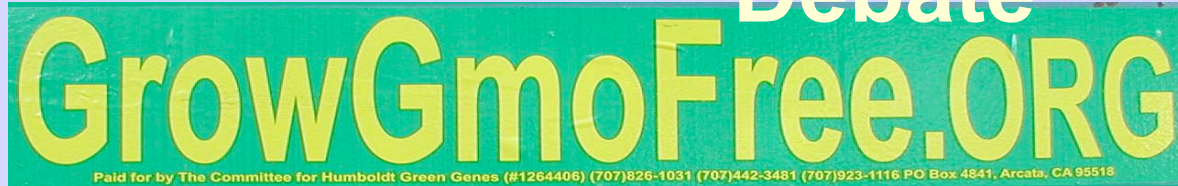


# FOOD FIGHTS IN CALIFORNIA

## Educational Challenges of the GMO

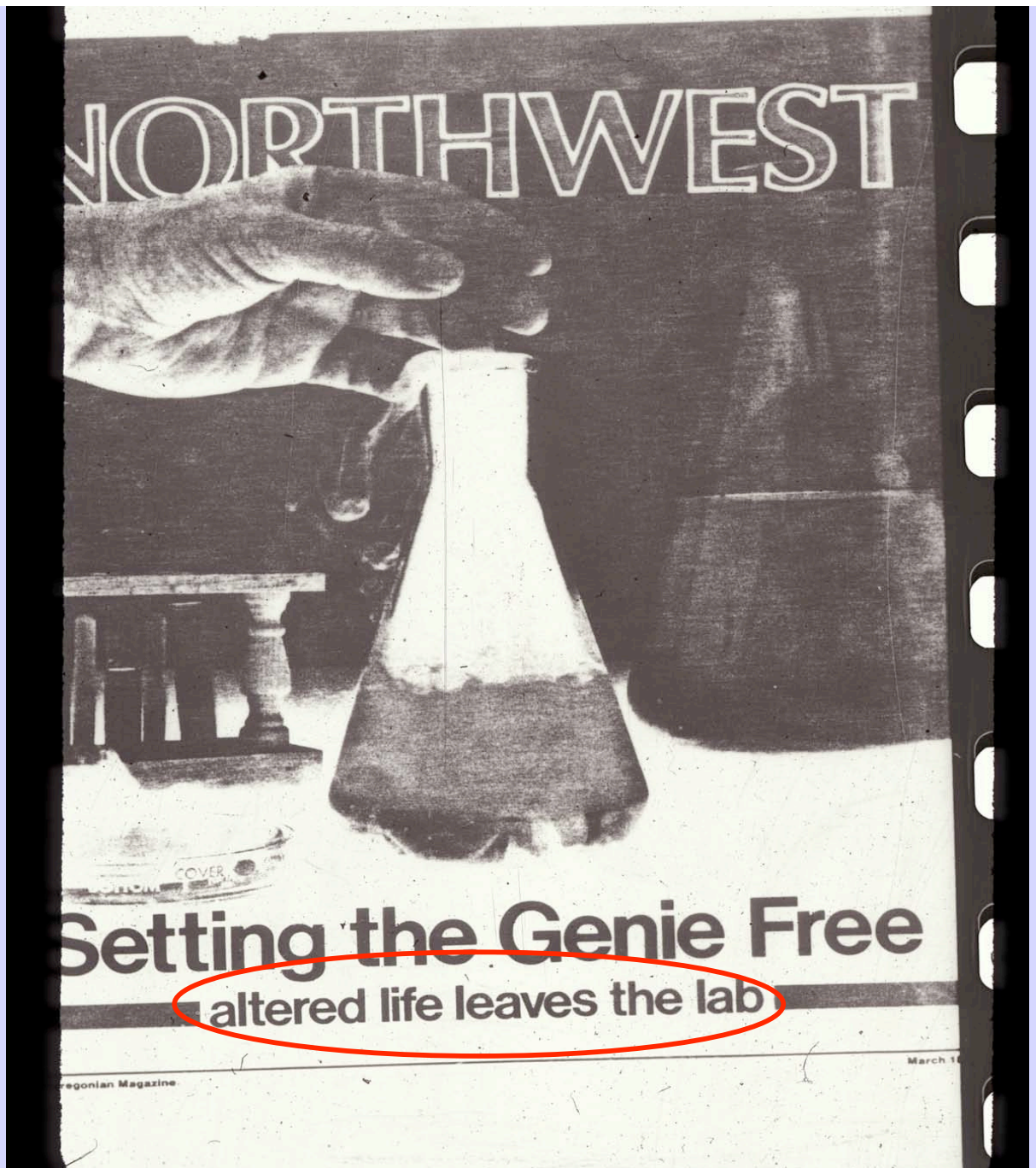
Debate



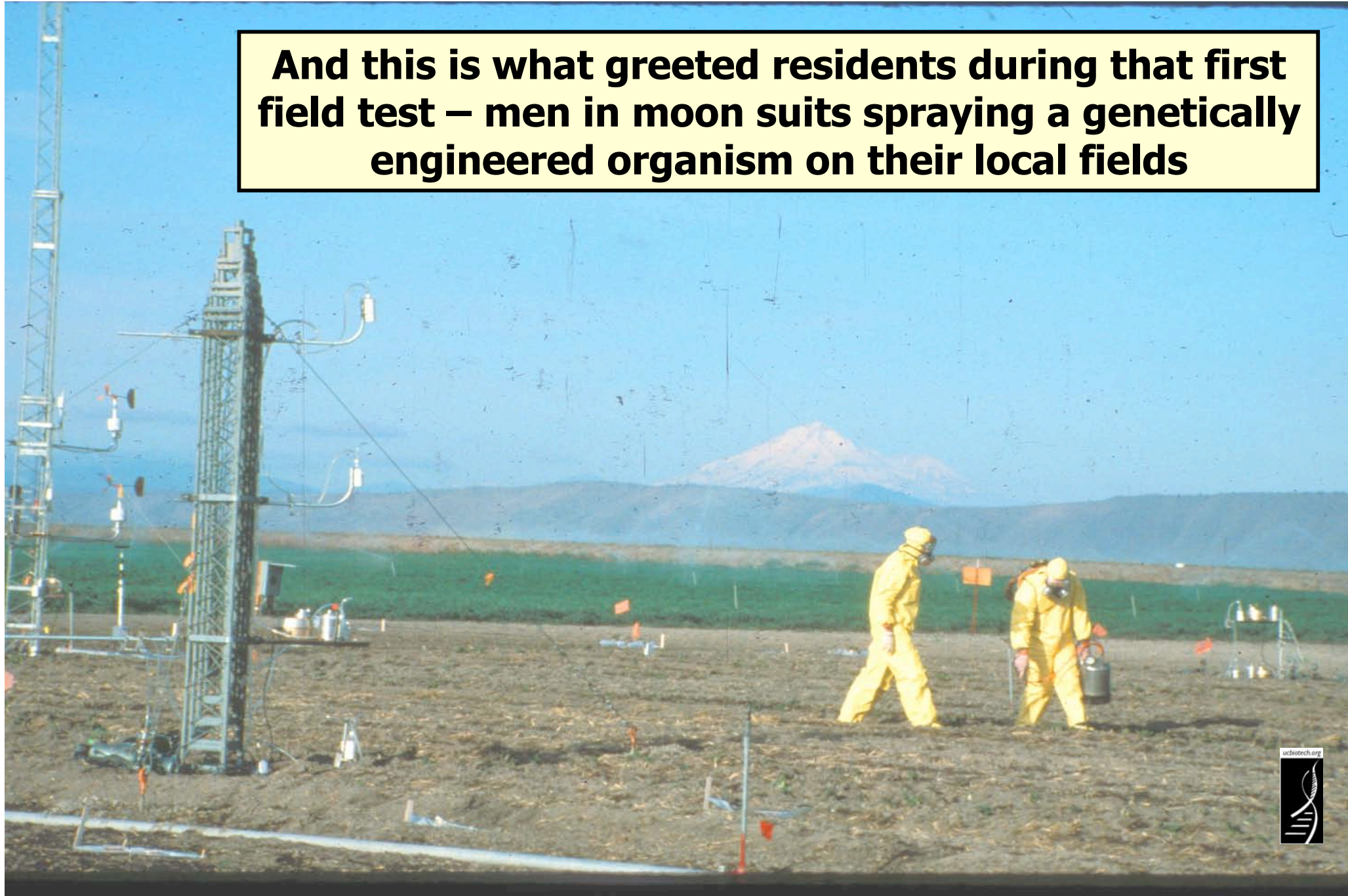
Peggy G. Lemaux, Barbara Alonso University of California, Berkeley  
Alison van Eenennaam University of California, Davis

**Newspaper coverage  
of the first field test  
of a genetically  
engineered organism  
in northern  
California in 1986.**

**The ice-minus  
bacterium**



**And this is what greeted residents during that first field test – men in moon suits spraying a genetically engineered organism on their local fields**

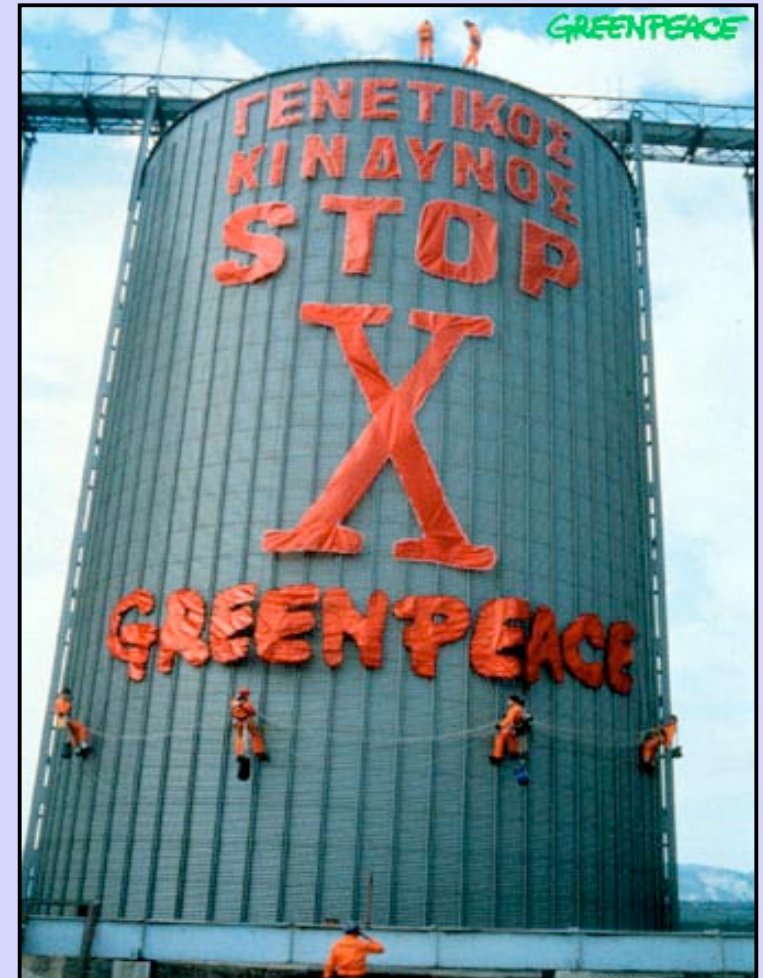


**More than a decade later concern over GE foods spread to Europe, when governments failed to quell consumer fears about mad cow disease and dioxin contamination of foods. In the late 90's Greenpeace stages protests and destroys fields of GE crops.**



*Greenpeace decontaminates GM field - Lord Melchett arrested*

SOURCE: 7/26/99, Lyng/Norfolk, Greenpeace



**14 April 1998** **Corinth, Greece**  
Greenpeace action against genetically engineered soya at soya mill.  
© Greenpeace/Karayannis

**And protests have continued – forty Greenpeace activists in 2004 ready to destroy GE crops in Switzerland**



**And in July 2008 Greenpeace activists vandalize field of GE maize in France**



# A letter in 1999 from Greenpeace to Gerber starts corporate reaction in U.S.

*Wall Street Journal*  
Friday, July 30, 1999

## *Strained Peace*

Gerber Baby Food,  
Grilled by Greenpeace,  
Plans Swift Overhaul

Gene-Modified Corn and Soy  
Will Go, Although Firm  
Feels Sure They Are Safe

Heinz Takes Action, Too

By LUCETTE LAGNADO

*Staff Reporter of THE WALL STREET JOURNAL*

The letter scrolling out of a fax machine at the Gerber baby-food company in Michigan May 28 was just one of many arriving that day and didn't even name the person it was meant for, but it sure got attention. Within days, it had found its way to Gerber's parent company in Switzerland, Novartis AG, and come to the attention of its CEO. There, executives soon were taking steps to overhaul a decades-old product



**And protests continue in the U.S. in 2007 – like rallies associated with the BIO meeting**



**IN CALIFORNIA IT ALL  
STARTED IN 2004 IN**

# **MENDOCINO COUNTY**



# **MENDOCINO COUNTY ORDINANCE**

## **March 2004**

- **“Unlawful for any person, firm, or corporation to propagate, cultivate, raise, or grow genetically modified organisms in Mendocino County” (excluded microorganisms)**
- **“DNA or deoxyribonucleic acid means a complex protein that is present in every cell of an organism...”**
- **At election time, no GE organisms were known to be in production in Mendocino County**

**The discourse on both sides of the issue was often driven by alarming assertions and facts that were not derived from, nor supported by science**

Dear Friends,

While the rest of the country focuses on one presidential candidate or another, Measure D represents Biodemocracy in action. Rarely do we have the opportunity to change the

**Contamination is spreading so quickly that we have little time to waste before our entire food supply is lost forever...**

statewide ban on GE crops. California's future is organic!

Yours in organics,

Organic Consumers Association

[www.organicconsumers.org](http://www.organicconsumers.org)



**The discourse on both sides of the issue was often driven by alarming assertions and facts that were not derived from, nor supported by, science**

“Measure H should be rescinded...on the basis that multitudinous GMOs have always been dangerous because:

1. **...in order to remove present GMOs all soil would have to be plowed under or removed...**

3. Fire retardants for fighting forest fires cannot be abolished...

4. ...in order to remove present GMOs all soil would have to be plowed under or

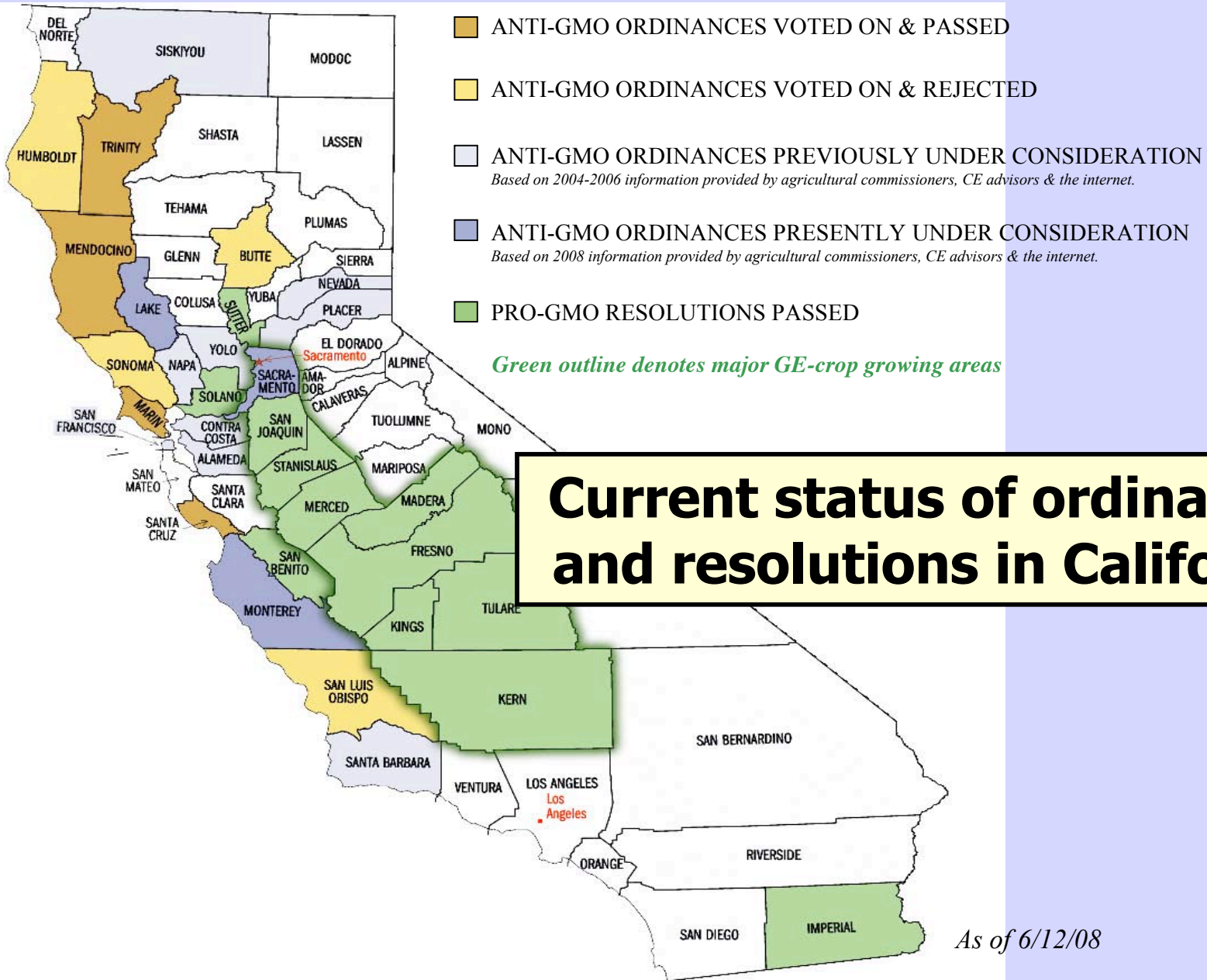
5. **...anyone visiting another county or coming in on a plane, train, or boat would have to have a security check...**

All of the above I have thoroughly investigated through pertinent organizations...”

Marie White, Ukiah Daily Journal

November 16, 2003





The background of the slide is a book cover. The top part shows the word 'Seeds' in a large, red, stylized font. Below it is a photograph of a corn cob. The bottom part of the cover is red with the text 'ENGINEERED FOODS You're Eating Jeffrey M. Smith' in white and yellow.

**VIDEOS AND ARTICLES ARE AVAILABLE FOCUSED ON AN ANTI-GE STANCE but...**

**WHAT EDUCATIONAL MATERIALS DID WE CREATE TO COUNTER THESE MESSAGES?**

ENGINEERED FOODS

You're Eating

Jeffrey M. Smith

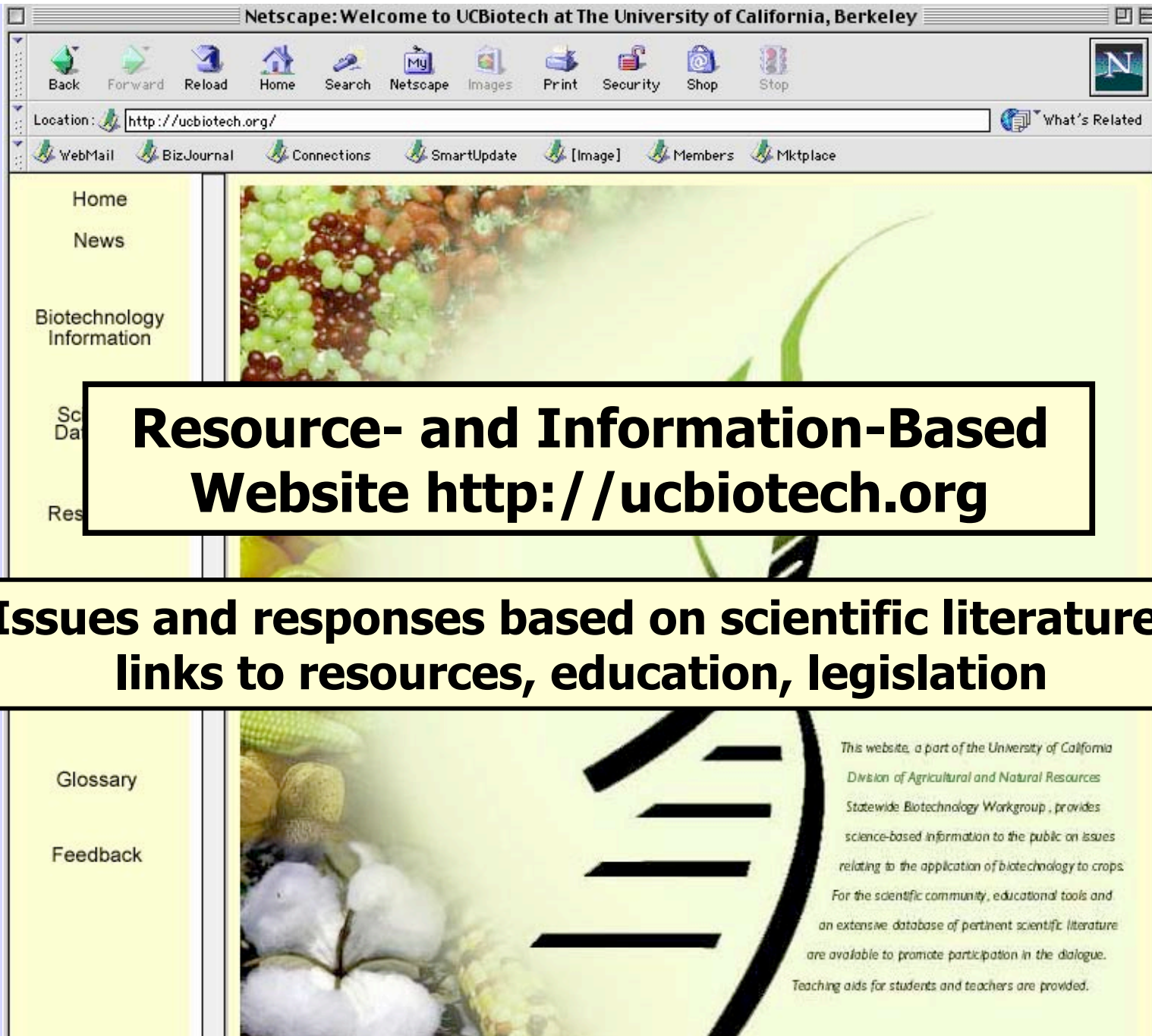


## **Peer-Reviewed Educational Videos**

### **30-minute, Peer-reviewed Videos**

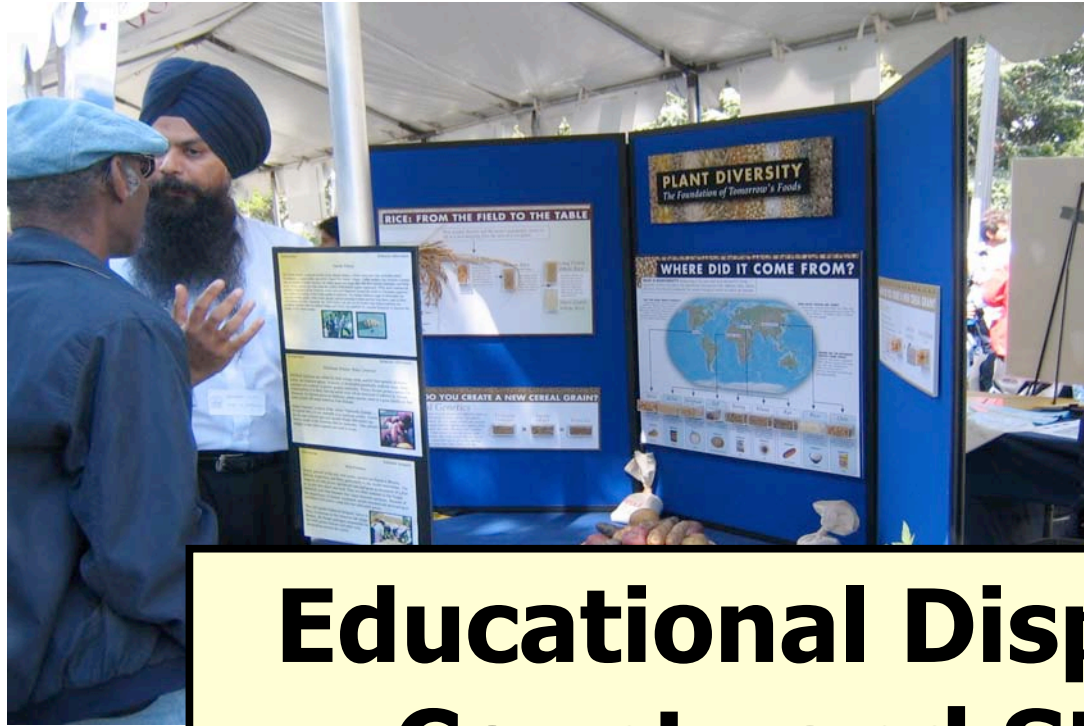
**“Genetic Engineering in California Agriculture” explains where and why genetically engineered crops and animals are being used in California.**

**“Cornucopia’s Challenge” explains the challenges farmers face in growing and marketing crops for diverse markets and consumer preferences.**



## Resource- and Information-Based Website <http://ucbiotech.org>

Issues and responses based on scientific literature, links to resources, education, legislation



**Plant Diversity: The Foundation of Tomorrow's Foods**

# **Educational Displays for City, County and State Events**

**Foods: Yesterday, Today, and Tomorrow**







# Informational Workshops for County Officials and Staff

Letters from our readers  
**Remember there are two sides to every story**  
 In today's front pages readers will find more opinions about the controversial Measure H. The Daily Journal has not taken a position on the measure yet but we are determined to provide as much opinion and information as we can to our readers. Hence, today you will find lots of that. We also want to increase something that perhaps some of the people with strong opinions on this issue don't seem to understand: we will present both sides. That's our job. You will read about the Friday, Inc. If meeting on the Employee Council of Mendocino County.

**GMO NIGHTMARE!**

**SCASH IT, HONEY!**

**By GLENDA ANDERSON**  
**The Daily Journal**  
 County supervisors voted to place on the ballot a modified initiative to further the ban on GMOs. The initiative reviewing Mendocino County's ban on genetically modified organisms has had a long and arduous process.

We endorse Measure H!



CRAIG BELL



KATRINA FREY

**YES on Measure H**

**Mendocino considers ban of genetically engineered plants**  
**NORTH COAST**

Letters from our readers  
 Measure H opponents  
 GMO makers

see, the last time I checked, this band of multi-national corporations includes the leading producers of the herbicides and pesticides which their patented GMO crops are designed to use exclusively. It's also interesting to note a Novartis study from the Northwest Center in 1994 concludes that the use of herbicides since 1994 has cost the world \$10 billion.

**Informational pieces for newspapers – take time to provide your expertise to the debate**

To the Editor:  
 I've been reading with interest your editorials in support of banning genetically modified organisms in Mendocino County. Unfortunately, the arguments lack foresight. We all know that by cross-pollination, selective breeding over the centuries, farm products have already been modified genetically. Now we have a process by means of laboratory engineering. We have used this new science

resistant to nematodes, tomatoes not attacked by nematodes, grapes resistant to Pierce's disease, drought-tolerant lettuce, and "peppers resistant to bacterial diseases," to name a few.

— Peggy Lennarz  
 UC Extension specialist



TONY CRAVER

Join us!

■ **Protect our private property!**  
**Keep Mendocino County GMO FREE!**

Second, the petition does not prohibit plants, animals, fish, fire retardant, native wines, apple juice, beer, coffee, etc. If you wish to purchase genetically modified foods available in your supermarket, you are free to do so. What the petition does prohibit is the growing of live genetically modified organisms that by pollen and other means can cross-pollinate with natural grapevines and other non-GMO crops and destroy their marketability, and subject those who consume these crops to uncontrolled health risks and seriously disrupt the local ecosystem. This petition does not require the labeling of genetically modified organisms.



# Two-part series in *Annual Review of Plant Biology*

## Genetically Engineered Plants and Foods: A Scientist's Analysis of the Issues (Part I)

Peggy G. Lemaux

Department of Plant and Microbial Biology, University of California, Berkeley, California 94720; email: lemiaux@plantmicro.berkeley.edu

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**What will happen with the application of and research in genetic engineering of agricultural crops and animals in the future?**

**Organic Consumers Association**  
 Campaigning for Food Safety, Organic Agriculture, Fair Trade & Sustainability.

**Campaign To Stop GM Wheat**

As you may already know, there is movement afoot to introduce genetically modified (GM) wheat to the United States. Last December Monsanto applied to the USDA for approval of GM wheat. Despite the fact that GM wheat is safe to eat, and human consumption, Now is the time for voices to be raised to push ahead regardless of the assurances that they will not introduce GM wheat until there is consumer acceptance they are continuing to push ahead regardless.

Canadian governments for commercial GM and non-GM assurances that they will not introduce GM wheat until there is consumer acceptance they are continuing to push ahead regardless.

Because there is no system in place to segregate GM and non-GM conventional and organic farmers will lose their ability to sell their crops. Repeated pressure from concerned farmers and consumers, the independent process in place to insure that GM wheat is safe to eat and human consumption. Now is the time for voices to be raised to push ahead regardless of the assurances that they will not introduce GM wheat until there is consumer acceptance they are continuing to push ahead regardless.

The OCA is currently targeting two companies in North Dakota to supply written pledges that they will not be using GM wheat. Please check back regularly as this list will be expanding.

These two companies in North Dakota are leaders in the pasta market. **Dakota Growers Pasta Company** and **Wheatland Pasta**. No decisions have been made if they will be approved for GM wheat. Both of these companies produce a line of organic pasta.

**GMO-vapaa.fi**  
 Muista meitä! - muistatko Suomi-gmo-vapaa.fi

**GMO-free Finland campaign**

This is the homepage of GMO-free Finland campaign run by Finnish NGO's. At the moment four organisations take part in the campaign:

- The Union of Organic Farmers in Finland
- The Union of Organic Forestry in Finland
- Biodynamic association in Finland
- Friends of the Earth Finland
- People's Biosafety Association in Finland

The campaign:

- encourages to express one's opinion
- spreads information
- lobby decision makers on national level
- puts the GMO's into general and public discussion

**BioDemocracy Alliance**

**Stop Monsanto's Genetically Engineered Sugar Beets**

**OCA & Allies Call for a Consumer Boycott of Kellogg's**

**What is Bio-Democracy and Why Does it Matter?**  
 -An essay by OCA National Director Ronnie Cummins

**CALIFORNIANS FOR GE-FREE AGRICULTURE**

**Join Us**

- Newsletter Sign-up
- Donate

**Sign-up for the Cal GE-Free Newsletter**


Cal GE-Free's newsletter is a one of a kind source of news and information related to genetic engineering in agriculture in California.

**Donate**

Cal GE-Free is a broad-based coalition working towards restricting Genetic Engineering in California. In the five years of its existence Cal GE-Free has stilled the introduction of Ventria's pharmaceutical rice, built a big network of local activists who have enacted local restrictions in their own communities and protected the state from preemption. This strategic and timely work has been made possible by your support.

To make make a tax-deductible donation, send a check payable to Cal GE-Free at: 15290 Coleman Valley Rd., Occidental, CA 95465

Or click on the "Make a Donation" Link on the left to make a donation to Cal GE-Free.

A photograph of a classroom. A male professor in a grey shirt stands on the right, pointing his right hand towards a whiteboard. Several students are seated at desks in the foreground and middle ground, some looking towards the professor and others looking down at their papers or laptops. The room has a yellow wall and a whiteboard.

**Are applications in agriculture going to be the only targets?**

**GENE THERAPY?**

**GLOBAL WARMING?**

**NANOTECHNOLOGY?**

**Will the continuing, often anti-science debates affect the education, attitudes and opportunities for today's students?**



In Chapter 3 **“What Could Go Wrong? – A Partial List...”**

**CANCER** “The CaMV light switch and other viral promoters used in GM crops can also activate other, non-viral genes in the species where it ‘happens to be transferred. One consequence of such inappropriate over-expression of genes may be cancer’.”

**WAKING SLEEPING VIRUSES** “The nature of the CaMV promoter presents another risk, which is probably the greatest risk of GM crops. Laboratory research demonstrates that ‘the insertion of modified virus and insect virus genes into crops’ can ‘create highly virulent new viruses’.”

**UNPREDICTED TOXINS** “In human gene therapy, studies have verified that insertion mutation can lead to leukemia in children...In plants the disruptions may be similarly dangerous, producing unpredicted toxins.”

Jeffrey M. Smith