



Great Lakes Fruit, Vegetable & Farm Market EXPO

Michigan Greenhouse Growers EXPO

December 9 - 11, 2014

DeVos Place Convention Center, Grand Rapids, MI



Greenhouse: Consumer Perceptions on Pest Control

Tuesday morning 10:00 am

Where: River Overlook (upper level) Room C & D

Michigan State University researchers conducted a nationwide survey to understand consumer's perceptions about insecticide use, biological control strategies, and common greenhouse pest control practices. Results will be presented showing the consumer's willingness to pay a premium for indoor, outdoor, and hanging baskets labeled with a variety of word alternatives describing the pest management practices used during production

Moderator: Kristin Getter, Floriculture Outreach Specialist, MSU

10:00 am Consumer Perceptions on Pest Control

- Heidi Wollaeger, Extension Educator, MSU Extension, Nazareth, MI

10:50 am Session Ends

Consumer Preferences for Pest Control Techniques

Heidi Wollaeger, Dr. Bridget Behe, Dr. Kristin Getter
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Should we be labeling plants with pest control practices?

If plants get labelled with pest management practices:



Then it becomes an extrinsic characteristic that customers use to make a purchasing decision



Marketing Strategy

Questions Raised

- Are consumers as concerned about the use of neonicotinoids as some sources imply?
- What are the factors consumers use when making a purchasing decision?
- What are their opinions on pest control practices?
- Would there be a market for charging a premium for plants grown with certain pest management practices?



Objectives

- Gauge general consumer's understanding of pest control techniques
- Understand the most important factors contributing to purchasing behavior
- Identify a willingness to pay a premium for plants with four different pest control methods



Internet Survey

- Online survey
 - Developed on Qualtrics platform
 - Administered May 2014
 - Respondents paid in points from Global Market Insite databases
 - Types of questions:
 - Multiple choice
 - Rating (using a 1 to 7 scale)
 - Demographic information (optional)



Nationwide Study

- 3,082 participants
 - Homogenous sample
 - Every state represent with few exceptions
- 3 simultaneous survey groups
 - Outdoor 4" Plants
 - Indoor 4" Plants
 - 12" Hanging Baskets



Three Factors



Factor: Species

- **4 plant species** in each survey
 - **Indoor plants, 4" pots:**
 - African violet, hyacinth, mum, poinsettia
 - **Outdoor plants, 4" pots:**
 - Pansy, petunia, geranium, coreopsis
 - **12" hanging baskets:**
 - Petunia, New Guinea impatiens, geranium, mixed basket (calibrachoa and verbena)



Factor: Price

- **Price points:**
 - **Indoor plants, 4" pots:**
 - \$2.99, \$3.49, \$3.99, \$4.49
 - **Outdoor plants, 4" pots:**
 - \$1.99, \$2.49, \$2.99, \$3.49
 - **12" hanging baskets:**
 - \$13.39, \$13.99, \$14.49, \$14.99



Factor: Pest Control Practices

- **Pest control practices**
 - Grown using bee-friendly insect management
 - Grown using traditional insect management
 - Grown using no neonicotinoid insecticides
 - Grown using beneficial insects to control pests



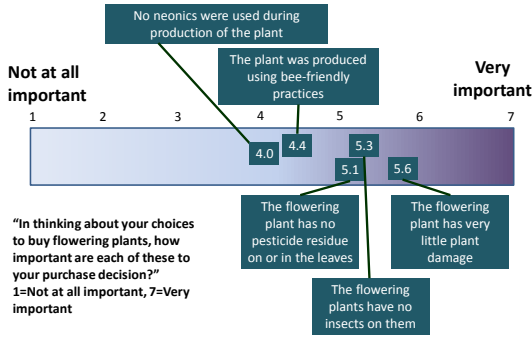
Understanding of "Neonicotinoid-free"

	Percentage of Consumers
Do Not Know	56.6
Plants not Treated with any Insecticide	10.5
Nicotine-based Chemical not Used on Plants	5.8
Not Harmful to Bees	5.6
Not Using Harmful or Toxic Insecticides	3.1
Only use Less Harmful Insecticides	1.4
Safe	1.3

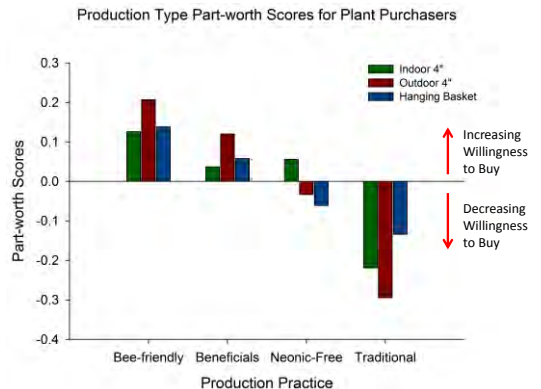
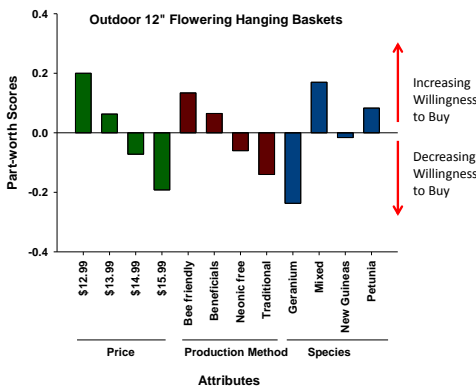
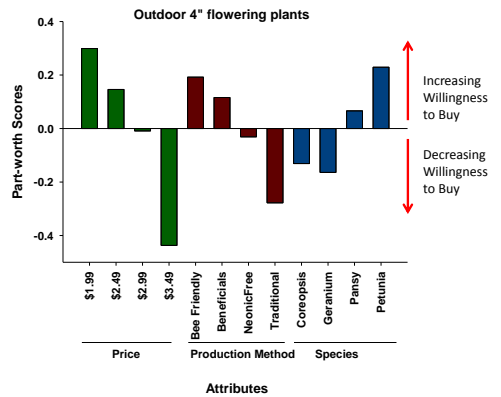
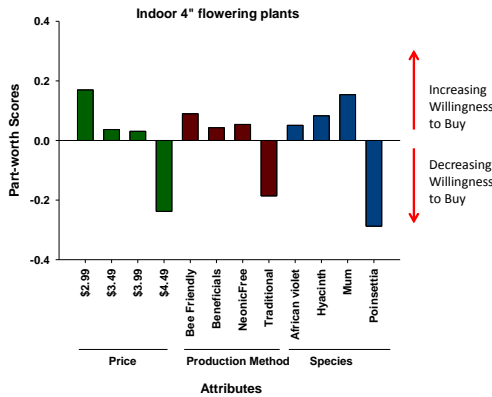
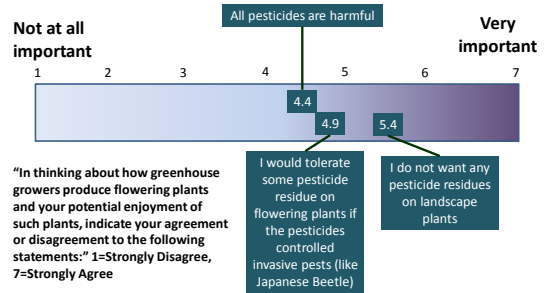
Understanding of "Bee-Friendly"

	Percentage of Consumers
Plants Not Harmful to the Bees	34.9
Plants Attracts Bees	18.8
Bees Able to Pollinate	17.5
Not Grown with Harmful Pesticides	11.2
Do Not Know	10.4
Plants Will Not Kill the Bees	8.4
Not Treated with any Chemicals or Pesticides	5.6
Protects Bee Population	3.8

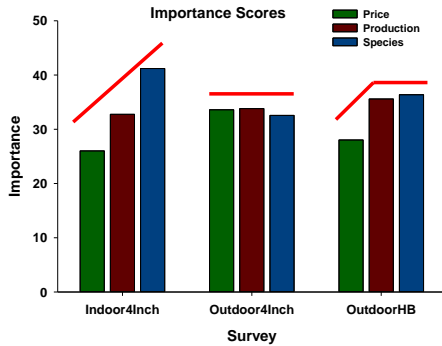
Factors Important to Buying Plants



Factors Important to Buying Plants



Relative Importance of Price, Production Type, and Species



So What do They Really Want?

- Characteristics contributing to a purchase decision:
 - #1 Very little plant damage
 - #2 No insects on them
 - #3 No pesticide residue

Summary

Understanding:

- General understanding of Bee-friendly
 - Primary characteristic: 'Bees are not harmed'
 - Also considered: 'Better for the environment'
- General public does not know what Neonic-Free means
- Generally, production method and species are more important than the price when considering a purchase

Price Premiums: Indoor 4" Plants

- May get price premiums for non-traditional production methods
- For **indoor 4" plants**, the perceived value premiums are:
 - Bee-friendly worth 13¢ more than Neonic-Free
 - Bee-friendly worth 17¢ more than grown with beneficial insects
 - Bee-friendly worth \$1.01 more than traditionally grown plants



Price Premiums: Outdoor 4" Plants

- For **outdoor 4" plants**, the perceived value premiums are:
 - Bee-friendly worth 45¢ more than Neonic-Free
 - Bee-friendly worth 15¢ more than grown with beneficial insects
 - Bee-friendly worth 96¢ more than traditionally grown plants



Price Premiums: 12" Hanging Baskets

- For **12" hanging baskets**, the perceived value premiums are:
 - Bee-friendly worth \$1.48 more than Neonic-Free
 - Bee-friendly worth 53¢ more than grown with beneficial insects
 - Bee-friendly worth \$2.10 more than traditionally grown plants

