

The Existential Challenge to Agricultural Innovation

L. Val Giddings

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AEIC Fall Meeting (Virtual)

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About ITIF

- Independent, nonpartisan research and education institute focusing on intersection of technological innovation and public policy, including:
 - Innovation and competitiveness
 - IT and data
 - Telecommunications
 - Trade and globalization
 - Life sciences, agricultural biotech, and energy
 - Formulates and promotes policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress
 - World's top think tank for science and technology policy, according to the University of Pennsylvania's authoritative *Global Go To Think Tank* Index
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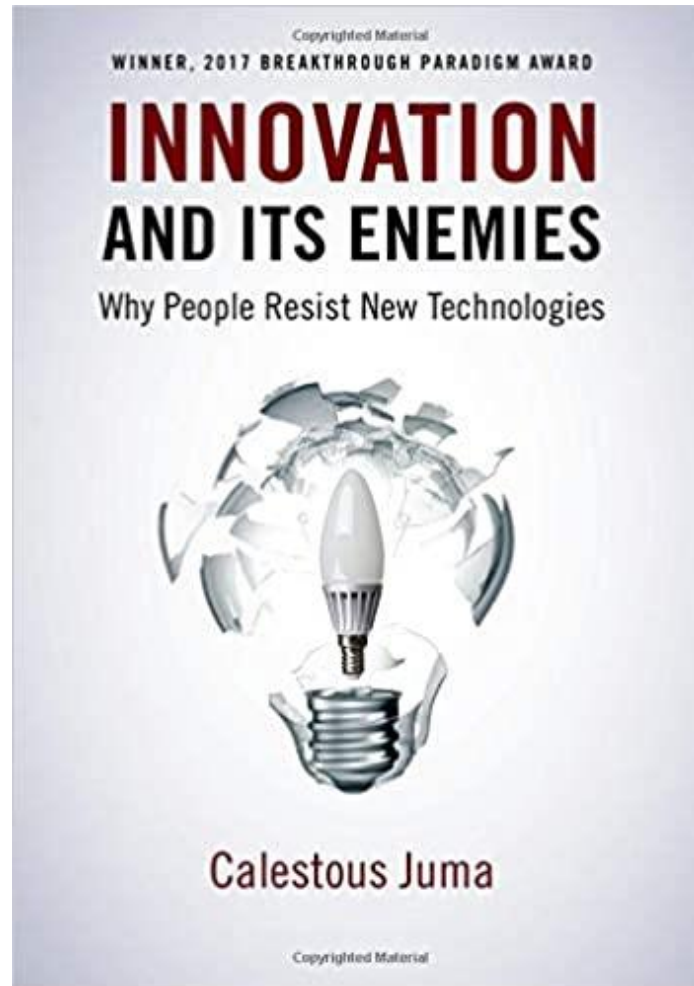
“A truly extraordinary variety of alternatives to the chemical control of insects is available. All have this in common: They are *biological* solutions, based on understanding of the living organisms they seek to control.”

--Rachel Carson, *Silent Spring*, 1962

Contents

- 1 The problem: Ag Innovation is under a multi-front assault**
 - 2 Governments are ambivalent**
 - 3 “We have met the enemy...”**
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Agricultural Innovation is under a multi-front assault



Media conveys the assault every day

Associated Press

EU wants to reduce pesticides use, promotes organic farming

Published: May 20, 2020 at 5:07 p.m. ET

By Associated Press

European farmers' association critical of the move, citing COVID-19 and other factors



Greenpeace asks to ban the use of GMOs and glyphosate in corn

Share this story



The organization explained that Genetically Modified and agrochemical Organisms affect native corn, in addition to contaminating the water and soil.



BREAKING CITY NEWS SEPTEMBER 14, 2020 / 6:36 AM / UPDATED 25 DAYS AGO

EU heading for lower sugar output as pest attacks bite

By Reuters Staff

3 MIN READ



PARIS, Sept 14 (Reuters) - The European Union is heading for a significant drop in sugar output this year after fields were devastated by pests and dry weather, making

Using hunger to feed an empire: How the agrochemical industry is exploiting the COVID-19 crisis

October 9, 2020 In Feature



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Using hunger to feed an empire: How the agrochemical industry is exploiting the COVID-19 crisis

16 Days of Global Action on Agroecology: Rural peoples mobilise for food systems change

TERRITORIES

"Agribusiness sells us poison"

September 6, 2020



Home > News > New GMOs and VrTH: Government inaction is illegal and ...

GMO 09.17.2020

New GMOs and VrTH: Government inaction is illegal and unacceptable



Last February the Council of State recognized that the techniques of site-directed mutagenesis and random mutagenesis in vitro produce regulated GMOs. The French government had until August 7 to comply by decree [1].

CAP calls for ban on sale of glyphosate, GBH



By Audrey Dermawan - September 30, 2020 @ 5:37am



“The Worst Types Of Ingredients Hidden In Kids' Cereal”



Opponents to Agricultural Innovation aligned with Anti Vaxxers



Disinformation is widespread and insidious

“...false news traveled farther, faster, deeper, and more broadly than the truth in every category of information that we studied, sometimes by an order of magnitude...”

Major funders are marketing agents for the organic food industry



Academics Review

Testing popular claims against peer-reviewed science

ORGANIC MARKETING REPORT

A report commissioned by Academics Review, an independent 501(c)(3) nonprofit organization.¹ Reviewed by: Bruce Chassy, PhD²; David Tribe, PhD³; Graham Brookes, MA⁴ and Drew Kershen, JD⁵, Principal researcher: Joanna Schroeder

Agricultural Innovation faces a multi-front assault

A Group Sows Seeds of Revolt Against Genetically Altered Foods

By Lucette Langnado Staff Reporter of The Wall
Street Journal
Oct. 12, 1999 1:56 am ET

 PRINT  TEXT



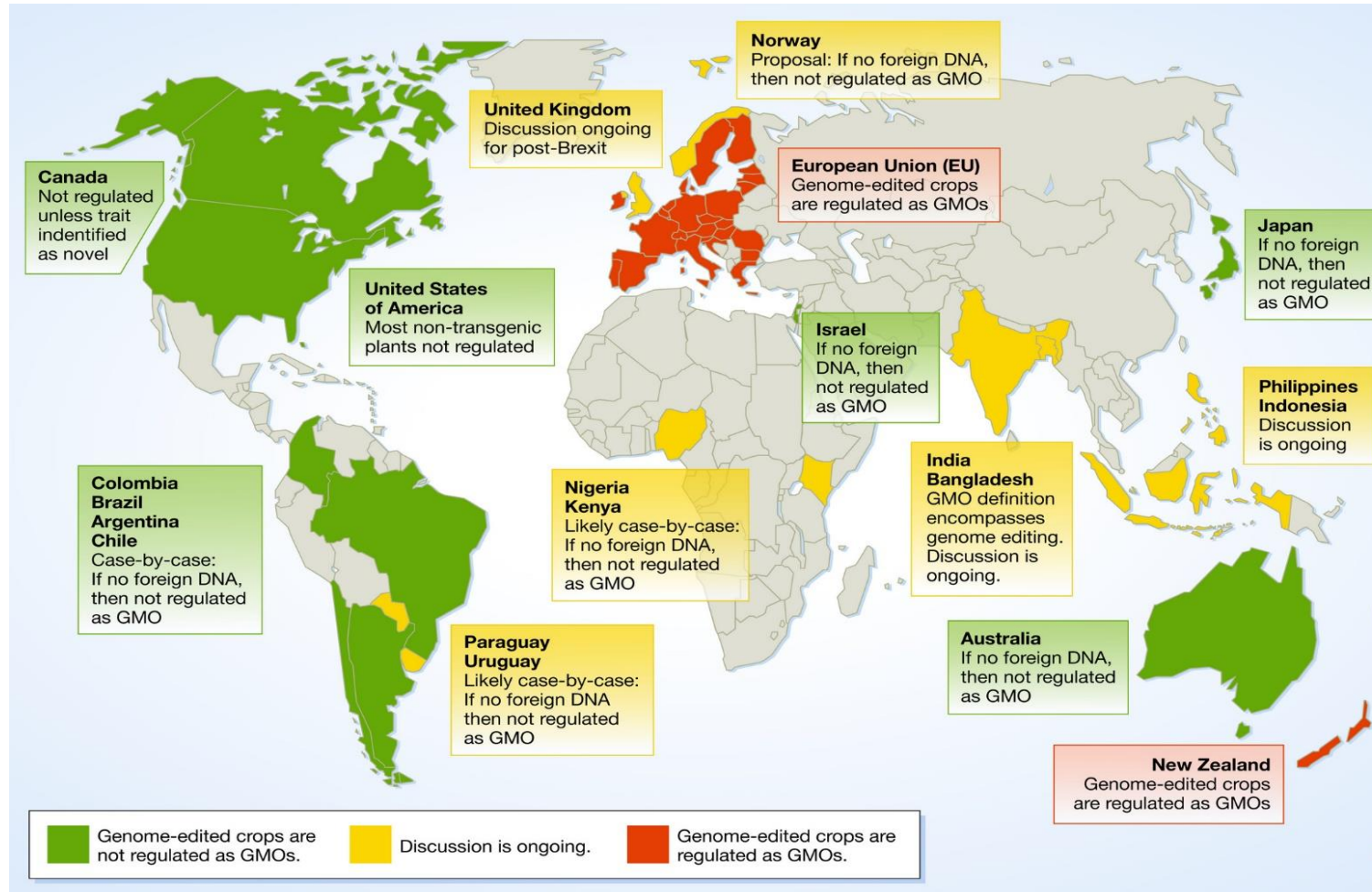
Cold Evil: Technology and Modern Ethics

presented by
Andrew Kimbrell



Twentieth Annual E. F. Schumacher Lectures
Salisbury, Connecticut
October 2000

If you think this is a friendly map you're not paying attention



Real and present dangers: accelerating in reverse

- Your ability to develop new seeds is being severely eroded
 - Your *existing* ability to use improved seeds under attack, eroding
 - You're losing ability to develop and market new active ingredients
 - You're losing access to *existing* active ingredients
-

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- 1 Agricultural Innovation Faces a Multi-front Assault**
 - 2 Governments are ambivalent**
 - 3 “We have met the enemy...”**
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Governments are ambivalent

- **Even the most supportive governments have been ineffective**
 - **9.29.2020 - FDA Releases “Feed Your Mind” Consumer Education Materials**
 - **FDA completely off base re gene edited animals & plants**
 - **USDA on Gene Editing – positive but too timid**
 - **EPA far behind the curve**
-

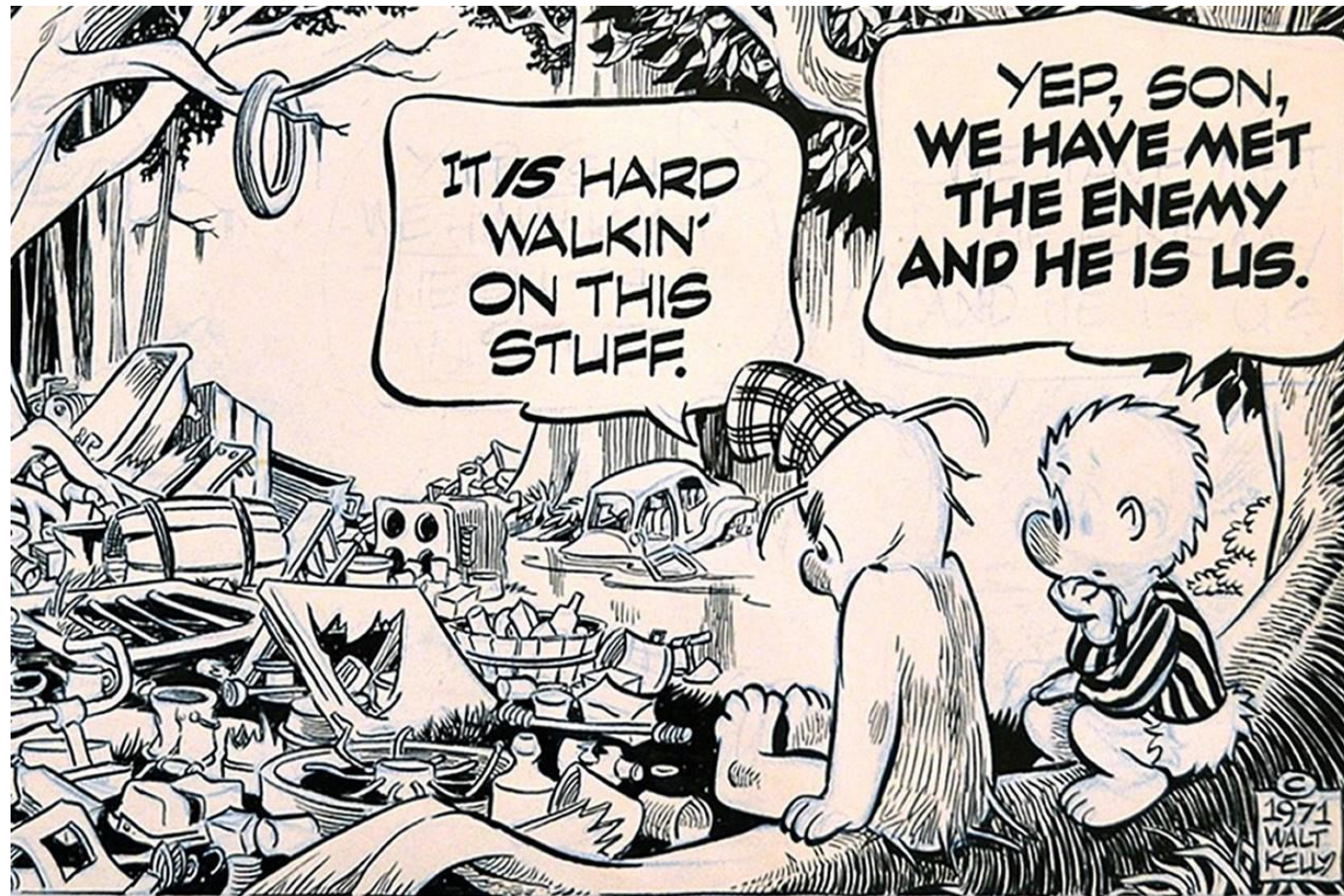
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 - 2 Governments are ambivalent (when they're not hostile)**
 - 3 “We have met the enemy...”**
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“We have met the enemy...”

- **Ag innovators have a brilliant story to tell**
 - **Ag innovation is the foundation of civilization**
 - **Virtually every human on the planet depends on it for survival and enjoys its benefits multiple times/day**
 - **Why are we not lionized???**
 - **We’ve allowed opponents to occupy the high ground**
-

“We have met the enemy...”



“We have met the enemy...”

- Tech providers are hobbled – cannot be effective advocates for themselves
 - Past efforts to enlist allies have not lived up to expectations
 - “Shooting the messenger”
 - Industry has not nailed the pivot
 - Innovation ecosystem has multiple needs
 - This requires multiple types of ally
 - This requires *sustained engagement*
-

“We have met the enemy...”

“Moral outrage inspires the passions much more than reason and facts - we've known this since David Hume - and so while the morality games of the zealots needs to be brought to a level playing field, this is very difficult and perhaps there need to be other voices.”

“We have met the enemy...”

“Industry hunkered down in the 1990s and are listening more to their internal communications managers than their public affairs reps.”

“We have met the enemy...”

“Industry has not helped itself and continues to shoot itself in the foot with poor PR and provision of information. This includes inaccurate data, use of unrealistic assumptions and over inflated impact assessments. These have little credibility with regulators. Even when these deficiencies are pointed out to them, no action is taken – example, ECPA’s report estimating impact of banning glyphosate in EU agriculture lacked credibility and overstated the impacts – the paper was never corrected/removed and is still on their website!”

“We have met the enemy...”

“Industry complains about how much money the antis spend – but have the biotech, seed, ag-chem sectors used their limited budgets on projects that have delivered good value? Did anyone independent ever evaluate the effectiveness of GMO Answers? What was its purpose? What did it achieve? What ROI has it delivered?”

“We have met the enemy...”

“There is too much free loading by industry off the goodwill and efforts of independent people. When these people ask industry for financial (and other) assistance, they get, at best, polite platitudes, but more usually, cold shouldered or ignored.”

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Reclaiming the high ground

1 Regulatory Reform

- **Governments will not do the right thing unless pushed**
 - **We have an excellent safety record**
 - **INDUSTRY IS AWOL**
 - **STOP AIMING LOW.**
-

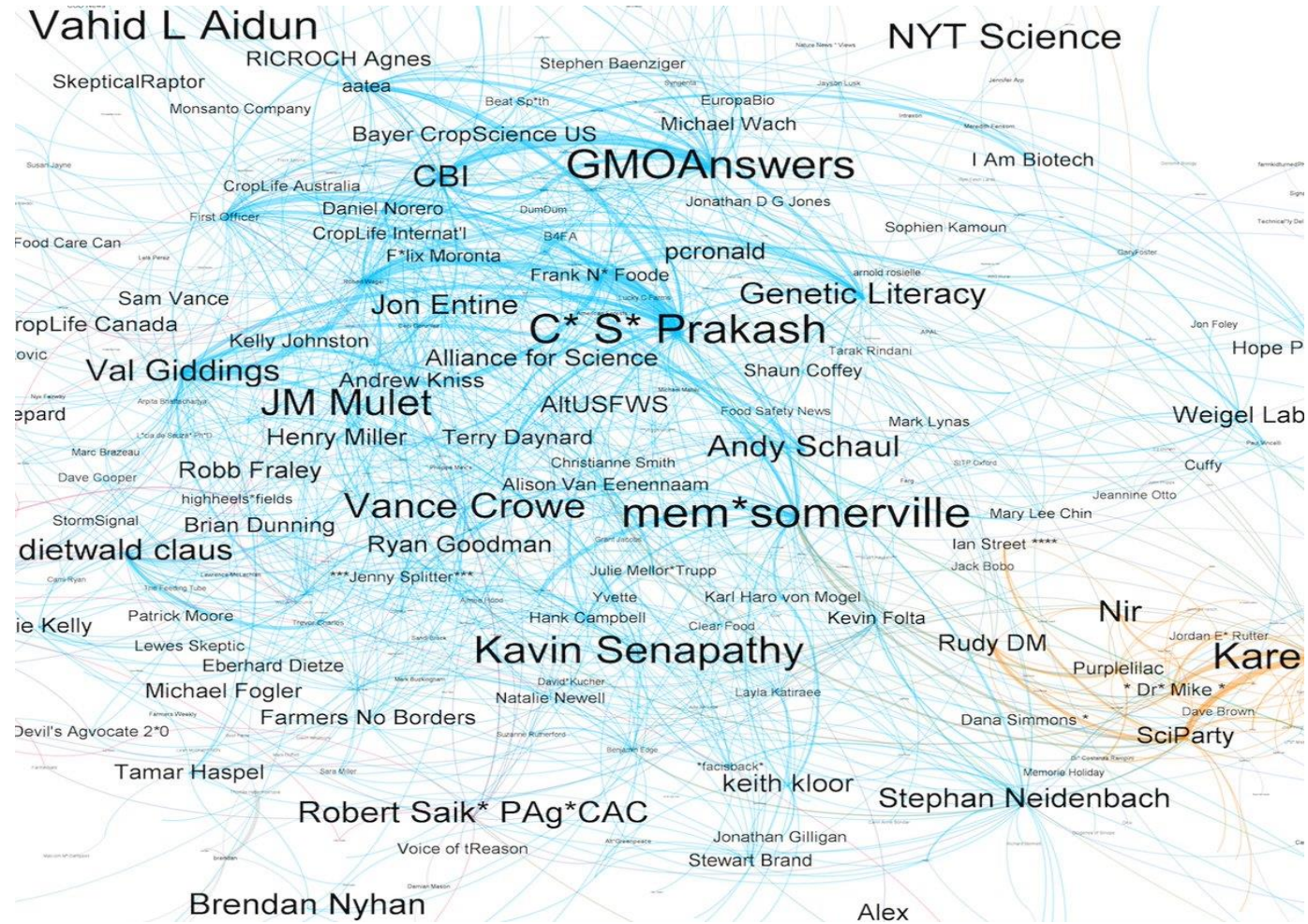
Reclaiming the high ground

1 Regulatory Reform

2 Social License: Engage through allies

- **Lies must be challenged.**
- **Tech providers are not the right messenger**
- **GMO Answers not credible to key target audiences**
- **Credible third-party voices – farmers, academics, think tanks**

Agbiotech Influencers on Twitter



Allies & influencers

1. Regulatory Reform

2 Social License: Engage Through Allies - Nurture third party validators

- Alex Avery
- Academics Review
- We Love GMOS & Vaccines
- Science Moms
- Food & Farm Discussion Lab
- Cornell Alliance for Science
- The Riskmonger
- ISAAA
- Genetic Literacy Project
- ITIF

Further Reading:

- Lucette Langnado, “A Group Sows Seeds of Revolt Against Genetically Altered Foods” Wall Street Journal, October 12, 1999 <https://www.wsj.com/articles/SB939682365264573572> reprinted at <https://www.iatp.org/news/group-to-oppose-genetically-altered-foods-in-us>
 - Calestous Juma, Innovation and its Enemies: Why People Resist New Technologies <https://wcfia.harvard.edu/publications/innovation-and-its-enemies-why-people-resist-new-technologies>
 - Jonathan Haidt, The Righteous Mind – Why Good People Are Divided by Politics and Religion <https://righteousmind.com/>
 - Alice Dreger, Galileo’s Middle Finger Heretics, Activists, and One Scholar's Search for Justice <https://www.amazon.com/Galileos-Middle-Finger-Heretics-Activists/dp/0143108115>
 - Sinan Aral, The Hype Machine - How Social Media Disrupts Our Elections, Our Economy, and Our Health—and How We Must Adapt <https://www.sinanaral.io/books>
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Thank You!

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Agbiotech Influencers on the WWW

