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
NO MANGUERAS EN EL TUBO

07/18/2006
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?