IR-4 Biopesticide Research Program and Updates for 2002

Lysophophatidylethanolamine isn’t a word that rolls off your tongue but it may be rolling onto the fruit at your local supermarket. Also known as LPE, it is a natural bioregulator derived from eggs that is effective in extending the shelf life of fruits, vegetables and flowers. It is a product developed by scientists at the University of Wisconsin and now distributed by Nutra-Park of Middleton, WI. IR-4 assisted with the regulatory package submitted to the Biopesticides and Pollution Prevention Division of EPA.

While the IR-4 Project works primarily on minor crops, we also work on minor uses of major crops. One minor use problem on a major crop is aflatoxin in cottonseed. AF36, a non-aflatoxin producing strain of Aspergillus flavus which occurs naturally in Arizona soils, was discovered and developed by Dr. Peter Cotty of USDA-ARS in New Orleans. AF36 is used as a treatment on cotton plants to dramatically reduce aflatoxin levels in cottonseed. The cottonseed can then be sold commercially for livestock feed and can enter the lucrative market for dairy feed.

AF36 is currently under an Experimental Use Permit in Arizona and this permit is being expanded to Texas. The USDA, National Cotton Council, Arizona Cotton Research and Protection Council, EPA and IR-4 have been working together to help make this product available to cotton producers. Hopefully AF36 will receive full registration by the 2003 growing season. The AF 36 project has received funding and regulatory support - including all registration submissions - through the IR-4 Biopesticide Program.

Dr. Michael Braverman is currently on sabbatical at the Biopesticide and Pollution Prevention Division of EPA. The division reviews microbial, biochemical and pheromone type pesticides. He is at EPA three to four days per month learning about the submission and review process. Thus far, he has completed three sessions and will continue for three more. For more information, contact Dr. Michael Braverman, braverman@aesop.rutgers.edu.

Article by Michael Braverman

Farm Safety Tips

- Wear protective clothing when applying pesticides
- Wear tight clothing and look for ticks after work
- Use sunscreen on exposed skin with at least a protective factor of 15 especially early in the summer
- Use respirators in conditions of high dust potential (blowing soils, pesticides, fertilizers)
- Make sure to provide plenty of clean drinking water, especially during hot periods
- Keep shady areas available for workers during the hot summer months
- Use pesticides safely and follow instructions on labels.

Tips from Zane Helsel
Rutgers Cooperative Extension