



**Asia-Pacific
Economic Cooperation**

2015/HLPDAB/FOR/004

Agenda Item: 4

Low Level Presence Policy for GM Crops in Grain Shipments

Submitted by: CropLife Canada



APEC
PHILIPPINES
2 0 1 5

**Forum on the Global Alliance for Agriculture
Biotech Trade Model Policy on Low-level Presence
and Genetically Modified and Organic Farming
Co-Existence**

**Iloilo, Philippines
30 September 2015**



Low Level Presence Policy for GM Crops in Grain Shipments – Action Required

Stephen Yarrow, Vice-President, Plant Biotechnology
APEC HLPD Meeting 30 September 2015 Iloilo City, Philippines



www.croplife.ca

ADAMA Arysta LifeScience BASF The Chemical Company Bayer CropScience CANTERRA SEEDS

Cargill CHEMINOVA CANADA Chemtura AGRO SOLUTIONS Crop Production Services

Dow Dow AgroSciences PIONEER The miracles of science ENGAGE AGRO CO-OP

FMC FP Genetics Gowan CANADA IPCO La Coop FEDEREE

MONSANTO N.M. BARTLETT INC. Nufarm PETROCANADA PLANT PRODUCTS

PREMIER TECH HOME & GARDEN RICHARDSON Scotts SeCan Canada's Seed Partner synAgri

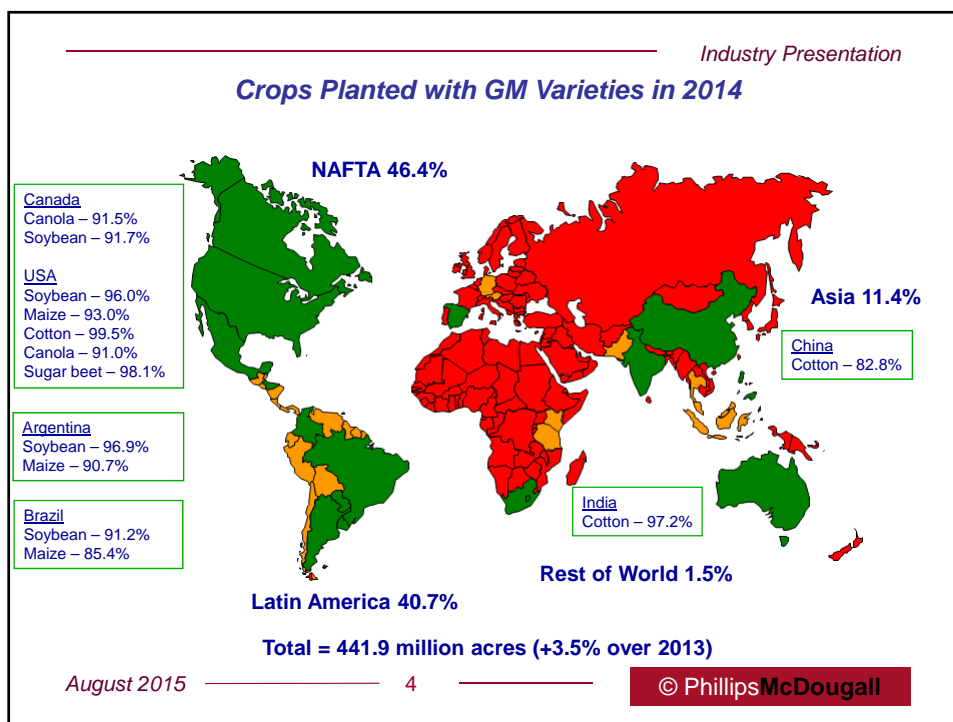
syngenta Novasource UFA UNIVAR VALENT

Representing the Canadian developers, manufacturers and distributors of pest control products and products of modern plant breeding.

CropLife Canada's role

- Increase awareness and acceptance of the benefits, safety and sustainability of plant science innovations
- Secure legislation, regulation and policy that encourage science and industry innovation
- Be world-leaders in lifecycle stewardship of pest control products and plant biotechnology traits
- Forge and lead alliances with stakeholder groups to help achieve the industry's vision and sound public policy
- **Facilitate creating choice for farmers and producers**

3



Industry Presentation

GM Seed Products Scheduled for Introduction in 2015

Year	Company	Trait / Product	Comment
2015	Bayer	Increased yield	Canola with increased yield
2015	Bayer	Liberty Link + Roundup Ready Canola	Glyphosate and glufosinate herbicide tolerance
2015	Bayer	Disease resistance + submergence tolerance rice	Disease and submergence tolerance
2015	Bayer	Insect resistant rice	Insect resistance
2015	Bayer	Balance GT Soybean - HPPD & glyphosate tolerant soybean	Glyphosate and HPPD herbicide tolerance
2015	Dow	WideStrike 3 Cotton	Insect resistant cotton
2015	Dow	Enlist Corn	2,4-D herbicide tolerance
2015	Dow	Powercore Corn Refuge Advanced	Above ground control of insect pests with glyphosate and glufosinate tolerance
2015	Dow	Nutrition trait 1	Improved nutrition trait in a non-identified crop
2015	Dow	No/Low saturated fat sunflower	Modified oil content
2015	Monsanto	TruFlex Genuity Roundup Ready canola	Glyphosate herbicide tolerance

August 2015

5

© PhillipsMcDougall

Industry Presentation

GM Seed Products Scheduled for Introduction in 2016

Year	Company	Trait / Product	Comment
2016	Bayer	Improved oil soybean	Modified oil content
2016	Bayer	Dual herbicide tolerance and novel insect resistant cotton	herbicide tolerance and insect resistance
2016	Bayer	Disease resistant + salinity tolerant rice	Disease and salt tolerance
2016	Bayer	Insect resistant + disease resistant rice	Insect and disease resistance
2016	Dow	Enlist Cotton	2,4-D and glufosinate herbicide tolerance
2016	Dow	Enlist E3 Soybean	2,4-D, glyphosate and glufosinate herbicide tolerance
2016	Dow	Enlist Soybean	2,4-D herbicide tolerance
2016	DuPont Pioneer	Liberty Link Canola	Glufosinate herbicide tolerance
2016	DuPont Pioneer	Optimum GLY Canola	Glyphosate herbicide tolerance
2016	DuPont Pioneer	DP-4114 Corn	Above and below ground control of insect pests with glyphosate and glufosinate tolerance
2016	DuPont Pioneer	Aphid resistant soybean	Resistance to aphids
2016	DuPont Pioneer	Multiple mode herbicide tolerance	Herbicide tolerance
2016	Monsanto	TruFlex Genuity Roundup Ready + Liberty Link canola	Glyphosate and glufosinate herbicide tolerance
2016	Monsanto	Genuity Bollgard III cotton	Above ground control of insect pests
2016	Monsanto	Genuity Bollgard II XtendFlex cotton	Glyphosate herbicide tolerance with lepidopteran pest resistance
2016	Monsanto	XtendFlex cotton	Dicamba and glyphosate herbicide tolerance
2016	Monsanto	Dicamba + glufosinate + glyphosate tolerant corn	Dicamba herbicide tolerance
2016	Monsanto	Dicamba tolerant corn	Dicamba, glufosinate and glyphosate herbicide tolerance
2016	Monsanto	2nd gen Insect Protection soybean	Above ground control of insect pests
2016	Monsanto	Genuity Roundup Ready 2 Xtend soybean	Dicamba and glyphosate herbicide tolerance

August 2015

6

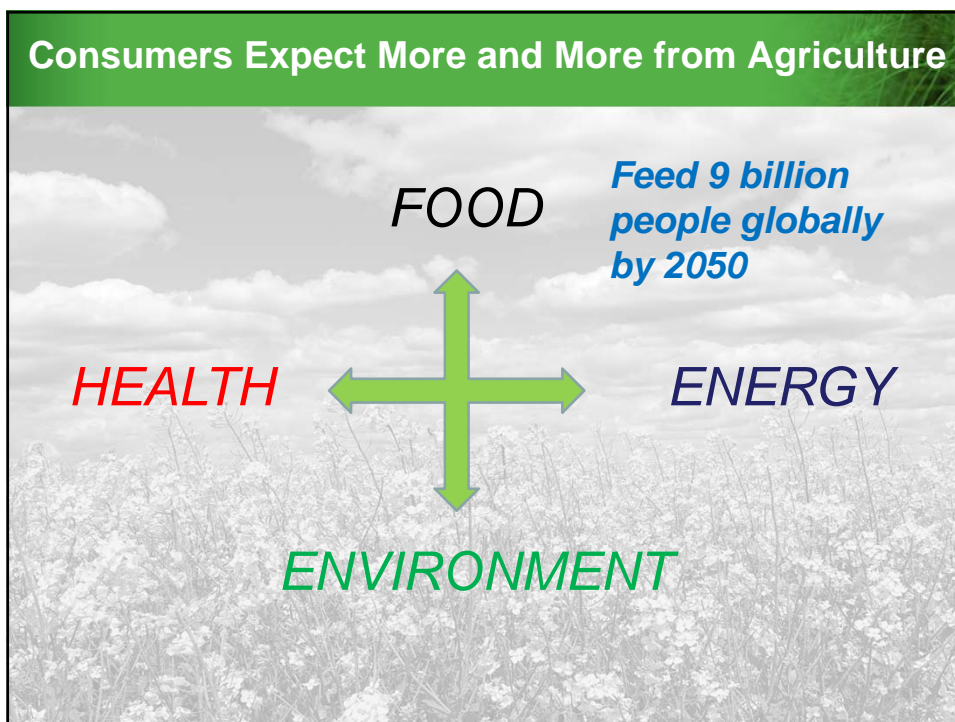
© PhillipsMcDougall



The “Green Revolution” increased food production and literally changed the world

- Improved the health status of 42 million preschoolers in developing countries
- Saved a billion people worldwide from starvation

Modern plant breeding through biotechnology will contribute to further benefits

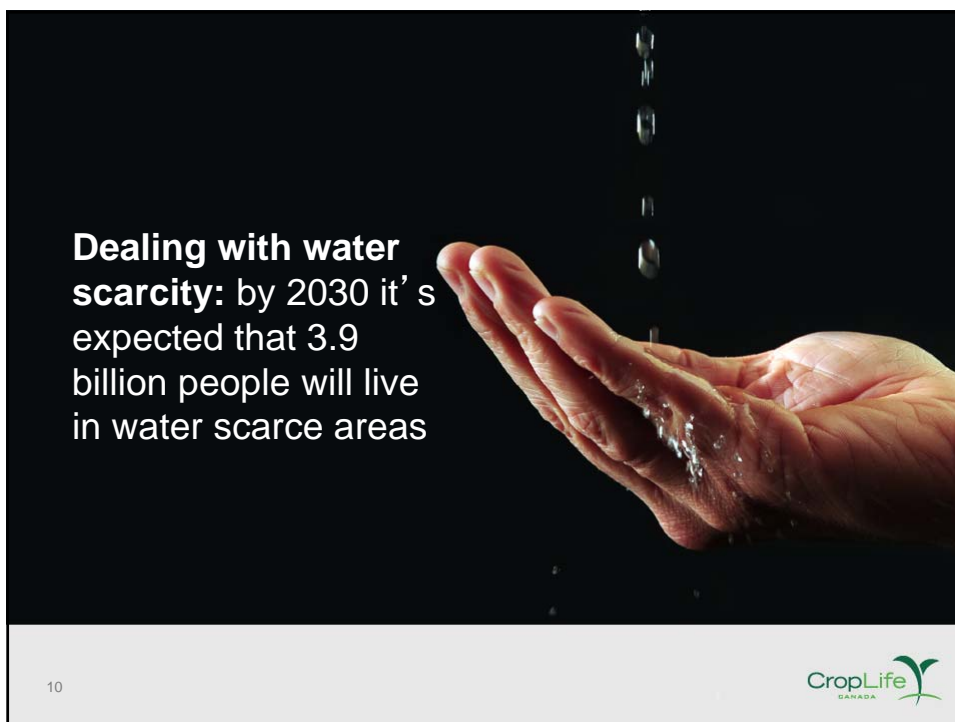




There are many new farming and food challenges anticipated


Public and private sector is looking ahead to deliver solutions for:

- Drought resistance
- Salinity tolerance
- New pest pressures
- Improved input usage
- Increase vitamin content in food
- Elimination of key allergens



Dealing with water scarcity: by 2030 it's expected that 3.9 billion people will live in water scarce areas

10





Adapting to climate change: farmers are increasingly faced with severe weather conditions, including drought, flooding, frost, severe winds and more.

11



The challenges facing agriculture

Feeding a growing world population: the population is expected to reach 9 billion by 2050



12



Safety of Plant Biotechnology Widely Accepted

- Environment, feed and food safety thoroughly addressed – Canadian Food Inspection Agency, Health Canada, USDA, EPA, FDA, EFSA, etc.
 - All products go through an extensive science-based safety review to ensure they are safe for people, animals, plants and the environment before they are made available for sale and use
- More than two decades of international research on biotech crops
- World Health Organization (WHO); Food & Agriculture Organization (FAO), and OECD others agree that current biotech products on the market are safe!
- Growing body of peer reviewed scientific papers on safety
- No safety issues with biotech crops to date – none!

13



But lack of synchronous approvals creates issues

- Once approved in one jurisdiction a GM product in grain may appear in another unintentionally – low level presence (LLP)
- Mixing can happen during cultivation, harvest, transportation or storage of grain
- Modern, efficient bulk grain handling systems are not designed for segregation of different grain sources
- Zero tolerance policies problematic



14



..... and LLP presents a serious export challenge

- Minimizing unpredictability becomes key to market access
- Once a new biotechnology trait is commercialized and enters the international grain handling system, it will co-mingle with other grain
- With modern detection equipment, it is not possible to fully and completely segregate crops
- Due to this fact, technology developers withhold traits from the marketplace until they are approved by all major markets regulating them
- An international policy on the commercially acceptable LLP of biotechnology is essential for trading confidence

Consensus on the need for a robust LLP policy

- Internationally
 - Industry: **Global Alliance for Ag Biotech Trade (GAABT)**
 - Governments: **Global Low Level Presence Initiative (GLI, 15 countries including Canada, U.S, Australia etc.)**

Low-level presence is the unintended presence, at low levels, of unauthorized GM crops in imported grain, food or feed; where the GM crop is authorized for food use in one or more jurisdictions but is not authorized in country of import



LLP policy will provide stability

An LLP policy should:

- Recognize that LLP is a compliance issue, not a safety issue
- Product has been approved, under CODEX guidelines, by at least one country, so no safety concerns
- Set a reasonable **compliance or marketing threshold** which maximizes the value of the grain and minimizes cost inefficiencies
- Industry seeking a compliance threshold level of 5%

17



Bottom line – zero does not work

- A zero tolerance policy for products of biotechnology does not acknowledge the low level of risk and adds unnecessary cost to the system
- A robust LLP policy supports trade and keeps costs of down for both the industry and the government
- This approach also benefits the consumer as it helps combat rising commodity prices and ensures food security is not compromised due to asynchronous approvals

18



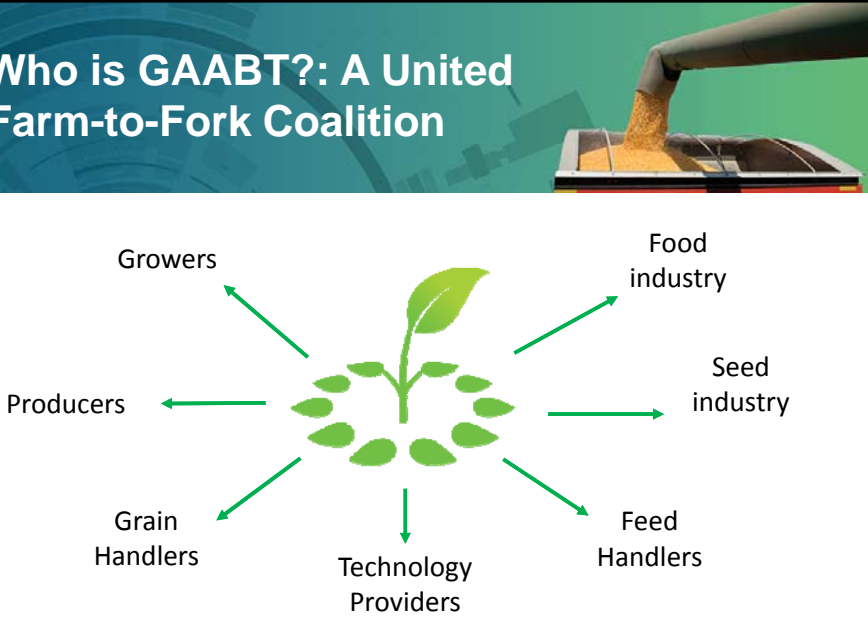


Proposed GAABT Policy Model

 Global Alliance for Ag Biotech Trade


 CropLife CANADA

Who is GAABT?: A United Farm-to-Fork Coalition



GAABT.org

20

 Global Alliance for Ag Biotech Trade

Diverse Membership Across Agriculture




asta
first—the seed®


PIONEER


Bayer CropScience


NATIONAL ALFALFA & FORAGE ALLIANCE
NAFA


MONSANTO


Gafta


GMA
The Association of Food, Beverage
and Consumer Products Companies


CropLife
INTERNATIONAL


syngenta


U.S. WHEAT
ASSOCIATES


CSTA ACCS


Dow AgroSciences


NATIONAL
CORN GROWERS
ASSOCIATION


INTERNATIONAL
GRAIN TRADE
COALITION


U.S. GRAINS
COUNCIL


National
Cotton
Council
OF AMERICA


SEED IS LIFE
ISF
International Seed Federation


Global Alliance
for Ag Biotech Trade

21

GAABT's Mission



Working together, GAABT encourages the development of trade policies that facilitate the movement of seed, grain and processing ingredients, and reduce the potential for trade disruptions.

GAABT seeks practical solutions to trade-related issues, e.g. LLP

GAABT.org

22


Global Alliance
for Ag Biotech Trade



Principles For Practical Solutions to LLP


The Reality

Zero presence of commercialized agricultural biotech-derived products in global trade is not achievable

LLP includes only products that have already passed a safety assessment

GAABT.org

23

Principles For Practical Solutions


Food and feed safety assessments should be science-based

Risk management approaches should be proportionate to risk.

LLP solutions are temporary and hence does not replace the goal of obtaining full approval of new biotech crops destined for grain imports.

GAABT.org

24





Principles For Practical Solutions


Information related to the commercial and regulatory status of agricultural biotechnology traits should be publicly available, comprehensive and up-to-date.

Importing and exporting governments should work together to harmonize agricultural biotechnology policies and synchronize trait approvals.

Existing national legal frameworks and sovereign authority of individual governments should be respected. Solutions should be compatible with international standards and agreements.

GAABT.org

25





What is a Practical LLP Policy?


Predictable	Efficient	Achievable
Enforceable	Specific & Comprehensive	Transparent

GAABT.org


26




What is a Practical LLP Policy?




Predictable	Efficient	Achievable
Enforceable	Specific & Comprehensive	Transparent

GAABT.org
27



What is a Practical LLP Policy?




Predictable	Efficient	Achievable
Enforceable	Specific & Comprehensive	Transparent

GAABT.org
28



What is a Practical LLP Policy?




Predictable	Efficient	Achievable
Enforceable	Specific & Comprehensive	Transparent

GAABT.org
29


What is a Practical LLP Policy?



Predictable	Efficient	Achievable
Enforceable	Specific & Comprehensive	Transparent

GAABT.org
30


What is a Practical LLP Policy?

Predictable	Efficient	Achievable
Enforceable	Specific & Comprehensive	Transparent

GAABT.org

31



Sound Policies Can Meet This Criteria


- Create a proactive LLP compliance threshold in grain imports – 5%
- Develop a mechanism to motivate regulatory submission for a detected product
- Why?
 - Does not require bilateral/multilateral agreements
 - Allows for smooth flow of trade and limits any disruption
 - Ensures products meet regulatory guidelines before widespread market access

Title

32



Sound Policies Can Meet This Criteria



What If...


An unauthorized event is detected above the LLP compliance threshold?

➔


An unauthorized event is below the compliance threshold & government has received a regulatory submission?

➔

An unauthorized event is detected & the government has not received a regulatory submission?

GAABT.org
33


Sound Policies Can Meet This Criteria



What If...

An unauthorized event is detected above the compliance LLP threshold?


➔

An unauthorized event is below the compliance threshold & government has received a regulatory submission?


➔

An unauthorized event is detected & the government has not received a regulatory submission?

The shipment should be managed in accordance with relevant national laws and regulations – it is out of compliance

GAABT.org
34


Sound Policies Can Meet This Criteria




What If...


```

    graph LR
      A[An unauthorized event is detected above the LLP compliance threshold?] --> B[An unauthorized event is below the compliance threshold & government has received a regulatory submission?]
      B --> C[An unauthorized event is detected & the government has not received a regulatory submission?]
  
```

The shipment shall be accepted and no action is required by the importer, shipper, or developer – in compliance.

GAABT.org 35 

Sound Policies Can Meet This Criteria




What If...

```

    graph LR
      A[An unauthorized event is detected above the LLP compliance threshold?] --> B[An unauthorized event is below the compliance threshold & government has received a regulatory submission?]
      B --> C[An unauthorized event is detected & the government has not received regulatory a submission?]
  
```

In this situation.....

GAABT.org 36 

Sound Policies Can Meet This Criteria



- Step 1** *Shipment accepted, but regulatory dossier is required within 60 days.*
- Step 2** *If dossier is received, 5% threshold remains in place until FFP evaluation is completed.*
- Step 3** *If no dossier is NOT submitted, 5% threshold expires and other risk management actions may be taken – out of compliance*

GAABT.org

37



GAABT is Fully Committed to Practical LLP Solutions



- **How can GAABT improve this policy model?**
- **Are there scenarios GAABT has not considered?**
- **GAABT remains committed to contribute to the conversation at upcoming GLI meetings**
- **Other comments/questions?**

GAABT.org

38

