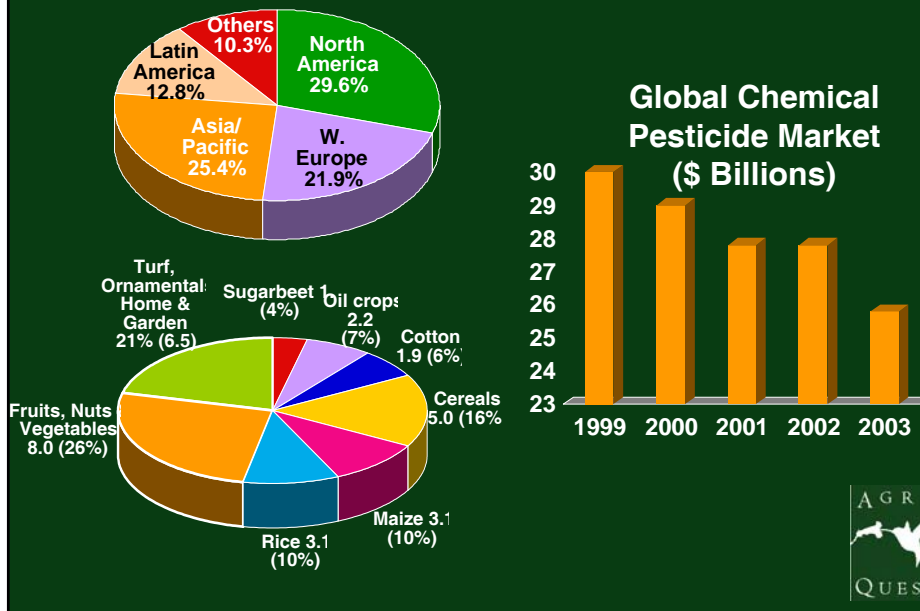


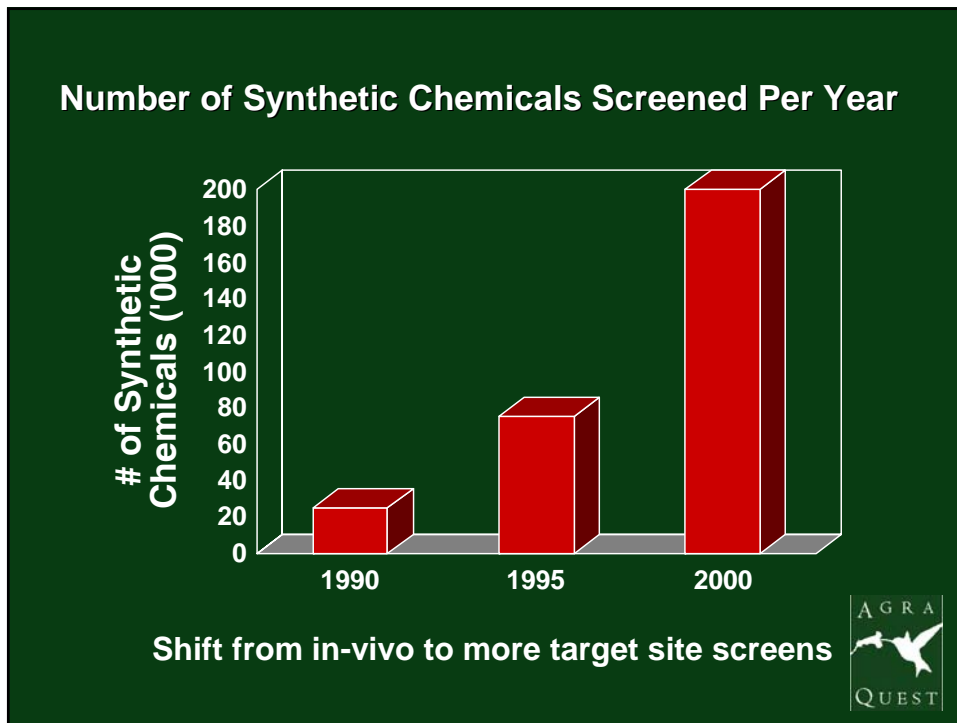
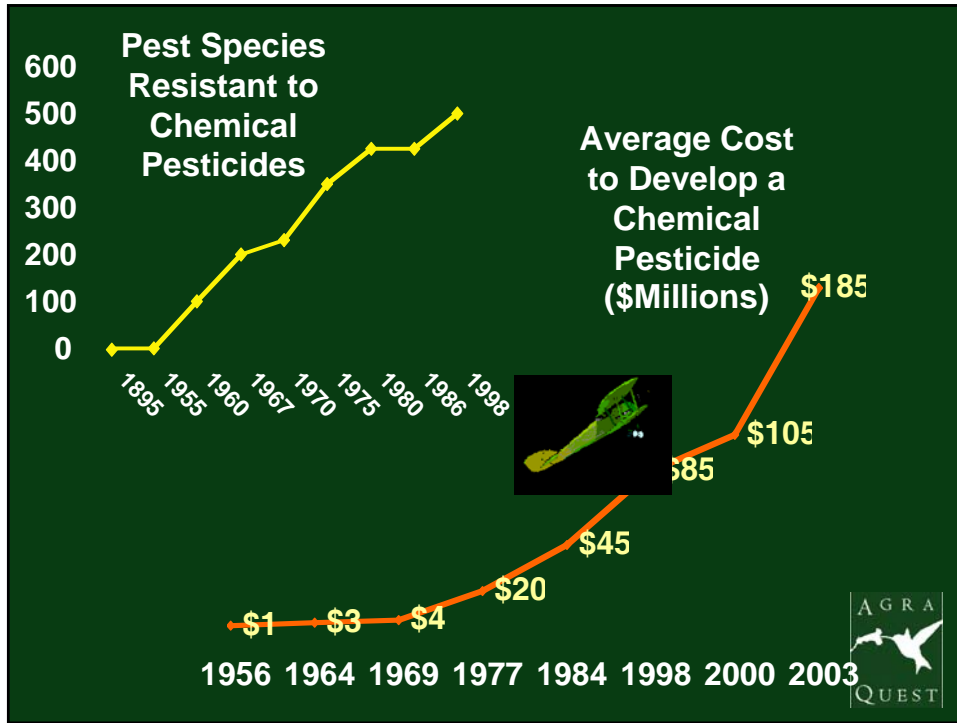
Biopesticide Contribution to Agricultural Production, Quality and Safety

Denise C. Manker
V.P. of R & D
AgraQuest, Inc.

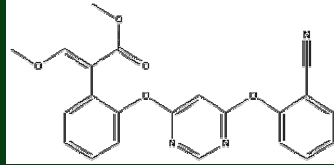


2003 Global Pesticide Market by Crop and Region

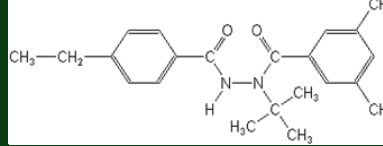




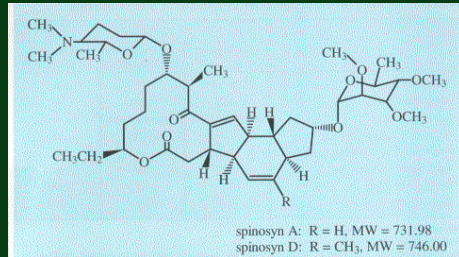
Shift to "Reduced Risk" Chemicals



Azoxystrobin fungicide from Zeneca (now Syngenta)



Tebufenozide insecticide from Rohm and Haas



spinosyn A: R = H, MW = 731.98
spinosyn D: R = CH₃, MW = 746.00

Spinosyn insecticide from Dow

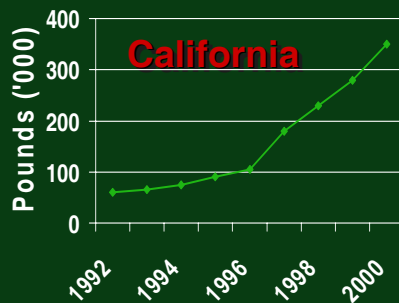
But only 4 of 11 new active ingredients scheduled for 2004 EPA approval are "reduced risk"



Growth of Biopesticides and Organic Food

+20% Compounded Annual Growth

Biopesticides

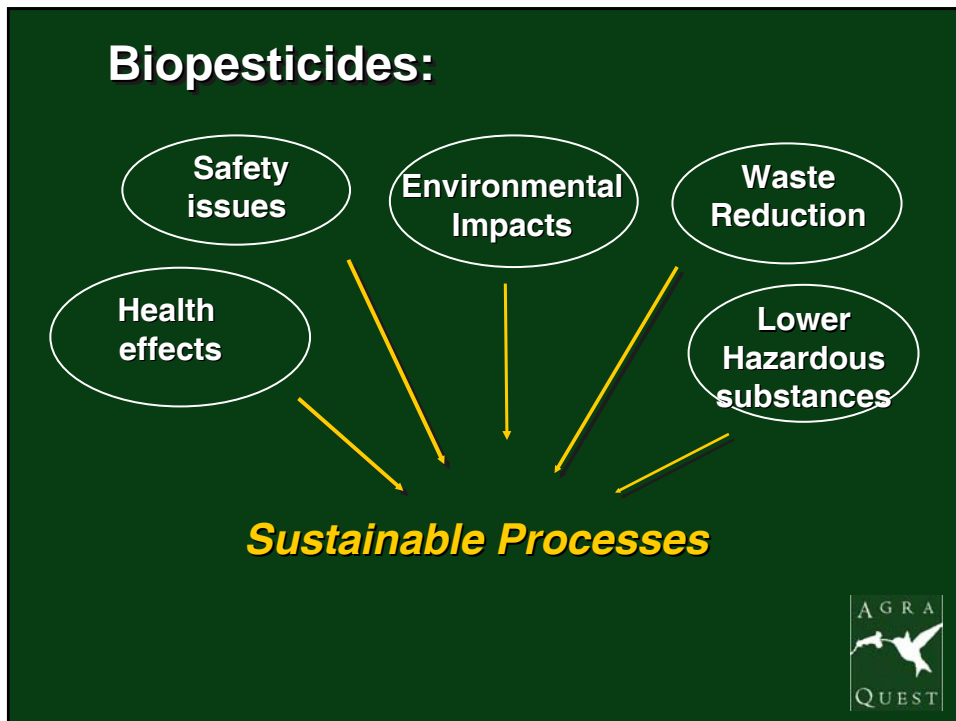
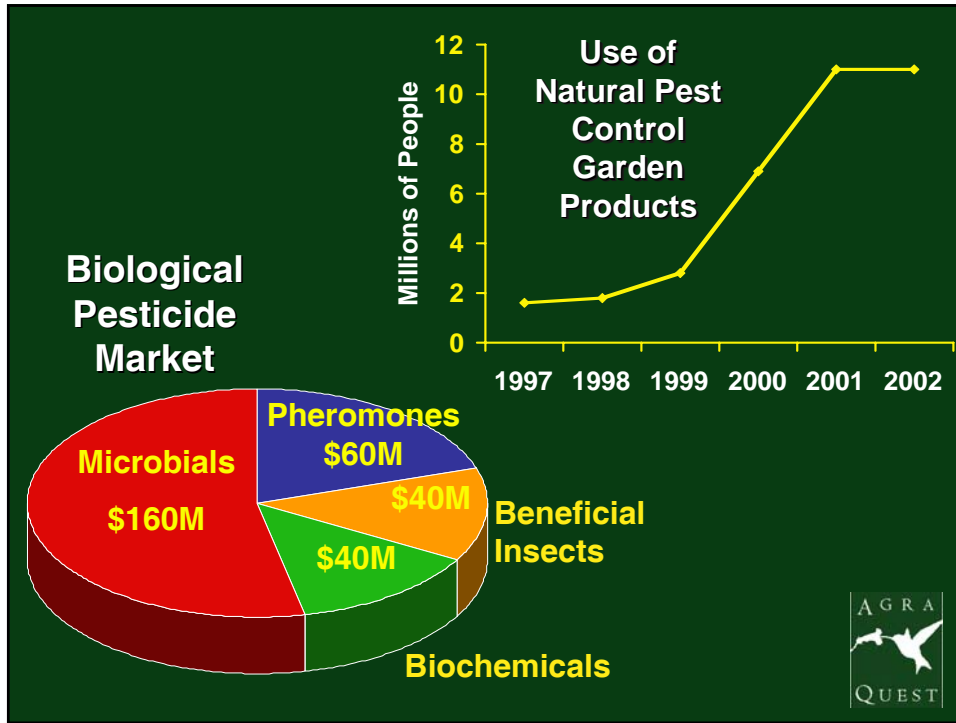


Organic Food Sales



Consumers and the globalization of food are driving the trend





Opportunities for Biopesticides

- Contribution to less synthetic chemistry
- Resistance management
- Improved worker safety
- Low environmental impact
- Exportation advantages, ISO, CODEX
- Replacement of FQPA or deregulated products



Registration and Costs

- EPA's Biopesticides and Pollution Prevention Division [Microbials, Biochemicals]
- Quicker and less expensive registration requirements than chemical pesticides
- Approval time is 1.5-2.5 years vs. 3-5 years
- Total development time 3 yrs. vs. 7-10 yrs.
- \$6-\$10 million vs. \$150-\$200 million



AgraQuest's Mission:

AgraQuest discovers, develops, manufactures and markets **effective**, safe, and environmentally friendly natural products for farm, home and public health pest management



Overview of AGRAQUEST

- Founded in 1995
- 5th fastest growing co. in Sacramento region (2003)
- 52 full-time employees
- 4 products on the market; 1 approved for sale on 4000 acres; 2 pending at the EPA; 20 more candidates identified
- 26 U.S. patents and 2 U.S. patent applications; 11 foreign patents and 60+ foreign patent applications
- \$49 million of invested capital
- Headquartered in Davis, CA
- Manufacturing in Tlaxcala, Mexico



