

# Do Biopesticides have a fit in IPM?

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- Goal is to reduce or eliminate pesticides
- But is it really, or is it to reduce the negative issues typically associated with pesticides?
- Certain high quality Biopesticides can and do have a place in IPM programs

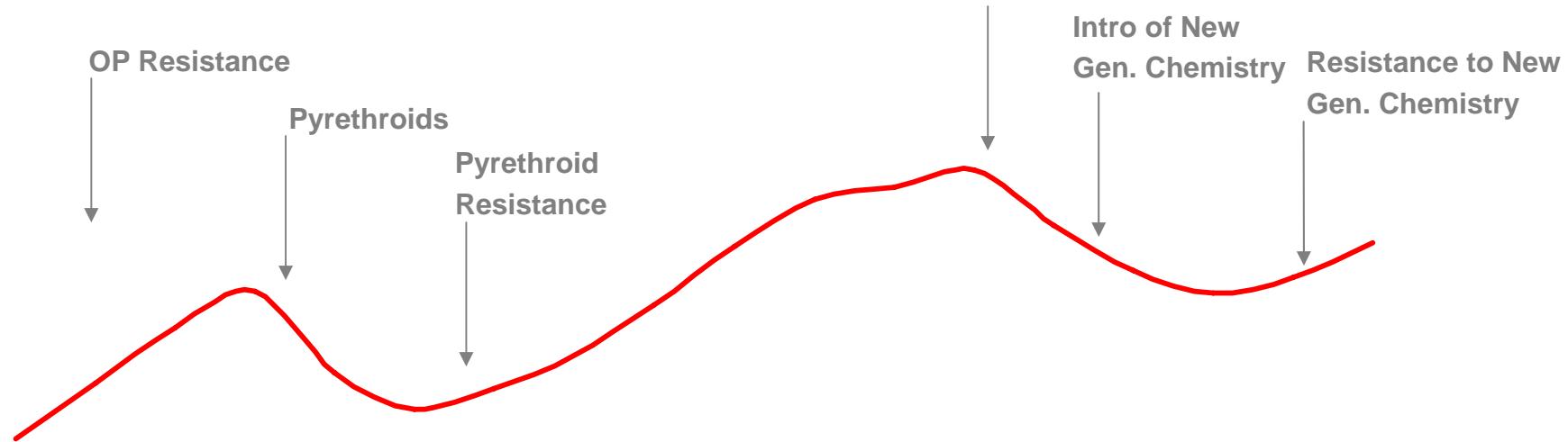
# Use of Bt products in Agriculture

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Bt Crops CORPORATION

OP Resistance  
Pyrethroids  
Pyrethroid Resistance



# Why is Bt use growing around the world?

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- Resistance Management
- Residue Management
- IPM
- Organic
- Economic

# How Bt products are used today

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- Typically used in a program with other biopesticides, old, or new chemistries
- Used either in a tank-mix or rotation
- Often sold and marketed by the multinational ag chem companies
- Used as “*life extenders*” for other new technologies

# Commercial Use of Bt Products

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- VBC currently sells DiPel, XenTari, and other brands of Bt products in 92 countries
- Registrations on over 55 worm species and over 200 crops
- Even though this technology is over 30 years old sales continue to grow

# Biopesticide solutions for Nematodes

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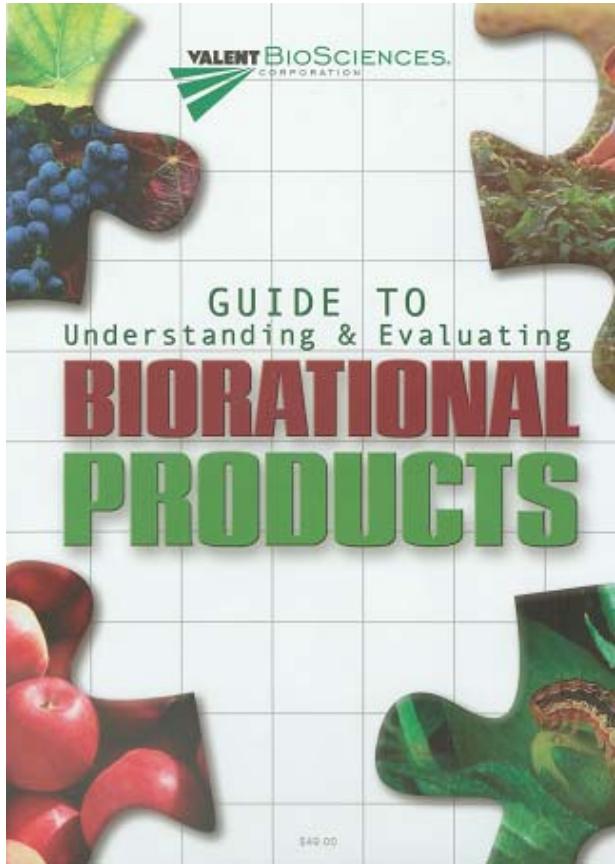
- Limited number of products available today
- DiTera is the leading bionematicide on the market
- Used as the grower standard in wine and table grapes in the US, MX, and Chile
- Use expanding into vegetables and other crops where there is a fit with grower practices such as drip irrigation

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GUIDE TO  
Understanding & Evaluating  
**BIORATIONAL  
PRODUCTS**

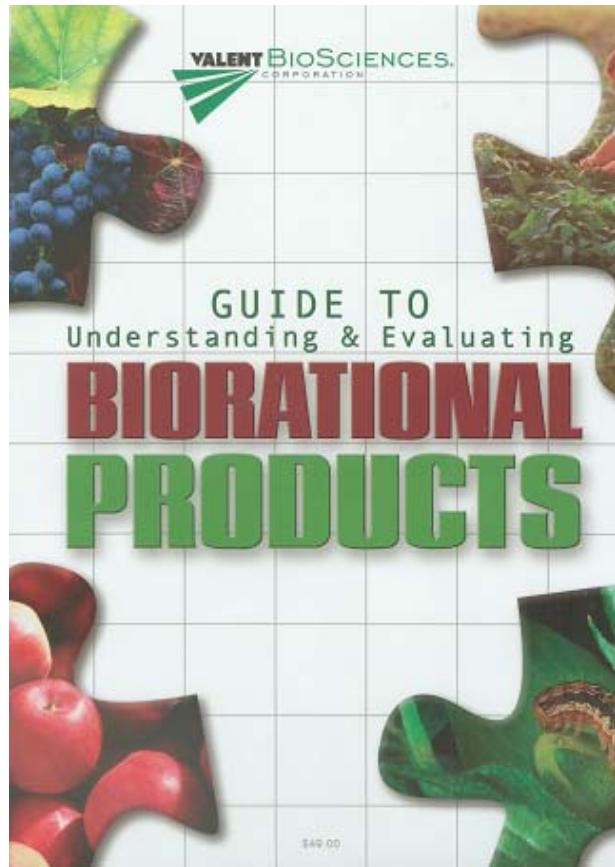
\$49.00

# *What does 'Biorational' mean?*



- 1 An active ingredient or formulation that is effective in controlling pests and is typically, but not necessarily derived from biological or natural origins.
- 2 Characterized as providing added value to the end user, being highly targeted and efficacious while having low impact on both the environment and non-target living organisms.

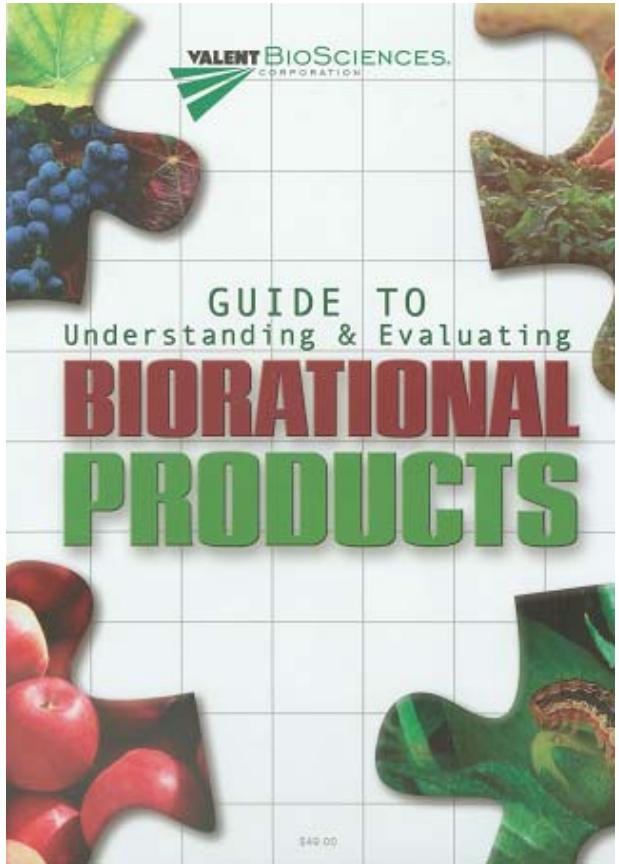
*What can you expect to gain from this guide?*



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- A better understanding about how to use biorational products.
- General knowledge on the overall value proposition and correct use of biorational products.
- The ability to differentiate between products that work and products that don't.

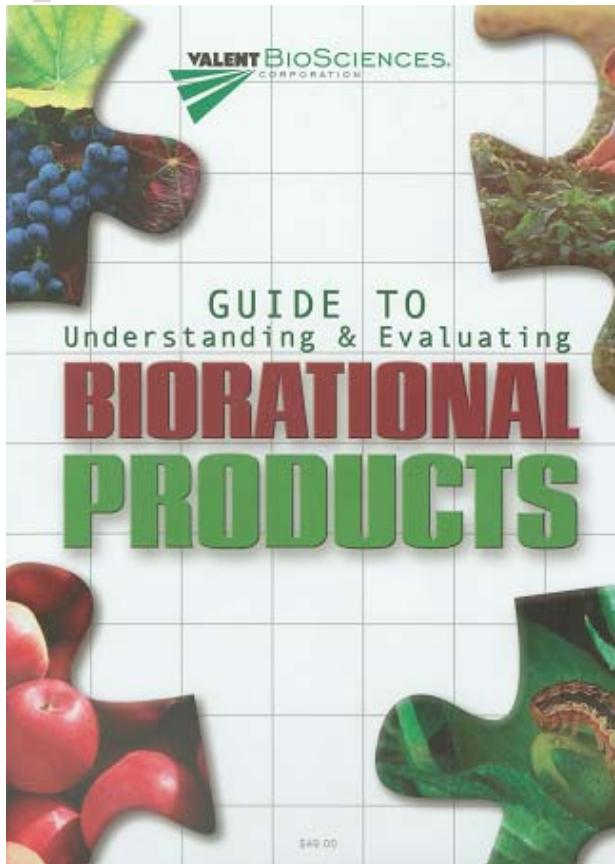
# *The Seven Misconceptions of Biorational Products*



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- Biorationals don't work
- Biorational products are expensive
- Biorationals are complicated and difficult to use
- Biorationals are intended to replace traditional chemicals
- Biorationals are only for use in organic growing systems, and are not used in mainstream agriculture
- All biorational products are created equal
- Biorational products are not reliable

# *How to obtain additional copies*



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- If you know of someone that may benefit from receiving a copy of this guide, please send an email request to [vbcwebmaster@valent.com](mailto:vbcwebmaster@valent.com) and we will mail them a copy.
- Or send in the postage paid card