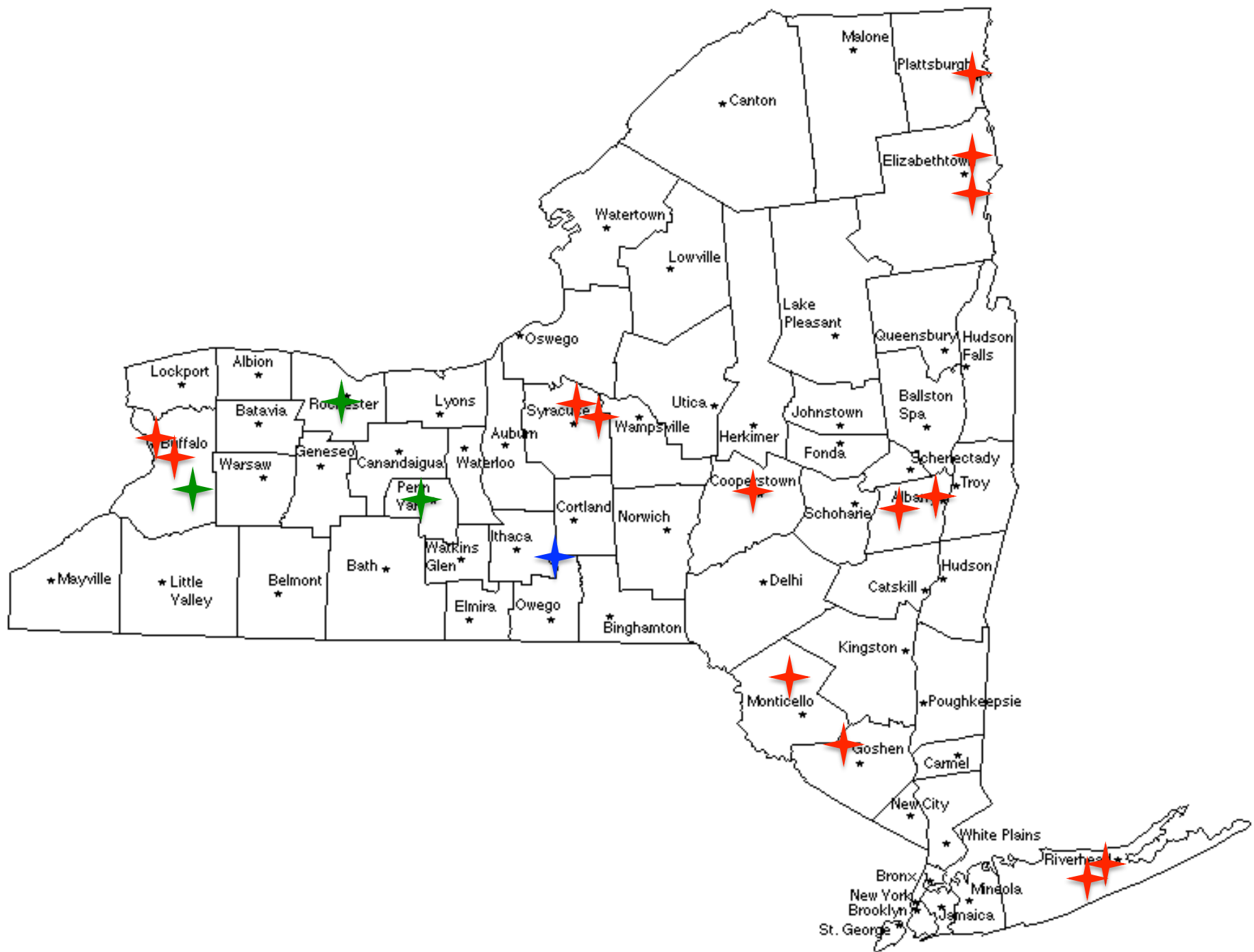
- Growers that participated in the tour were asked to be a part of a series of programs held throughout the state
 - Persuasion
 - Various types of interactions



Taking it on the road – 2007-9

- 3 grower panels
 - 100 participants
- 1 regional grower meeting
 - 35 attended
- 6 On-farm meetings Fall 2008
- 8 On-farm meetings Fall 2009
 - Presentation/demonstration at a greenhouse with a tour
 - ~350 participants













Did it work?

- At events 2008-2009
 - ~39% using biocontrol or had tried it already
 - 68% intended to use it in the next season
 - This population is fairly self-selected for interest in biocontrol
 - Lots of other things were encouraging the use of biocontrol in the industry

Surveys at regional bedding plant schools 2010

- 4 locations
- 100 respondents
- Had attended biocontrol workshop
 - 26% use biocontrol
- Had not attended biocontrol workshop
 - 10% use biocontrol

Grower mentors

- They make the case better than we can
- Multiplier effect





Continuing the education

IPM In-depth

- Annual summer hands-on program in Ithaca 2008-2014
- Grant funded hands-on programs around state 2009-2013
 - Each has an entomology module that includes information on biocontrol
 - Attendees less self-selecting for interest in biocontrol
 - Practice change based on previous programs
 - 36% indicated biocontrol in an open ended question

The process continues . . .

- Scouting and biocontrol app for greenhouses
- Greenhouse Biocontrol workbook
- NYS is now ready for a tour of its own growers!
 - Bring the mentors along!



Thanks!

- Any questions?

