Economic Evaluation Team Report- 2013

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Objectives of the economic evaluation:

1) assess the impact of BMSB on specific commodities
2) estimate the cost of BMSB control strategies
3) project the cost and potential benefits of proposed management strategies

Economic information can be useful for:
- prioritizing research and extension efforts for individual commodities
- encouraging producer adoption of new control tactics
- informing policymakers of the economic impact of this pest

Case Study Approach to Evaluating the Economic Impact of BMSB

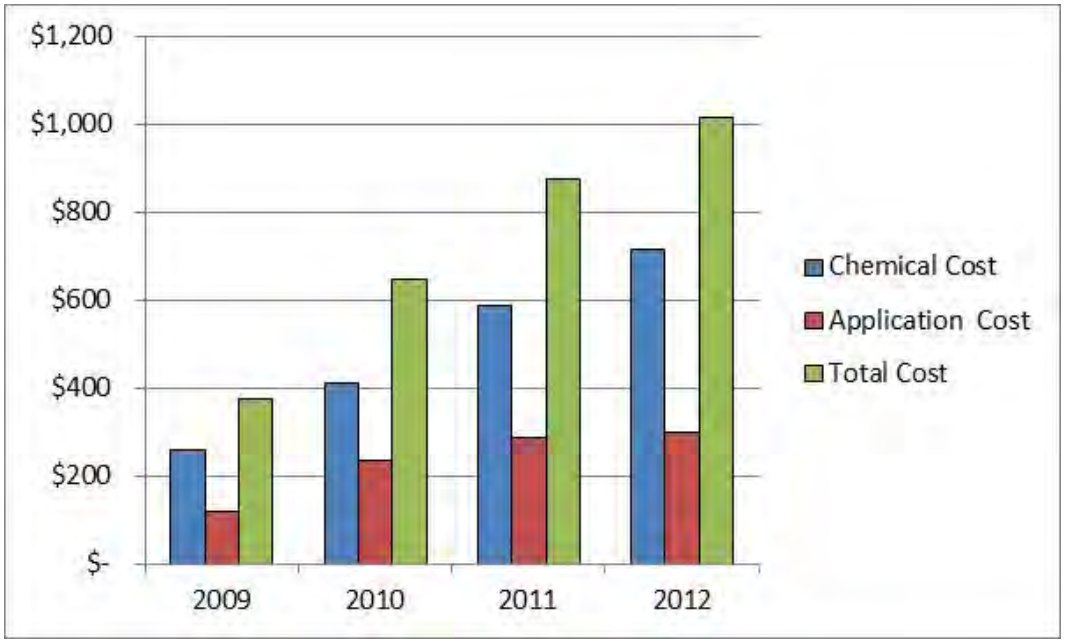
- For individual crops, have looked at how has BMSB has changed the use of insecticides (type of materials and number of applications)
- If/when packout data becomes available, the impact of changes in quality (and marketable yield) will also be incorporated into the analysis
- Will estimate the cost of BMSB management techniques as new tactics are developed

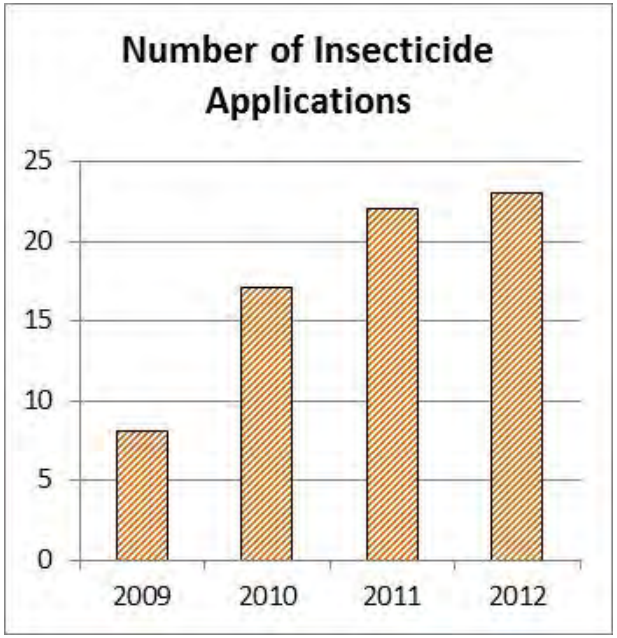
Data required for economic analysis

- Spray records (minimum) and yield/packout (if available)
- From this data we calculate the cost of current management practices
- When new management practices are proposed for BMSB management, we can help project their cost

Impact of BMSB on Insecticide Costs for an Apple Orchard in Lancaster Co., PA

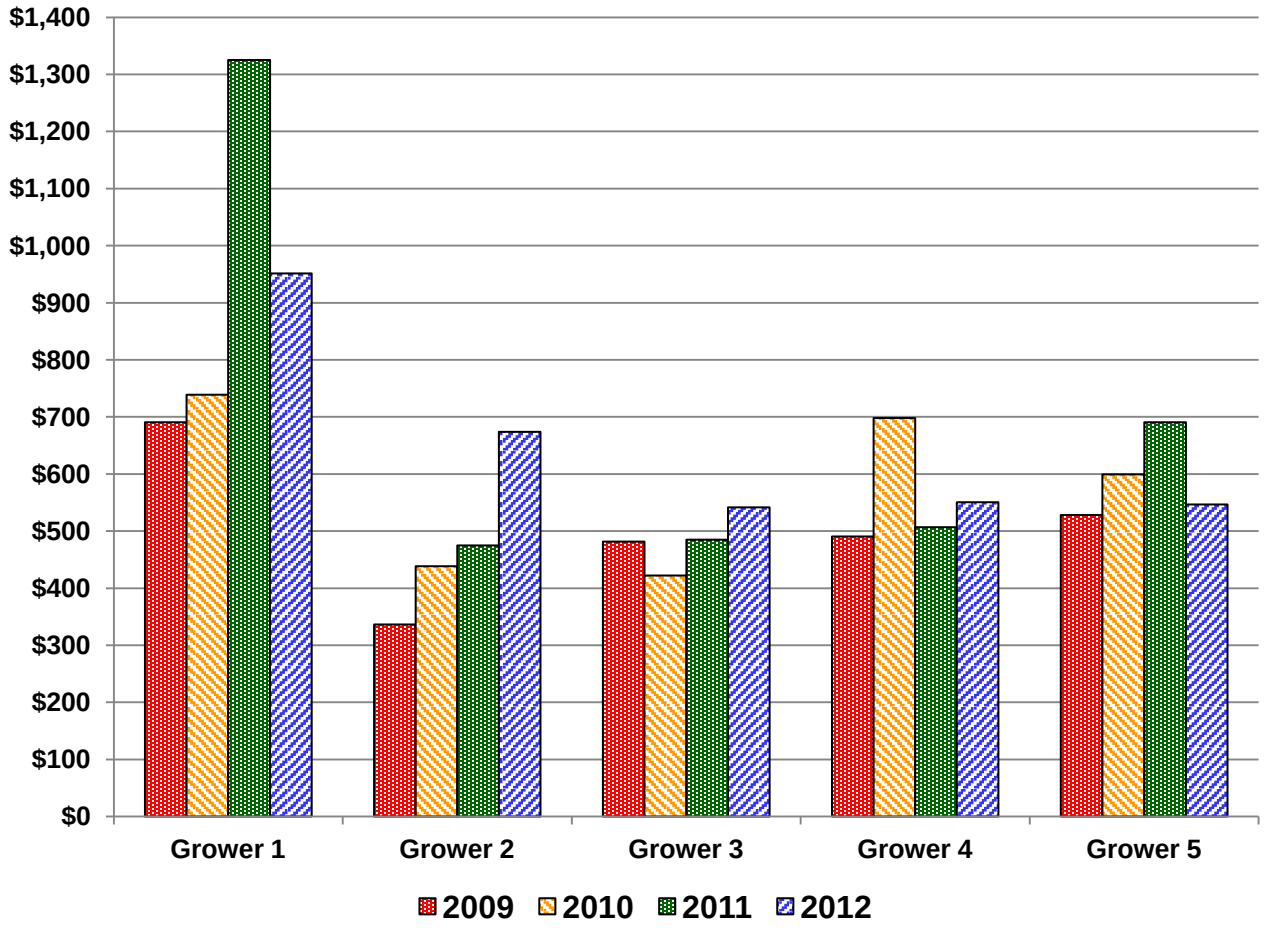
Cost of Insecticides and Application ($/A)





Spray records provided by Dr. Greg Krawczyk, Penn State Univ.

Apple data from WV and MD



Spray records provided by of Dr. Tracy Leskey, USDA-ARS

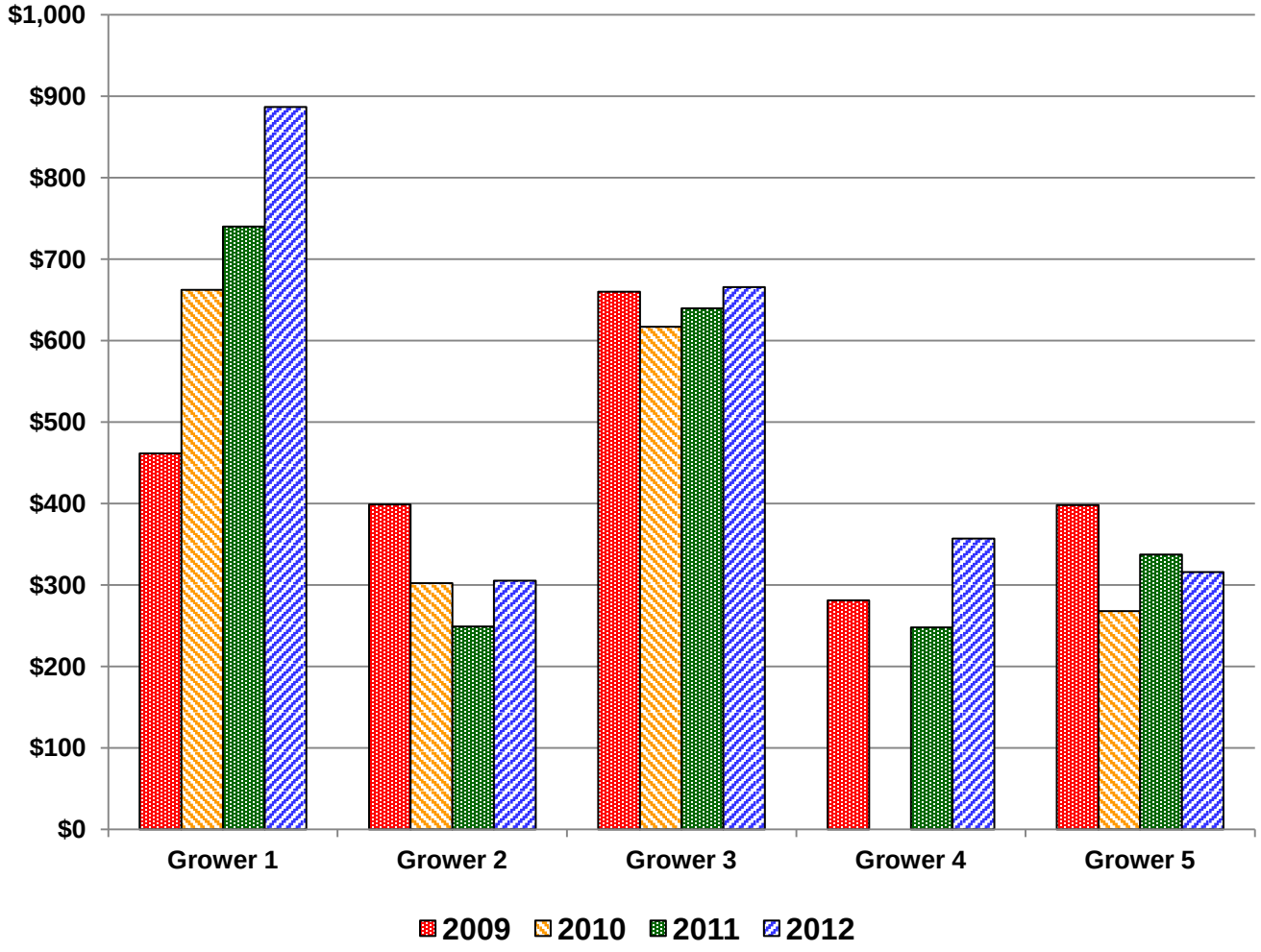
2009 – Pre-BMSB (BMSB had not yet become an issue for growers)

2010 – BMSB outbreak year, but no recommendations available (season-long problems for growers)

2011 – BMSB recommendations being developed and communicated (high populations in early season, but crash in the late season)

2012 – BMSB recommendations being developed and communicated (low populations in the early season, but high populations late)

Peach data from WV and MD



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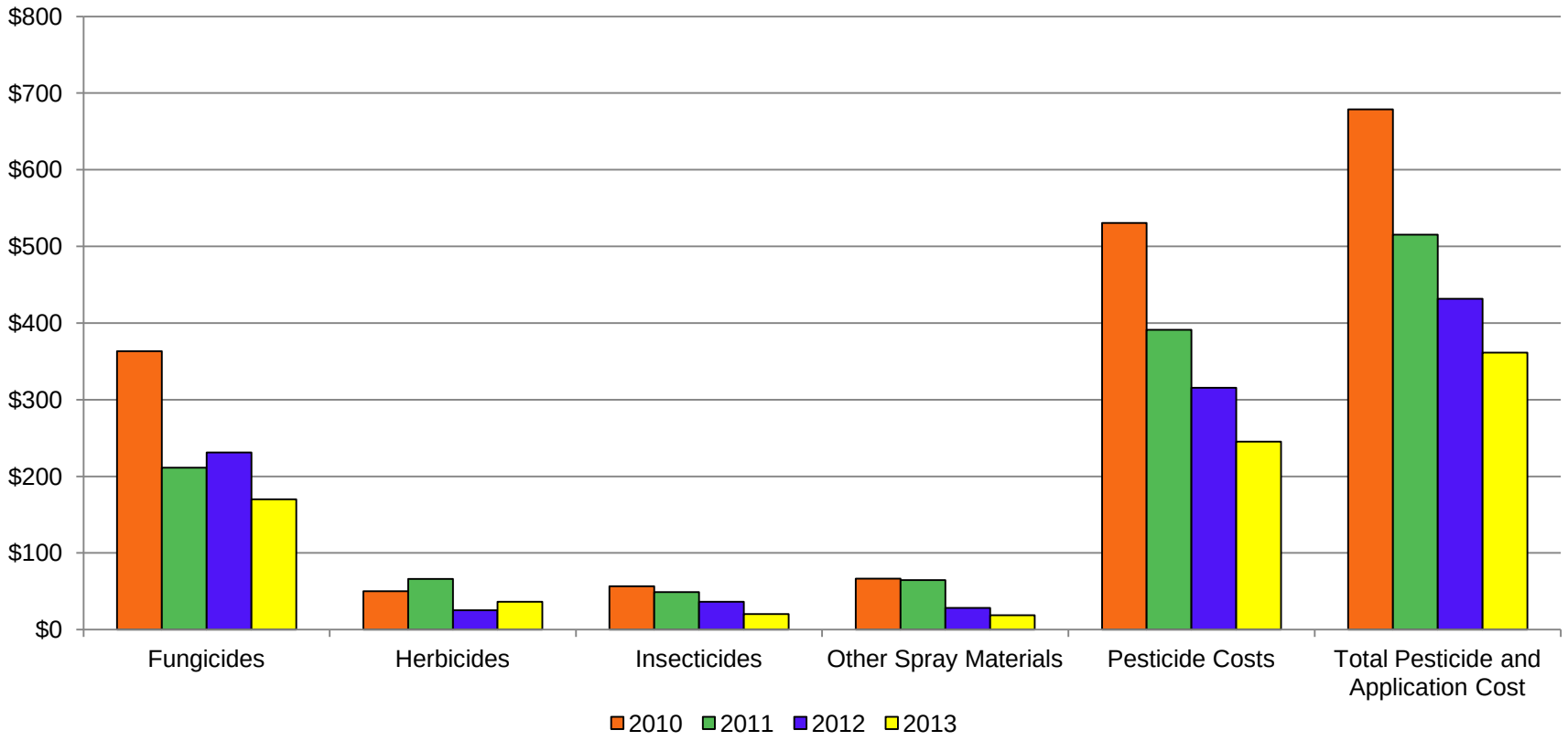
Processing Tomatoes in central Pennsylvania



<u>Data from</u>: 9 growers in 2010, 11 growers in 2011, 28 growers in 2012, and 11 growers in 2013

Spray records provided by of Furmano Foods, Northumberland, PA

Summary of Economic Evaluation

- Gauging the impact of BMSB on the cost of producing apples, peaches, and tomatoes. More data and crops will be evaluated in 2014.

- Economic team is available to help determine the costs and potential benefits of proposed management tactics.
  - Evaluate potential physical and financial constraints faced by producers in implementing the proposed tactics.
  - Fine tune management recommendations and provide feedback to producers on the status and commercial viability of proposed control tactics.
  - Make information on cost and benefits of proposed management strategies available through extension channels.