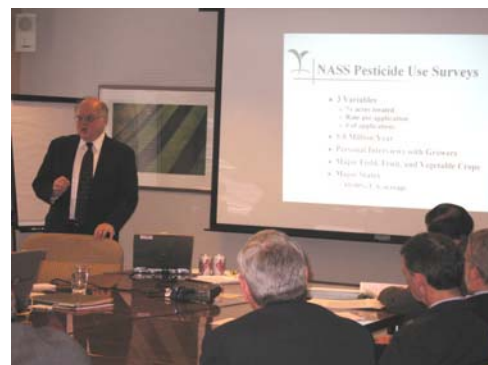


Crop Protection Research Institute 2004-2005 Annual Report Synopsis

The Crop Protection Research Institute (CPRI) is a research unit of the CropLife Foundation. Established in January 2004, CPRI is a non-advocacy research organization focused on the economic analysis of agricultural pests, pest management, and pesticide use and regulation in the United States. CPRI's goal is to inform the public discussion surrounding pest management policy, employing written reports, presentations, panel discussions, and web-based media to reach as broad an audience as possible. Under the direction of Leonard Gianessi, CPRI's work in 2004-2005 focused around three major areas: the National Pesticide Use Database, pesticide use data collection and analysis, and pesticide benefits quantification.



CPRI Director Leonard Gianessi discusses pesticide use data sources at a briefing for commodity groups. April, 2005

National Pesticide Use Database Integral to CPRI's pesticide use research is maintenance of the *National Pesticide Use Database* (NPUD), the only national, comprehensive, publicly available pesticide use database for the United States. NPUD is a collection of publicly available estimates of pesticide use organized by active ingredient, crop, and state and quantifying acreage treated, average application rate, and total pounds of active ingredient applied. The 1992 & 1997 versions of this database are used by USEPA, USDA, and USGS for risk assessments, benefit studies, and water quality analysis. In 2004-2005 CPRI staff endeavored to finalize the 2002 update to NPUD. 2002 data was delivered for the first 50 active ingredients to USEPA, USDA, and USGS and industry review of our remaining data is proceeding. All preliminary data will be delivered to the federal agencies this summer and NPUD 2002 will be finalized and released in November, 2005.

Pesticide Use Data Collection and Analysis Throughout the past year CPRI staff have been involved in efforts to summarize currently available pesticide use data sources, assess their utility for a number of commercial, policy, and regulatory needs, and develop proposals to improve national, state, and sub-state pesticide use data. We are addressing this issue within a number of forums including a USDA National Agricultural Statistics Service advisory subcommittee that is co-chaired by CPRI Director Leonard Gianessi, a CropLife America pesticide use data subcommittee, and through CropLife Foundation meetings and workshops, including a recent, well attended briefing for commodity groups.

Pesticide Benefits Projects The Crop Protection Research Institute is approaching completion of its fungicide benefits study *The Value of Fungicides to U.S. Crop Production*. This study quantifies the use of and expenditure on fungicides in comparison to plant disease pressure and resulting losses, revealing economic and production gains of 50-75% among most of the 50 crops addressed. Upon completion, CPRI staff intend to engage in an extensive outreach campaign to publicize and discuss the benefits of agricultural fungicides. Over the past year we have also reformatted many of the findings of our herbicide benefits study, *The Value of Herbicides in U.S. Crop Production*, into fact sheets and press releases. These materials have received coverage among the agricultural and industry press. The fungicide benefits study has been endorsed by 23 commodity groups thus far.

Articles

- Gianessi, Leonard, *Economic and Herbicide Use Impacts of Glyphosate-Resistant Crops*, **Pest Management Science**, Vol. 61, p. 241, 2005.
- Gianessi, Leonard, and Nathan Reigner, *Herbicides Extremely Important to Carrot Growers*, **Carrot Country**, Fall, 2004.
- Gianessi, Leonard, *Biotechnology Expands Pest Management Options for Horticulture*, **California Agriculture**, April-May, 2004.



Research Briefs, Research Notes & Special Reports

- “Why California Organic Growers Want an Exemption from a Farm Worker Protection Rule” *Research Brief #1*, January 19, 2005
- “The Outsourcing of Organic Crop Production” *Research Brief #2*, January 19, 2005
- “A Review of *World Agriculture and the Environment*” *Research Note #1*, July 1, 2004
- “Trends in Pesticide Use in EPA Region 6: *Comparing 1992 and 1997*” May 18, 2004



Commentary...from the Director

Every research project needs a hypothesis that is tested. Our hypothesis for CPRI projects is straightforward: American farmers have sound economic reasons for using pesticides on United States cropland. In our national herbicide benefit study we documented a net return of \$3 for every \$1 that growers spend on herbicides and their application. In our ongoing fungicide benefit study we are identifying typical net return rates of \$10 for every \$1 spent. Our research interest in organic agriculture supports the hypothesis as well: organic farming is unlikely to greatly expand in the U.S. because the costs of production without pesticide use are very unfavorable. A major theme to our work is to use history to document the great improvements in pest control resulting from the introduction of synthetic chemical pesticides. The “good ole days” of farming are a myth. Terrible yield losses occurred due to uncontrolled disease pathogens; millions of people spent their lives engaged in backbreaking labor required for pulling weeds.

We believe that research should not be done solely for its own sake. Outreach and communication are a key part of our research program and that is why I am so excited about next year. We have been working diligently on our fungicide benefit study, which will be released shortly. We have hundreds of stories to tell about how fungicides control disease organisms and make high yields possible. Our research covers fifty crops, including 5-10 crops for each state in the U.S. We are planning to quadruple the number of presentations we give to audiences around the country. Pest control is fascinating and audiences respond to descriptions of pests and the very logical reason that farmers have for using pesticides: “*It’s the Pests, Stupid.*”

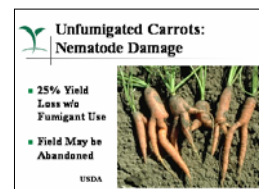
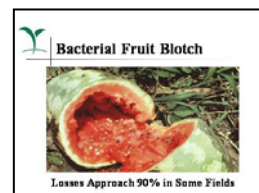
Thanks for the support,



Presentations

Leonard Gianessi made the following presentations in 2004 and 2005:

- “Crop Weed Control: Chemicals, Biotech Crops, and Organics, *A U.S./EU Comparison*” **Mint Industry Research Council**, Las Vegas, NV, 1/14/04
- “The Value of Herbicides and Biotech Crops in the U.S.” **Southern Weed Science Society**, Memphis, TN, 2/4/2004
- “Glyphosate Usage Trends: 1990-2003” **Weed Science Society of America**, Kansas City, MO, 2/11/2004
- “U.S. Biotech Crop Adoption: *Who Decides?*” **Southern Association of Agricultural Scientists**, Tulsa, OK, 2/15/2004
- “Plant Biotechnology: Potential for Pest Management in New England” **New England Branch, Entomological Society of America**, New Haven, CT, 3/9/2004
- “Pesticide Use Data Collection and Compilation” **American Association of Pesticide Control Officials**, Arlington, VA, 3/11/2004
- “The Economic & Herbicide Use Impacts of Glyphosate Resistant Crops” **American Chemical Society**, Anaheim, CA, 3/29/2004
- “Spore Wars: *Phytopathology 101*” **Northeast Vegetable & Berry Growers Association**, Manchester, NH, 12/17/2004
- “The Use of Fungicides in Potato Production: *Communicating the Benefits of Fungicides*” **National Potato Council**, Marco Island, FL, 1/7/2005
- “Why California Organic Growers Want an Exemption from a Farm Worker Protection Rule” **University of California at Davis, Agricultural Issues Forum**, Davis, CA, 1/25/2005
- “Why California Organic Growers Want an Exemption from a Farm Worker Protection Rule” **Women Involved in Farm Economics**, Arlington, VA, 2/13/2005
- “Potential New Minor Use Needs Areas: *Ag Biotechnology*” **IR-4 Strategic Planning Conference**, Arlington, VA, 2/15/2005
- “The Benefits of Fungicides to Crop Production: *Phytopathology 101*” **Plant Pathology Society of North Carolina**, Research Triangle Park, NC, 2/22/2005
- Spore Wars: *Communicating the Benefits of Fungicides*” **Georgia Phytopathology Society**, Lake Blackshear, GA, 3/14/2005
- “Use of Pesticides in Carrot Production: *Communicating the Benefits*” **California Fresh Carrot Advisory Board**, Bakersfield, CA, 3/16/2005



Nathan Reigner made the following presentations in 2004 and 2005:

- “Are Pesticides Really Necessary in Massachusetts Crop Production” **Farmers’ Field Day, Tercentenary Celebration**, Sutton, MA, 7/10/2004
- “Pesticide Use Data & The Realities of Crop Production in the United States” **U.S. Environmental Protection Agency Region 6**, Dallas, TX, 10/26/2004
- “Why You’re Glad U.S. Farmers Use Pesticides” **University of the District of Columbia**, Washington, DC, 11/4/2004



Nathan Reigner discusses CPRI's outreach strategy with CropLife America Communications Director Allan Noe.

Website

CropLife Foundation launched its website, www.croplifefoundation.org, on September 15, 2004. The website serves as the primary vehicle through which the Crop Protection Research Institute communicates its work.

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May 17, 2005