The Crop Protection Research Institute (CPRI) was established as part of the CropLife Foundation in January 2004. The purpose of CPRI is to research and communicate the benefits of crop protection products. The Institute has been staffed for the past eight years by a Senior Researcher who also serves as CPRI’s Director, Leonard Gianessi, and by a full-time Research Assistant.

Every two work days in 2011 we released a new study, wrote an article, or made a presentation.

**Case Studies**

*These one page summaries detail the vast improvement to US and the world's food supply and agricultural viability made possible with herbicides, insecticides and fungicides.*

50 Case Studies of Pesticide Benefits Internationally
- Funded by CropLife International (CLI) and featured on the CLI website

33 Case Studies of Pesticide Benefits in US Crops
- Regularly featured in CLA’s Tell Me More communications program

**Articles**

Overlooking the Obvious: The Opportunity for Herbicides in Africa, Published in *Outlooks on Pest Management*, October 2011.

In this article, we argue that poorly controlled weeds are the biggest constraint to improving crop production in Africa.
Presentations

In January 2011, we launched the Sustainability Tour featuring a 45-minute slide show presentation entitled: The Importance of Herbicides for Sustainable Agriculture. This presentation was made for 41 audiences throughout the year:

- 8 University/college
- 21 CLA Member Companies
- 6 Government Agencies
- 7 Conferences/Forums
- 8 Industry Association Meetings

A portion of this presentation is featured in a video on the Green State TV website sponsored by Syngenta and in an interview on the RFD Radio Network.

All of these events are described on our website at http://www.croplifefoundation.org/sustainability.html.

The audience at US EPA Office of Pesticide Programs

Green State TV interview

Crop Protection Research Institute Funders 2011

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Jay Vroom, Chairman
Bill Kuckuck, President

Crop Protection Research Institute Staff

Leonard Gianessi, Director
Ashley Williams, Research Assistant

CropLife Foundation
1156 15th Street, NW #400 Washington, DC 20005
Phone 202-296-1585 www.croplifefoundation.org Fax 202-463-0474
The 2011 Sustainability Tour!

In January 2011, the Crop Protection Research Institute (CPRI) launched the Sustainability Tour!, featuring a presentation by Leonard Gianessi on the sustainability of U.S. agriculture. The Sustainability Tour! draws on the history of weed control in American agriculture to tell the story of why herbicides are vital to sustainability. The 45 minute presentation includes a discussion of energy use, soil erosion, crop yields, and the challenges organic farmers face without herbicides. Leonard made this presentation 41 times for a wide variety of audiences in the U.S.

2011 Sustainability Tour Presentations

January 12: Michigan Agribusiness Association, Lansing, MI
January 18: Illinois Fertilizer and Chemical Association, Peoria, IL
February 1: National Council of Agricultural Employers, Washington, DC
February 3: USDA, Agricultural Research Service, Beltsville, MD
February 14: The Pesticide Stewardship Alliance, San Antonio, TX
February 23: US EPA Office of Pesticide Programs, Crystal City, VA
March 3: School of Public and Environmental Affairs, Indiana University, Bloomington, IN
March 3: Dow AgroSciences, Indianapolis, IN
March 4: Department of Chemistry, Butler University, Indianapolis, IN
March 4: Indiana Government Center, Indianapolis, IN
March 7: MO-AG Legislative Day, Jefferson City, MO
March 10: North Carolina Weed Science Society, Raleigh, NC
March 11: BASF, Research Triangle Park, NC
March 24: Dupont, Newark, DE
April 5: School of Public Health, George Washington University, Washington, DC
April 6: Block & Bridle Club, University of Maryland, College Park, MD
April 8: National Agricultural Landscapes Forum, Washington, DC
April 11: Kennedy School of Government, Harvard University, Boston, MA
April 18: Science and Technology Week, Illinois State University, Bloomington, IL
April 18: Growmark and Illinois Farm Bureau, Bloomington, IL
May 25: FMC, Philadelphia, PA
June 24: CropLife America, Washington, DC
June 30: Nufarm, Burr Ridge, IL
July 1: US EPA Region 5 Office, Chicago, IL
July 12: Growmark Summer Management Conference, Wisconsin Dells, WI
July 16: South Carolina Fertilizer and Agrichemicals Association, Hilton Head, SC
July 19: Soil and Water Conservation Society 66th International Conference, Washington, DC
August 16: FFA Ag Ambassadors, Research Triangle Park, NC
August 30: American Chemical Society National Expo, Denver, CO
October 11: Nufarm, Morrisville, NC
October 12: BASF Global Regulatory Herbicide Group, Research Triangle Park, NC
October 25: USDA, ARS, Vegetable Laboratory, Charleston, SC
October 26: Southern Crop Production Association's Issues Summit, Charleston, SC
November 14: Bayer CropScience, Stillwell, KS
November 15: CropLife America's Midwest Regional Issues Summit, Kansas City, MO
November 29: Alabama Agricultural Symposium, Birmingham, AL
December 1: Nichino America Annual Meeting, Key Biscayne, FL
December 2: American Legislative Exchange Council's States and Nation Policy Summit, Phoenix, AZ
December 5: AGMaster's Conference, University of Illinois, Urbana, IL
December 12: Cedar Lane Unitarian Universalist Church, Bethesda, MD

“Leonard gave a terrific speech. Students and faculty were talking about it all day yesterday and there were numerous positive comments on Facebook from our students praising Leonard for his talk and the way he fielded the questions.”

-Rob Rhykerd, Chairperson, Department of Agriculture, Illinois State University

“Thank you so much for coming! You opened my eyes to a new perspective on sustainable ag, organic farming, and the role herbicides play!”

-Nathan Glenn, University of Maryland, Class of 2012

For complete details on the Sustainability Tour!, visit our website at http://www.croplifefoundation.org/sustainability.html.
In 2011 the Crop Protection Research Institute produced 33 Case Studies on the benefits of pesticides in the United States. These one page summaries document the many ways that pesticides have improved crop production in the US. These US benefit case studies can be viewed or downloaded at http://www.croplifefoundation.org/Case%20Studies.html.

**U.S. Benefits Case Studies**

1. **Fungicides Have Tripled the Productivity of Pecan Trees**
2. **Herbicide Use Benefits Water Conservation Efforts**
3. **Herbicide Use Leads to a Yearly Increase of 60 Million Pounds of Maine Blueberries**
4. **Herbicides are Key to Sustainable Great Plains Dryland Farming**
5. **Insecticides Protect Soybeans from New Invasive Aphid**
6. **Fungicides Make Commercial Wild Rice Production Possible in Minnesota**
7. **Florida’s Sweet Corn Flourishes with Help from Insecticides**
8. **Without Fungicides, Northeastern Cranberries Would Succumb to Rots**
9. **Fungicides Required for Blight Prevention in Pistachios**
10. **No Hops to Flavor Beer without Insecticides or Fungicides**
11. **Without Fungicides, 50% Less Orange Juice from Florida**
12. **Insecticides Keep Processed Spinach Free of Insects**
13. **Fungicides Needed to Protect Spinach After Failure of Plant Resistance to Mildew**
14. **Fungicides Prevent Defoliation of Cherry Trees in Eastern States**
15. **Insecticides are Necessary for Maggot-free Cherries**
16. **Fumigation Makes California the #1 Producer of Strawberries in the World**
17. **Fungicides Protect High-Yielding Sugarbeets from Disease**
18. **Herbicides Saved Louisiana Sugarcane Production Following Shortages of Laborers for Weeding**
19. **The Romans Prayed, U.S. Farmers Spray Fungicides to Save Wheat from Rust**

![Fall armyworm larva](image1)

![Wheat rust](image2)
20. Herbicides Help Keep U.S. Chile Producers Competitive with Foreign Suppliers

Chile pepper field in New Mexico: herbicide treated rows (foreground) compared to non-treated rows

21. Fungicides Protect Potatoes from a Disease that Caused the Death of Millions

22. Dramatic Improvements Have Been Made with Fungicides in Preventing Peach Losses to Rot

23. Herbicides Reduce Peach Tree Death in the Southeast

24. Insecticides Protect Alfalfa in Regions Where Parasites are Ineffective

25. Insecticides Required to Meet Consumer Demands for Sunflower Seeds

26. Herbicides Replaced Backbreaking Hand Weeding in California Vegetable Fields

27. Herbicides Keep Processed Green Peas Free of Poisonous Contaminants

28. Zero Tolerance for Worms in Processed Green Beans Makes Insecticide Sprays Necessary

29. Artichokes Would be Filled with Worms without Insecticide Use

30. Insecticides Keep Worms and Their Excrement Out of Cucumbers and Pickles

31. Walnut Growers Have Sprayed Insecticides for 80 Years to Prevent Major Losses

32. Herbicide Use Has Resulted in a Significant Reduction in Energy Use

33. Insecticides Increase the Value of Avocados by 40%
In 2011 the Crop Protection Research Institute produced 50 Case Studies on the international benefits of pesticides. From Europe, Asia, Africa and Latin America, these one page summaries detail the vast improvements to the world’s food supply and agricultural viability made possible with herbicides, insecticides and fungicides. These international benefit case studies can be viewed or downloaded at http://www.croplifefoundation.org/Case%20Studies%20International.html.

**International Benefits Case Studies**

1. China’s Agricultural Success: the Role of Herbicides
2. The Importance of Herbicides in UK Wheat: Long-Term Experiment Results
3. Europe’s Self-Sufficiency in Rice Due to Herbicide Use
5. Without Pesticides, Apple Production in the United Kingdom Would Not be Viable

6. New Zealand Kiwifruit Would Not Meet Export Standards without Insecticide Sprays
7. Herbicides are Key for the Sustainability of Rice Growing in South Asia
8. Rice Fungicides Prevent Famine
9. Herbicides Enable the Replanting of Rubber Trees on Small Farms in South Asia
10. Without Fungicides, World Banana Exports Would Collapse

11. Fungicide Sprays on Groundnuts Would Greatly Improve Food Security in Africa
12. Herbicides Enable Thousands of Asian Farmers to Gain Income from Oil Palm Trees

13. European Organic Wheat Suffers from “Stinking Smut” Disease Due to Lack of Fungicide Seed Treatment
14. High Maize Yields in Europe Depend on Herbicides
15. Climate Change Increases Need for Fungicides for Coffee Trees
16. Dramatic Reductions in Soil Erosion on Tea Plantations Result from Herbicide Use
17. Fumigation Makes Spain the #1 Exporter of Strawberries in the World
18. Insecticide Use Maintains Productivity of European Oilseed Rape Fields
19. Fungicides Have Protected European Wine Grapes for 150 Years
20. No German Hops for Beer without Insecticides or Fungicides
21. Herbicide Use in Scandinavia: Increased Cereal Yields, Improved Water Quality
22. Without Pesticides, One-Fifth of Norway’s Population Could not be Fed in a Crisis
23. Pesticide Use in Russia: Restoring the Benefits
24. Insecticides Prevent Major Losses in UK Wheat
25. Fungicides Protect Potatoes Worldwide from a Disease that Caused the Deaths of Millions of People
26. Due to Sex Change, European Potatoes Increasingly Dependent on Fungicides
27. Restrictions on Fungicide Use Causing Decline in Organic Potato Production in Europe
28. Increased Fungicide Use on Potatoes Would Significantly Improve Food Security in Russia
29. High Quality Italian Tomatoes Depend on Fungicides
30. Herbicide Use in Argentina Has Led to $30+ Billion in Worldwide Economic Benefits
31. Fungicides Protect the World’s Wheat Crop from Rust
32. Insecticides Required to Meet Consumer Demands for Blemish-Free Carrots in the EU

Carrot fly larva

33. Potato Farmers in the Andean Mountains Depend on Fungicides
34. European Potatoes Require Insecticide Protection from an Invasive Pest - From the U.S.
35. Chinese Rice Fields Require Insecticide Protection from an Invasive Pest - From the U.S.
36. Italian Rice Farmers Would Lose 125 Million Euros in Annual Income without Fungicides
37. Without Insecticide Sprays, Damage from Insect Feeding Would Lower the Quality of European Olive Oil
38. Herbicide Use in Spanish Olive Groves Conserves Soil and Water
39. The Importance of Herbicides for Grain Crops in Canada
40. Herbicide Use in Africa Would Lead to Large Increases in Crop Yields
41. Without Insecticides, 1.2 Billion Pounds of Sugar from Australia Would Not Be Produced
42. Herbicides are Key for Wheat Farming in Australia
43. Europe’s Wheat Yields are the World’s Highest Due to Fungicide Use
44. European Organic Apple Production Demonstrates Value of Pesticides
45. Fungicides Prevent Massive Losses of Soybeans In Brazil
46. Fungicides Preserve the Productivity of Rubber Trees
47. Insecticide Sprays Keep Mexico Free of Medflies with Great Economic Benefits
48. Fungicide Spraying Is Critical for Increasing Potato Production in Africa
49. EU Subsidies Have Led to a Significant Increase in Pesticide Use and Crop Productivity in Poland
50. Herbicide Technology Can Reduce Massive Crop Losses to Striga in Africa