The Role of Crop Protection in Responding to Global Food Demand

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CropLife America

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What? Why?

- ASTA & CLA!
- Food Industry

+

Crop Protection!



+



MUTUAL INTERESTS ABOUND ©



How This "New Alliance" Began

- Late 2011 . . .
 - First there was an orange grove in Brazil
 - Disease to be controlled
 - Juice concentrate export to USA . . .



Natural and Fresh . . .







Processed...



















January 12, 2012

Statement by CropLife America re: Trace Levels of Carbendazim in Imported Orange Juice CropLife America (CLA) supports the rigorous regulatory review system for pesticides in the United States. We applied the U.S. Food and Drug Administration (FDA) for their work in ensuring consumer CropLife America (CLA) supports the rigorous regulatory review system for pesticides in the United safety following the detection of the fungicide carbendazim in certain orange juice imports to the U.S. States. We applaud the U.S. Food and Drug Administration (FDA) for their work in ensuring consumer that the United States' strong safety following the detection of the fungicide carbendazim in certain orange juice imports to the U.S. food safety network is working effectively and provides consumers one of the safest food supplies in t Thef





In light of the rapid response to this incident, CLA reminds consumers that the United States' strong world.

World.

World.

World is working effectively and provides consumers one of the safest food supplies in the orange juice, carbendazim, is not currently registered by the U.S. Environmental orange juice, carbendazim, is not currently registered by the U.S. Environme in increase with trace amounts of carbandazim recognized by the U.S. Environme If or agricultural use in the U.S., and therefore it is not used on food crops of trace amounts of a crop protection. e juice imports with trace amounts of carbendazim recognized by the FDA is a stable allowable lavels which Portant to note that the presence of trace amounts of a crop protection be safe after a rigorous review and testing process. The amount detected in ately equal danger, and regulatory bodies establish allowable levels which set a significantly below any internationally established maximum allowable levels which set a maximum allowable levels which set a significantly below any internationally established maximum allowable

be safe after a rigorous review and testing process. The amount detected in a significantly below any internationally-established maximum allowable ng regulatory review process to help ensure that food grown and the fo If regulatory review process to help ensure that tood grown and a viancina tactina arrange hafara annional fartica his that cop s food imported from other countries is safe and healthy for all. All creating in an affactive. To an extensive testing process before approval for use by the EPA.

In a racille ara provant and imported food, resulting in an effective are provant and including a 2000 report. ipply. The results are proven every year, including a 2009 report from



January 2012

- Coca-Cola self-reports to FDA unapproved fungicide in Brazilian concentrate
- Led to connection with CropLife
- Rest is history CLA Food & Beverage Committee today!



CLA Food & Beverage Committee Members

- Ron Williams, The Coca-Cola Company, Chair
- Greg Sommerville, McCormick, Co-Chair
- Diane Allemang, Cheminova
- Patrizia Barone, Unilever*
- Constance Cullman, Dow
- Cheryl Deem, ASTA
- Randal Girous, Cargill Agricultural
 Supply Chain*
- Peter Goggi, Tea Association of the USA, Inc.
- Kelly Johnston, Campbell's Soup*
- Kirk Kealey, Pepsi*
- Jason Klywka, Kraft*
- Roger Lawrence, McCormick
- Gabriele Ludwig, Almond Board of CA
- Carolyn Meduski, Nestlé

- Mark Nelson, Nestlé*
- Michael Parris Monsanto
- Kelley Poole, Verto Solutions*
- Jean Reimers, Bayer CropScience
- Dan Skrypec, Kraft*
- Cindy Baker Smith, AMVAC Chemical Corporation
- Daniel Sonke, Campbell's Soup*
- Adao Torres, Cutrale*
- Samuel Zeller, Unilever*



Karil Kochenderfer, Linkages **Consultant**



^{*}Membership pending or considering membership

CLA Food & Beverage Committee

- 1. Harmonization of MRLs
- 2. Modern Ag Outreach
- 3. Help identify areas for innovation need



Modern Agriculture Today



6 → 7 Billion

+ 1 BILLION!!

>50% in Cities (2011 for first time)



Modern Agriculture Today



- +925 million hungry; 1,500 million obese
- 50% of world's farmers unable to feed their own family



Market Performance 2012

(Distributor level – average exchange rates - Nominal US\$)

Year	Crop Protection (\$m)	rotection Agrocemicals		Conventional Seed (\$m)	
2002	25150	4270	3140	13060	
2003	26710	4445	3709	13521	
2004	30725	4675	4476	14524	
2005	31190	4905	5095	14657	
2006	30425	5150	5855	14485	
2007	33390	5365	7062	14648	
2008	40475	5655	9150	16870	
2009	37860	5860	10570	17185	
2010	38315	5880	12870	17950	
2011	44528	6290	15685	18810	
2012	47360	6372	18495	19065	
2012 / 2011 %	6.4%	1.3%	17.9%	1.4%	

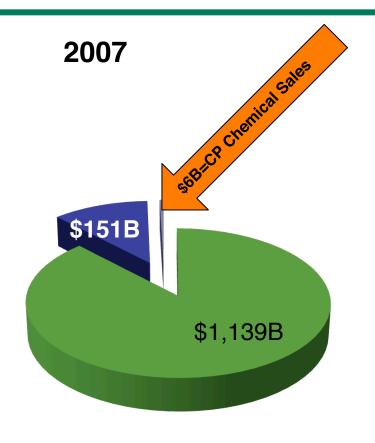
Agrochemicals = \$53,732 +5.7%

Seed= \$37,560 +8.9%

Product Introductions and R&D by Crop

Number of new	Active Ingredier	nts	Time period			
	-	1980/1989	1990/1999	2000/2009	2010/12	In R&D
Herbicides	Cereals	15	12	12	0	2
	Soybean	11	10	1	0	1
	Maize	2	10	9	1	2
	Rice	11	19	15	1	3
	F&V	2	1	0	0	0
	Other	10	5	2	2	1
	Total	51	57	39	4	9
Insecticides	F&V	11	16	16	3	4
	Rice	5	2	3	1	5
	Cotton	9	12	3	0	0
	Others	4	7	5	1	3
	Total	29	37	27	5	12
Fungicides	F&V	13	9	17	5	4
	Cereals	14	16	8	6	1
	Rice	9	5	7	1	1
	Others	0	0	0	0	1
	Total	36	30	32	12	7
Others		7	3	5	1	0
Total		123	127	103	22	28
Average annual rate of introduction 12.3			12.7	10.3	7.3	5.6

AgChem Value to U.S. Food Consumer



In 2008, 9.6% of U.S. disposable income was spent on food.*

- Total Food
- Cost Crop Sales
- CP Chemical Sales

Per U.S. OTA May '09 news release, 3.5% of food sales are organic.



The Ripple Effects of Crop Protection

- Use of crop protection products has created 1.05 million jobs, and generated a payroll of \$30+ billion
- Crop protection products increase yield and the production of higher quality of crops, and added:
 - \$51.4 billion (field crops)
 - \$18.9 billion (nut/fruit crops)
 - \$11.5 billion (vegetables) in crop value
- The use of crop protection products increases affordability of food by up to 47.9 percent for an average American family of four







Tell Me More

TELL ME MORE BRANDED MATERIALS MODERN AGRICULTURE RESOURCES

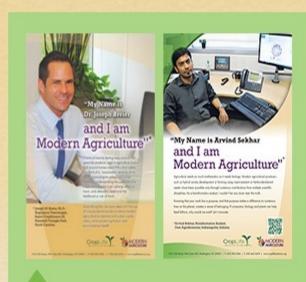
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Welcome

Tell Me More About...

The Drought, Farming and Resource Conservation

Conversation Starters

50 Years of Silent Spring

Downloadable Resource of the Month

New Poster: I am Modern Agriculture

CropLife Foundation Benefits Study: Fungicides Result in Mangoes Suitable for Export

Testimonial

Tell Me More Blog: Paul from Stoneville, Mississippi

Get Your Masters Degree!

Masters in Modern Agriculture (MMA) is a program geared to help employees of CLA member companies or state associations to speak more confidently and knowledgeably on behalf of modern agriculture.



Join the Conversation—Find Us Online!



Industry Collaboration

- U.S. Farmers and Ranchers Alliance
 - An association of farmers and ranchers devoted to answering American consumers' questions about how food is raised
 - www.fooddialogues.com





Industry Collaboration

- America's Heartland is a magazine style, half-hour TV series produced by KVIE, in Sacramento, CA.
- Gives consumers an inside look at the people and processes involved in providing food, fuel and fiber to a global family.



How It Began...

Insecticide Act of 1910







A New Era of Awareness

1970: Norman Borlaug

1962: Silent Spring published wins Nobel Peace Prize

1970: U.S. Environmental Protection Agency is created



The Green Revolution

"The battle to feed all of humanity is over. In the 1970s and 1980s hundreds of millions of people will starve to death in spite of any crash programs embarked upon now." – The Population Bomb, 1968



• Pakistan:

Wheat yields rose from 4.6 million tons in 1965 to 8.4 million in 1970.

• India:

 Wheat yields rose from 12.3 million tons to 20 million tons in less than a decade.

Back to Food & Beverage Committee

"MRL Harmonization"

- 1. CLA & CLI focus for 30+ years
- 2. Progress (some) made
- 3. Much more progress needed
- 4. Science and food demand = *constantly* changing



Harmonization – Everywhere, Anywhere

APEC* opportunity (new example)

Streamlining Regulation Boosts Wine Trade





Thank You!

