Global regulations on microbial biotechnology in food and agriculture

The Future of Microbial Biotechnology Workshop
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Outline

1) Who are USDA FAS and New Tech
2) Global regulatory environment
3) Future of microbial biotech in food and feed
USDA Foreign Agricultural Service

Who is FAS?

- Eyes, ears, voice of U.S. agriculture overseas
- Economists, Trade & Marketing Specialists, Scientists, other SMEs
- 93 International offices covering 171 countries

Programs and services

- Trade Policy
- Market Development and Export Assistance
- Data and Analysis
- Food Security
New Technologies and Production Methods Division

• Team of Trade Policy Specialists and Scientists

• A fundamental mission to maintain and open market access for U.S. food and ag. exports

• Specific focus to facilitate U.S. exports of biotechnology products for food and agriculture
FAS/New Tech maintains and expands market access for food and ag. biotech products

- Monitor regulatory developments and changes around the world and advocate for science-based and risk-proportionate regulations
- Coordinate with like-minded countries to improve landscape for products of ag. biotechnologies
- Create and support programming to inform ag. biotech discussions globally

Source: USDA flickr
USDA FAS Embassy Activities

Philippines: Philippines First in World to Approve Golden Rice for Propagation

July 26, 2021  |  Attaché Report (GAIN)  |  RP2021-0042

Contact: Office of Agricultural Affairs, Manila  |  (011-632) 301-4900
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Three factors to global success for commercial products

- Effective Product
- Regulatory Environment
- Market Acceptance
The Regulatory Environment

- Regulations
- Standard setting bodies
- International agreements and treaties
- Intended use
Case comparison: PRC and Canada

People’s Republic of China
• Only purified enzymes allowed into food or feed
• Enzyme must be whitelisted
• No label required when the purified enzyme is incorporated into food or feed

Canada
• Enzymes, proteins, other ingredients* 
• Must be on food additives list
• Labels not required on purified products

*derived from GE microbes not treated differently than conventional
Standard-setting bodies and international organizations’ guidelines for food and feed

- **Food and Agricultural Organization (FAO)**
  - Various Codex Alimentarius Committees, primarily on Food Additives
  - Guidelines for safety assessments of foods produced using rDNA microorganisms
- **Organisation for Economic Co-operation and Development (OECD)**
  - Previous work on non-food GEMs
  - Microorganism section in Working Group for the Safety of Novel Foods and Feeds
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Countries leading food innovation

TRADITIONAL USE
• The United States
• The United Kingdom
• Switzerland
• Canada
• France
• Italy
• Germany
• China
• Indonesia
• India
• Ireland

EMERGING USE
• The United States
• The United Kingdom
• Switzerland
• Canada
• France
• Italy
• Japan
• China
• Israel
• Singapore
• Netherlands
Thank You!

Thank you! Please feel free to reach out to me if you have questions or comments for the New Tech team!

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