

A K-S



Cherry Marketing Institute

# **FQPA & Azinphos Methyl:** **"The Hard Road"**

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## **Alternatives vs AZM**

1. Calendar vs. IPM
2. Residue vs. No (cherry) or little Residue (apple)
3. Solid Efficacy vs. Increased Crop Failure
4. Reduced vs. increased Enviro. & Eco Impacts



## Increased Damage in Apples and Worms in Cherries

**FDA Law – Zero Tolerance**  
**USDA Inspection Standards**  
**State of Michigan Law (1928)**

- Impact on Growers
- Impact on Processors
- Impact on Industry

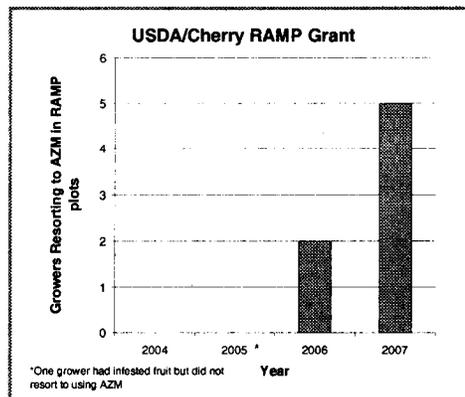


## AZM Alternative's in Cherry

- **New Research**
  - Finishing 1<sup>st</sup> USDA RAMP GRANT (Other Grants: CAR, PMAP, PESP)
  - INDUSTRY'S INVESTMENT
  - MSU'S INVESTMENT
- **AZM**
  - GFW, LR, PC, CFF
- **New Tool's**
  - **Imidacloprid (2004)**
    - GFW, LR, PC, CFF (7d)
  - **Thiamethoxam (2006)**
    - GFW, LR, PC, CFF (14d)
  - **Acetamiprid (2008)**
    - GFW, LR, PC, CFF (7d)
  - **Spinosyn**
    - GFW, LR, PC, CFF (7d)
  - **Indoxacarb (2007\*)**
    - GFW, LR, PC, CFF (14d)

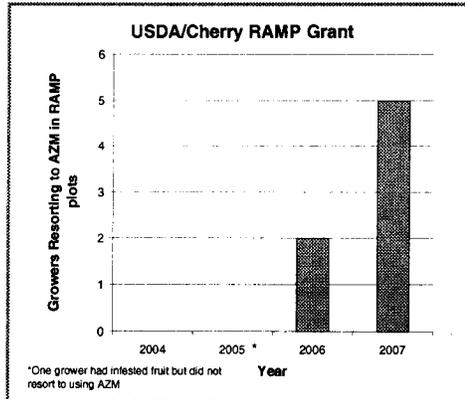
### MRL's

- **Economically Sustainable?**



# AZM Alternative's in Apple

- **Recent Research**
    - Finished 2<sup>nd</sup> USDA RAMP GRANT (for the 2004, 05, 06, 07, 08 years)
    - INDUSTRY'S INVESTMENT
    - MSUS INVESTMENT
  - **AZM**
    - CM, LR, PC, CFF
  - **New Tool's**
    - Imidacloprid (2000)
      - CM, LR, OFM, PC, AM (7d)
    - Thiamethoxam (2004)
      - CM, LR, OFM, PC, AM (14d)
    - Acetamiprid (2005)
      - CM, LR, OFM, PC, AM (7d)
    - Spinosyn (2004)
      - CM, LR, OFM, PC, AM (7d)
    - Indoxacarb (2005\*)
      - CM, LR, OFM, PC, AM (14d)
  - Virus
  - Pheromones
- MRL's**
- **Economically Sustainable?**



# Sweet and Tart Cherries

## AZM Rate Reduction



	<u>2007-2009</u>	<u>2010-2012</u>
Season Max	1.5 lbs	.75 lbs
	ai/acre/year	ai/acre/year

- Aerial Applications Prohibited
- 60 ft Buffer Zone – Dwellings
- 60 ft Buffer – Water
- Pick Your Own – Prohibited



## The "Real" World Production Agriculture

- Robust / Complex
- Dynamic
- Plum Curculio = A small bug but a BIG Problem
- Secondary Pest Outbreaks
- Growers Need Tools to "Fit" IPM Programs
  - USEPA is the KEY!

