MINISTRY OF NATURAL RESOURCES
AND ENVIRONMENTAL SUSTAINABILITY

BIOSYM
BIOSAFETY SYMPOSIUM 2025
21 AUGUST 2025

JABATAN BIOKESELAMATAN

BIOSAFETY SYMPOSIUM

STRENGTHENING BIOSAFETY FOR FUTURE SUSTAINABILITY

21 August 2025 | Thursday

DoubleTree by Hilton, Shah Alam

gef | UN environment programme | ASEAN MALAYSIA 2025 | MALAYSIA MADANI kemampanan | Visit Malaysia 2026 Truly Asia

Insights on Biosafety Regulatory Approach, Local Innovations and Public Engagement Initiatives

Philippines

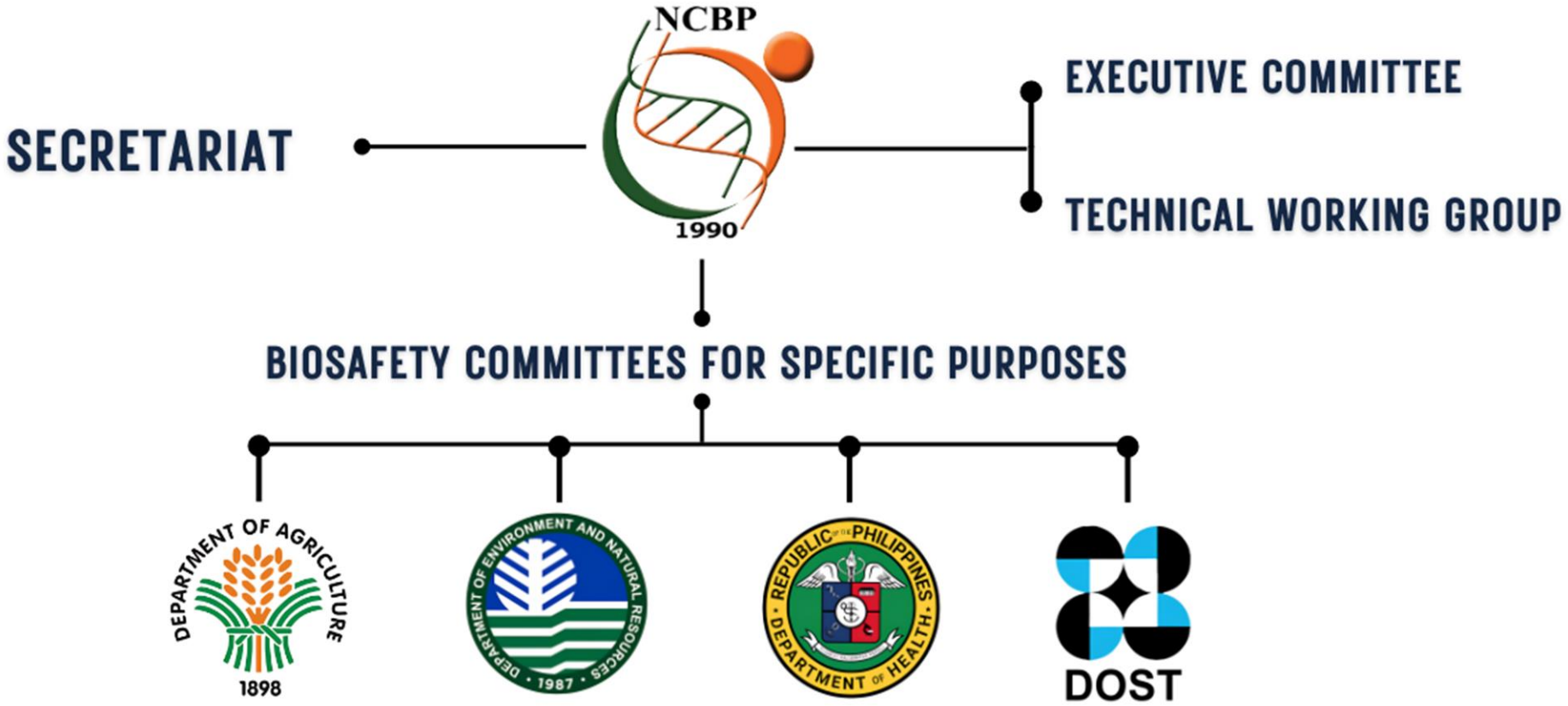
Biosafety Regulatory Approach

How are GM crops regulated in the Philippines?

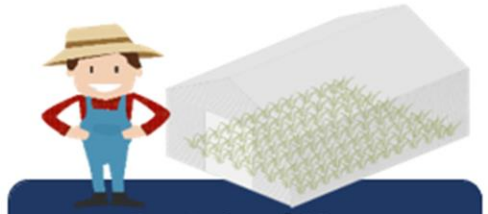
DOST-DA-DENR-DOH-DILG
Joint Department Circular[1]
No. 01, series of 2021

Subject: **Rules and Regulations for the Research and Development, Handling and Use, Transboundary Movement, Release into the Environment, and Management of Genetically Modified Plant and Plant Products Derived from the Use of Modern Biotechnology**

THE PHILIPPINE BIOSAFETY FRAMEWORK AS PROPOSED IN THE NATIONAL BIOSAFETY FRAMEWORK



ACTIVITIES REQUIRING BIOSAFETY APPROVAL



Contained Use

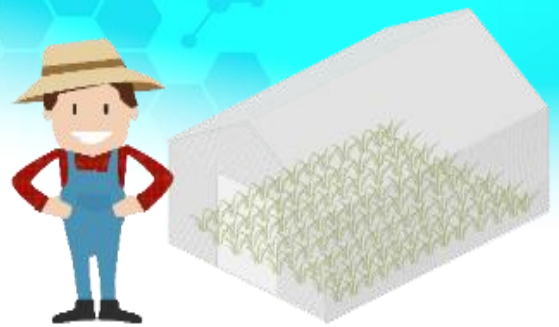
Field Trial

Commercial Propagation

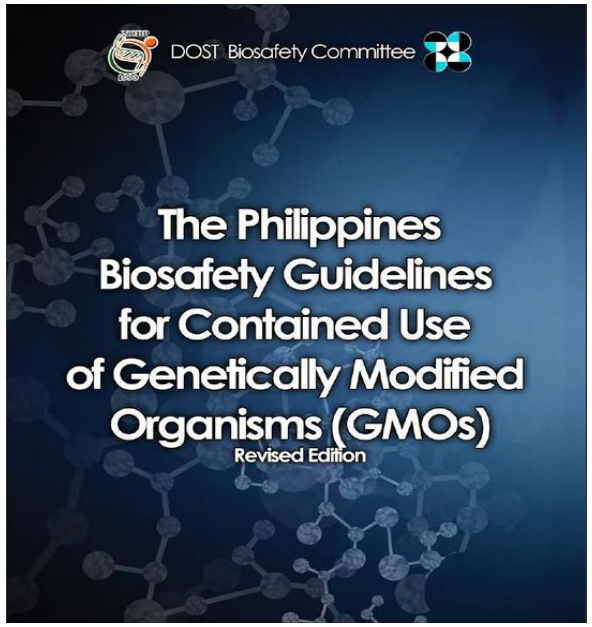
Supervised by the DOST

Supervised by the DA

Direct Use

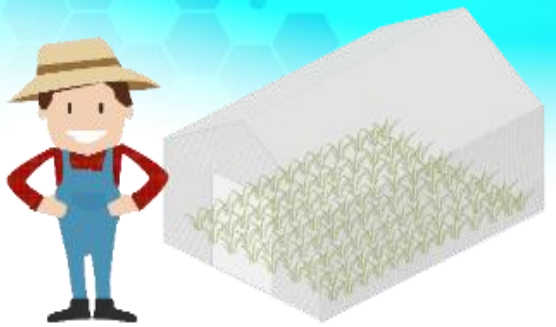


CONTAINED USE



Policy on Contained Use and Confined Test of Regulated Articles.

The contained use, including experiments inside **laboratory, screenhouse, greenhouse, and glasshouse, and confined test** of regulated articles shall be **governed by the DOST-BC** in accordance with the Biosafety Guidelines for Contained Use of Genetically Modified Organisms.



CONTAINED USE

- Approval shall be based on satisfactory compliance of the applicant with biosafety requirements imposed by the DOST BC

- Certification from the DOST-BC that the GM application has completed the experiment for contained use or confined test will be issued

- Certificate of Contained Use Completion is one of the requirements needed in the application for field trial.

CONTAINED USE

FIELD TRIAL

SECTION 10. Policy on Field Trial of Regulated Articles.

Only regulated articles that satisfactorily passed the process on contained use or confined test supervised and officially endorsed by DOST-BC may be subject of application for a Biosafety Permit for Field Trial

FIELD TRIAL

- Small scale activity, usually less than 1 hectare
- Only authorized personnel are allowed inside the trial site
- Fence is installed to ensure that stray animals are excluded from the site

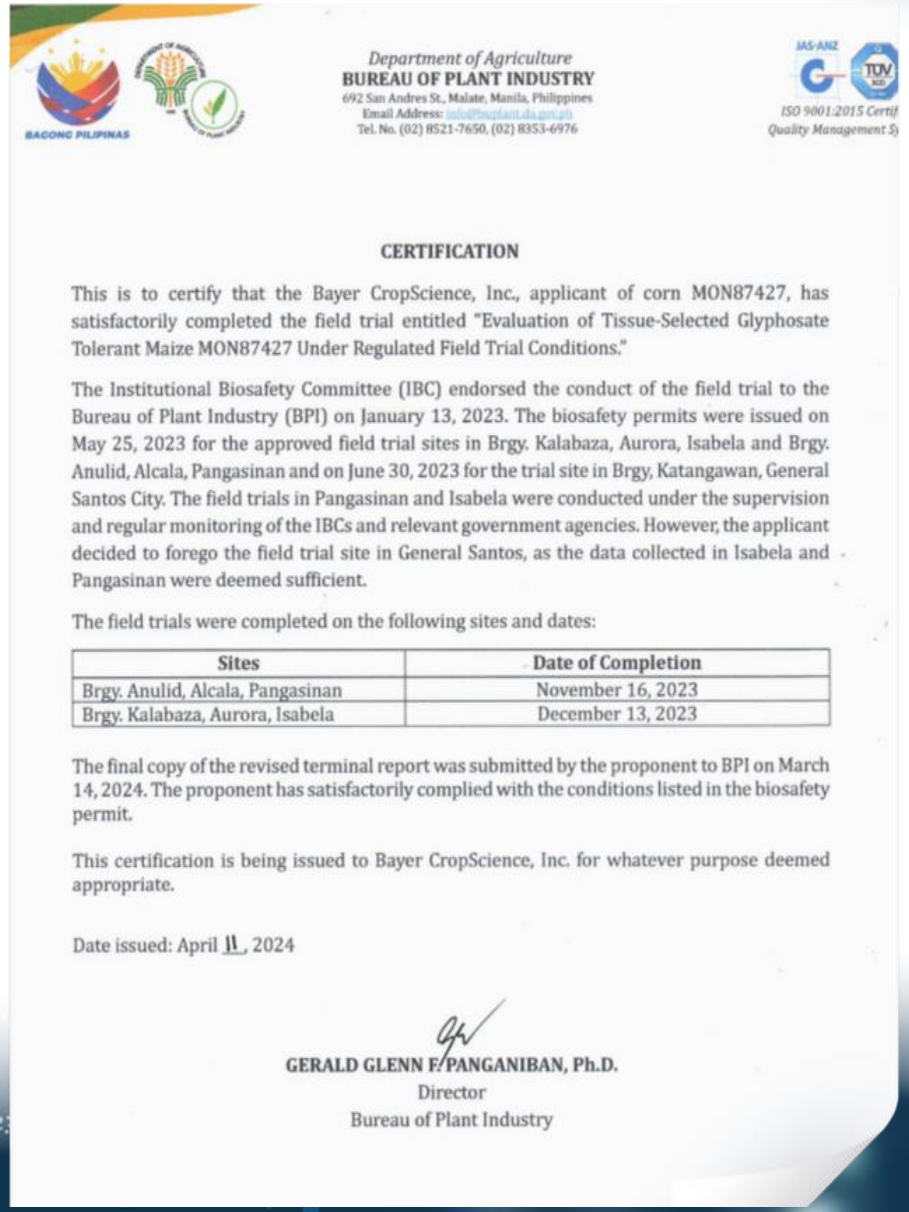
Viable plant materials are heat-killed

Vegetative parts are plowed under

Viable plant materials are buried at a designated spot within the site

Certificate of Field Trial Completion

- Issued by the BPI upon satisfactory completion of field trial in the country
- One of the requirements needed for the application for commercial propagation



Department of Agriculture
BUREAU OF PLANT INDUSTRY
692 San Andres St., Malate, Manila, Philippines
Email Address: info@bpiplant.da.gov.ph
Tel. No. (02) 8521-7650, (02) 8353-6976

ISO 9001:2015 Certif
Quality Management S

CERTIFICATION

This is to certify that the Bayer CropScience, Inc., applicant of corn MON87427, has satisfactorily completed the field trial entitled "Evaluation of Tissue-Selected Glyphosate Tolerant Maize MON87427 Under Regulated Field Trial Conditions."

The Institutional Biosafety Committee (IBC) endorsed the conduct of the field trial to the Bureau of Plant Industry (BPI) on January 13, 2023. The biosafety permits were issued on May 25, 2023 for the approved field trial sites in Brgy. Kalabaza, Aurora, Isabela and Brgy. Anulid, Alcala, Pangasinan and on June 30, 2023 for the trial site in Brgy, Katangawan, General Santos City. The field trials in Pangasinan and Isabela were conducted under the supervision and regular monitoring of the IBCs and relevant government agencies. However, the applicant decided to forego the field trial site in General Santos, as the data collected in Isabela and Pangasinan were deemed sufficient.

The field trials were completed on the following sites and dates:

Sites	Date of Completion
Brgy. Anulid, Alcala, Pangasinan	November 16, 2023
Brgy. Kalabaza, Aurora, Isabela	December 13, 2023

The final copy of the revised terminal report was submitted by the proponent to BPI on March 14, 2024. The proponent has satisfactorily complied with the conditions listed in the biosafety permit.

This certification is being issued to Bayer CropScience, Inc. for whatever purpose deemed appropriate.

Date issued: April 11, 2024

GERALD GLENN F. PANGANIBAN, Ph.D.
Director
Bureau of Plant Industry

CONTAINED USE

FIELD TRIAL

COMMERCIAL PROPAGATION

SECTION 15. Policy on Commercial Propagation of Regulated Articles.

No regulated article shall be released for commercial propagation unless:

- **Biosafety Permit Secured** – A permit for Commercial Propagation has been issued.
- **Risk Assessment** – Field trial results show no greater risks to biodiversity, human health, or animal health compared to the conventional counterpart.
- **Food and Feed Safety** – Studies confirm safety equivalent to that of the conventional counterpart.
- **Pest-Protected Plants** – If applicable, the transformation event serving as the plant-incorporated protectant (PIP) is registered with the Fertilizer and Pesticide Authority (FPA).

SECTION 20. Policy for the Direct Use of Regulated Articles for Food and Feed, or for Processing.

No regulated article, whether imported or developed domestically, shall be permitted for direct use as food and feed, or for processing, unless:

- **Biosafety Permit Secured** – A permit for Commercial Direct Use has been issued by BPI
- **Imported Regulated Article-** For imported products, the regulated article has been authorized for commercial distribution as food and feed in its country of origin.
- **Risk to Human Health** – Regardless of intended use, the regulated article poses no greater risks to human health than its conventional counterpart, consistent with:

  Codex Alimentarius Commission Guideline 44-2003: Principles for the Risk Analysis of Foods Derived from Modern Biotechnology

  Codex Alimentarius Commission Guideline 45-2003: Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants

OVERVIEW OF PROCESSING

- ✓ Submission of application requirements to BPI
- ✓ Checking of sufficiency of the application

- ✓ Joint Assessment Group

- ✓ Public Participation

- ✓ Decision of BPI Director
- ✓ Issuance of Permit and Monitoring

JOINT ASSESSMENT GROUP

Composed of qualified representatives or personnel from DA, DENR, DOST, and DOH

evaluate applications for field trial, commercial propagation, and direct use to determine whether article does not pose greater risks to human health and the environment compared to its conventional counterpart

make its recommendations to the BPI Director

PROCESSING TIME

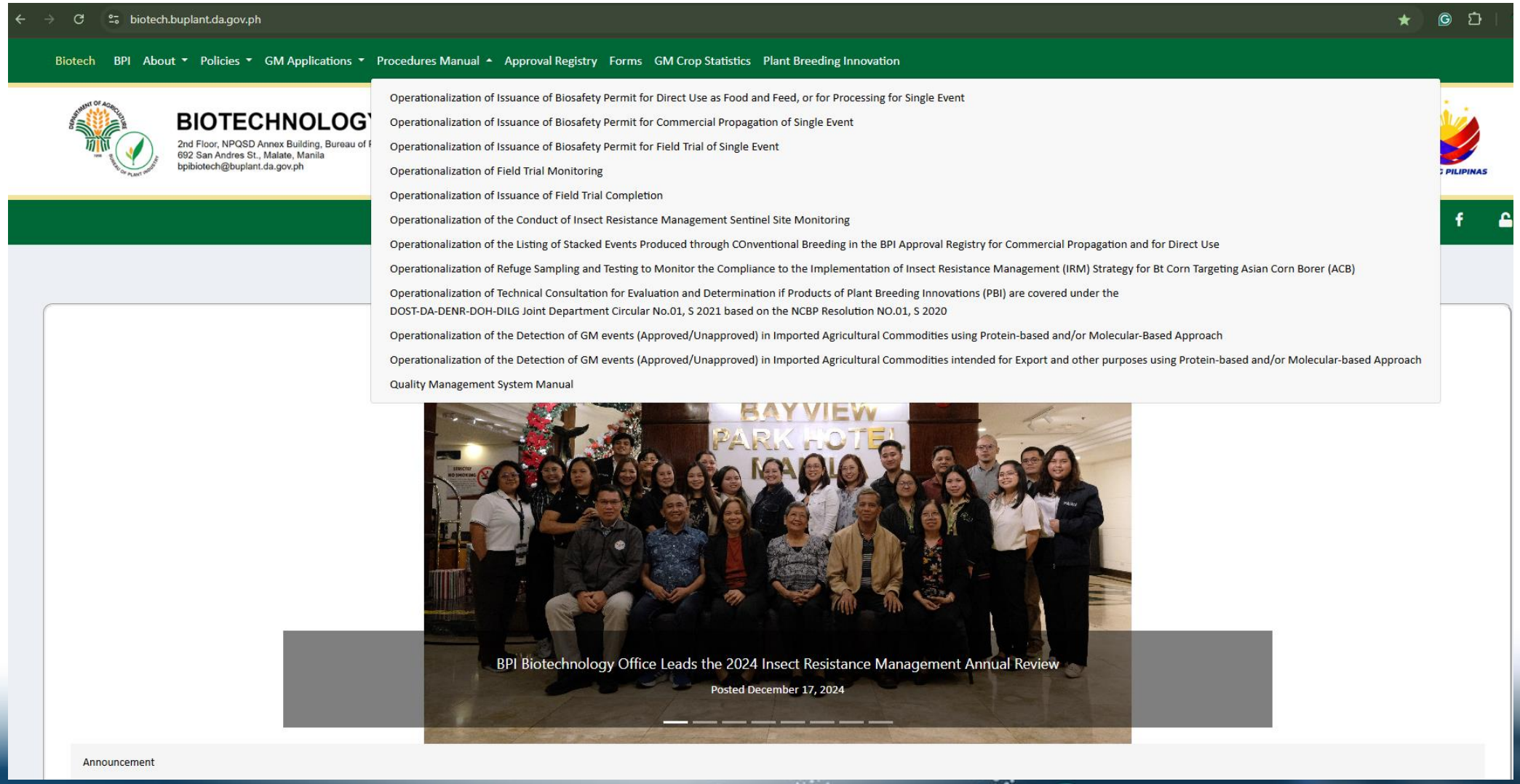
3 days
Pre-Assessment

32 days
- JAG Assessment
- Public Consultation

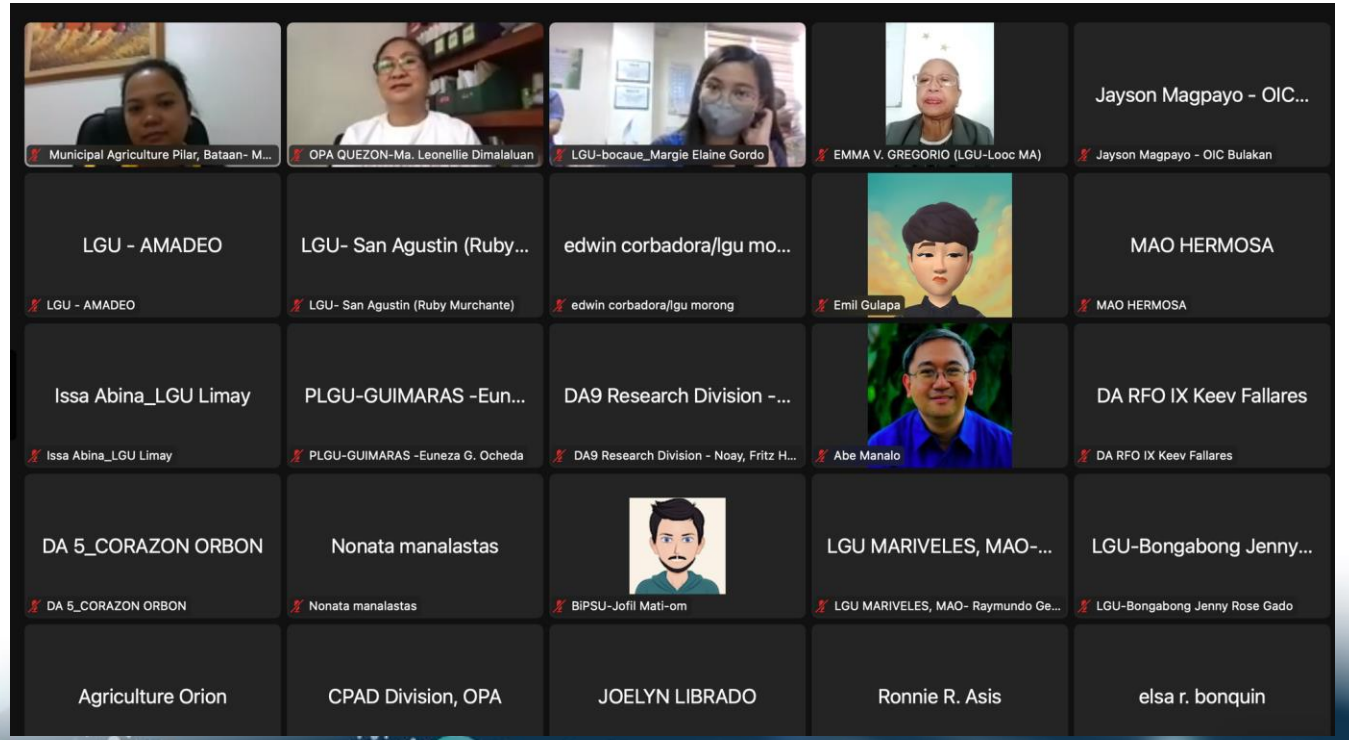
5 days
Decision from BPI Director

35-40
WORKING DAYS

BIOTECHNOLOGY OFFICE WEBSITE



PUBLIC BRIEFING FOR NEW REGULATIONS



TOTAL GM CROP APPROVALS

Field Trial

4

Single Events

Commercial Propagation

11

Single Events

Commercial Propagation

8

Stacked Events

Direct Use

64

Single Events

Direct Use

47

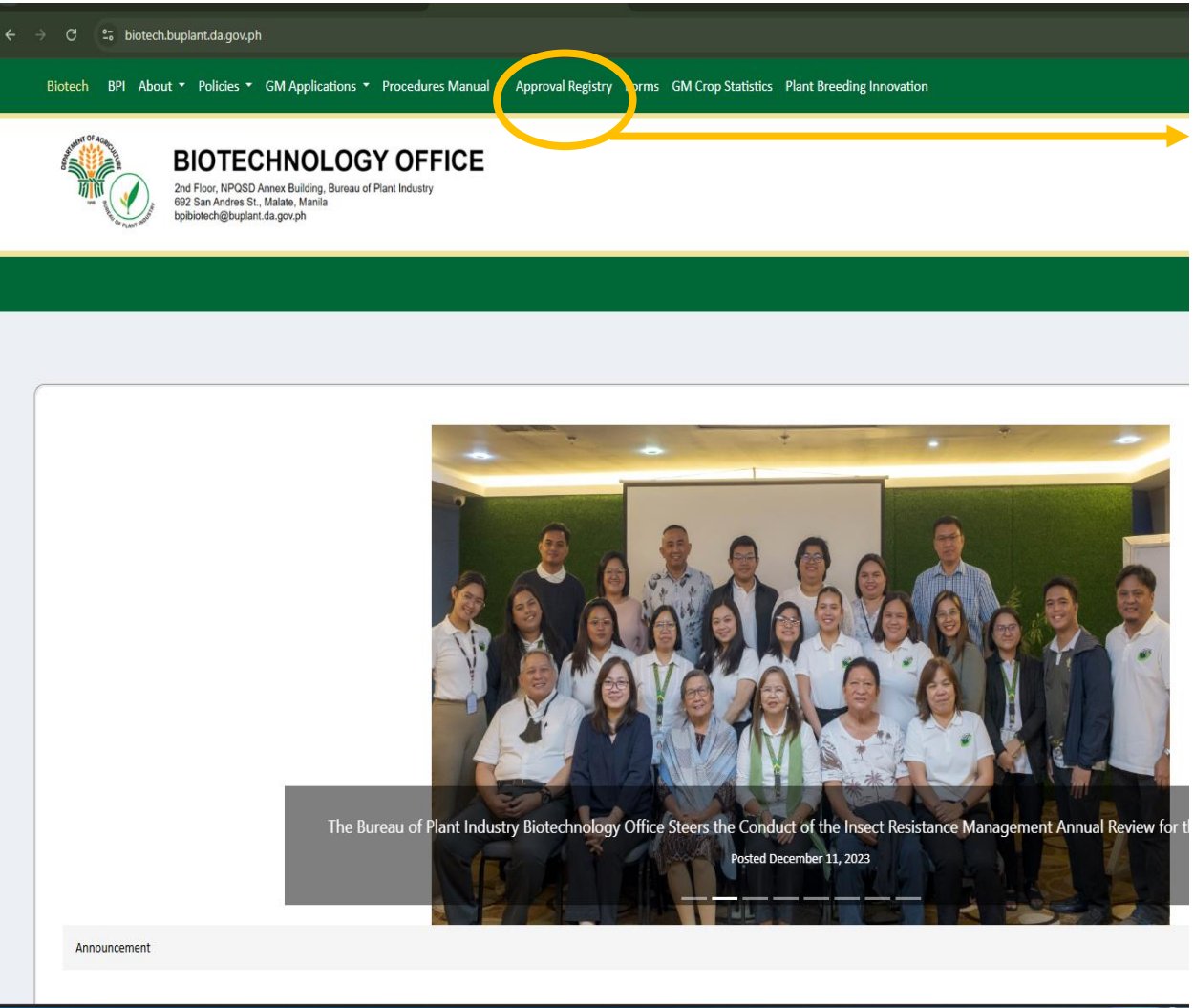
Stacked Events

134

Total Approvals

Source: BPI Approval Registry as of April 4, 2025

APPROVAL REGISTRY



BPI APPROVAL REGISTRY
April 4, 2025

I. Regulated Articles (single transformation event) for Direct Use as Food and Feed, or For Processing

1. Soybean A5547-127
2. Corn MON88017
3. Corn MON810
4. Corn MIR604
5. Corn DAS59122-7
6. Soybean SYHT0H2
7. Soybean MON87701
8. Soybean MON89788
9. Soybean MON87708
10. Corn 3272
11. Corn MZHG0JG
12. Soybean MON87751
13. Soybean 40-3-2
14. LLcotton25
15. Cotton GHB614
16. Soybean DP305423
17. Cotton T304-40
18. Cotton GHB119
19. Corn MON87411
20. Oilseed Rape Ms8
21. Oilseed Rape Rf3
22. Corn TC1507
23. Soybean DAS44406-6
24. Soybean DAS68416-4
25. Corn DAS 40278-9
26. Soybean DAS81419-2
27. Canola RT73
28. Corn NK603
29. Cotton MON1445
30. Corn MON87419
31. Alfalfa J163
32. Canola DP73496
33. Corn T25

TRANSPARENCY ON GM APPLICATIONS

biotech.buplant.da.gov.ph/2021propagation.html

Status of Application for Commercial Propagation

Search

Transformation Event (Application Form)	Trait	Technology Developer	Public Information Sheet	Status of Public Comment	Date Applied	Date Approved	Biosafety Permit	Date Posted	Decision Document	Decision Document Date Posted
EE-1 Eggplant	Insect Resistant	University of the Philippines Los Banos	Public Information Sheet of EE-1 Eggplant	Closed	March 31,2022	October 18, 2022	Biosafety Permit of EE-1 Eggplant	October 19, 2022	Decision Document of Eggplant EE-1	November 1, 2022
Bt Cotton - GFM cry1A	Insect Resistant	Philippine Fiber Industry Development Authority	Public Information Sheet of Bt Cotton - GFM cry1A	Closed	March 20, 2023	August 24, 2023	Biosafety Permit of Bt Cotton - GFM cry1A	August 25, 2023	Decision Document of Bt Cotton - GFM cry1A	September 8, 2023
Corn MON 87427	Herbicide Tolerant	Bayer CropScience, Inc.	Public Information Sheet of Corn MON 87427	Closed	June 6, 2024	February 12, 2025	Biosafety Permit of Corn MON87427	February 14, 2025	Decision Document of Corn MON 87427	February 28, 2025

Updated as of October 2023

DECISION DOCUMENTS

Regulatory Decision on the Application of Bt Cotton-GFM Cry1A for Commercial Propagation

I. Brief Identification of the Genetically Modified Organism

Designation:	Bt Cotton-GFM Cry1A
Applicant:	Philippine Fiber Industry Development Authority (PhilFIDA)
Host Plant:	Cotton (*Gossypium hirsutum* L.)
Trait Description:	Bt Cotton is genetically modified through the insertion of the synthesized insecticidal gene, cry1Ab-Ac which encodes for the insecticidal Bt-protein that confers resistance to the cotton bollworm.
Trait Introduction Method:	Pollen Tube Pathway
Donor Organism (s):	*Bacillus thuringiensis* subsp. kurstaki – the donor bacterium where the cry1Ab-Ac synthetic fusion gene was derived *Escherichia coli* Tn5 transposon – source of *nptII (Neophosphotransferase II)* used as a marker gene *Escherichia coli* – source of the *uidA* gene encodes beta-D-glucuronidase (GUS) allowing detection of transformed cells in the laboratory
Proposed Use:	For commercial propagation

II. History of Safe Use of the Host Plant

Cotton has been used by humans for thousands of years. Various methods of processing using cotton have been developed leading to its widespread adoption. Cotton is a common source of natural fibers mainly used in manufacturing of textiles. The seeds, on the other hand, are used to extract edible oil utilized for salad dressing, margarines, and vegetable oil. Inactivation or removal of gossypol and cyclopropenoid fatty acids (CPFAs) during processing has enabled use of cottonseed meal for catfish, poultry and swine.

Though the exact origins of the *Gossypium* are uncertain, it is believed that its main diversity centers were in west-central and southern Mexico, northeast Africa, Arabia, and Australia. Domestication is thought to have occurred in Africa and Asia, Mesoamerica, and South America.

Cotton typically thrives in specific environments such as in areas with abundant water and/or nutrients, but it does best in regions with deep surface soil, good drainage, and a pH level ranging from 5.5 to 7.

In the Philippines, medium-staple *hirsutum* varieties are cultivated in regions with Type I or Type III climates, where there is a distinct dry season. The growth cycle lasts 5 to 5 1/2 months, with harvesting timed during the dry season to avoid rain damage.

The extent of outcrossing, influenced by insect pollinators such as bumble bees and honey bees, varies based on environmental factors and pollen viability affected by temperature.

Despite centuries of cultivation, cotton has not been identified as a significant weed pest, with no *Gossypium* species recognized as problematic weeds either agriculturally or environmentally, nor do they have problematic weed relatives.

IV. Characteristics and Safety Assessment of the GM Crop

The Bt cotton-GFM Cry1A contains three genes such as the insecticidal gene, *cry1Ab-Ac,* derived from *Bacillus thuringiensis subsp. kurstaki, nptII* kanamycin resistant which serves as a selectable marker gene from *Escherichia coli* Tn5 transposo, and *uidA* gene derived from E. coli which allows the detection of transformed cells. Bt cotton was transformed using the Pollen Tube Pathway allowing the crop to have built-in resistance to the cotton bollworm, *Helicoverpa armigera* (Hubner).

Bacillus thuringiensis subsp. kurstaki, from which the cry1Ab-Ac synthetic fusion gene was derived, is widely known for its insecticidal properties against Lepidopteran pests. There have been no scientific reports indicating toxicity to humans and other mammals. *Escherichia coli* Tn5 transposon, on the other hand, is the source of the *nptII* gene, which serves as a marker gene. This gene has no pesticidal activity, and not known to be toxic or allergens. Similarly, the *uidA* gene sourced from *Escherichia coli,* also used as a marker gene in GMO plants and products, does not possess pesticidal properties. *Escherichia coli* naturally occurs in the digestive tracts of vertebrates, as well as in soil and water ecosystems. Therefore, the presence of these genes in GM food and feed is unlikely to cause harm to either the environment or consumers.

To evaluate the safety of *Bt* cotton for human and animal consumption, the proteins

BIOSAFETY PERMIT

Republic of the Philippines
Department of Agriculture
BUREAU OF PLANT INDUSTRY
692 San Andres St., Malate, Manila

Biosafety Permit for Commercial Propagation
Number 23-002 Propa

Bt Cotton – GFM *cry1A* owned and licensed by the Philippine Fiber Industry Development Authority (PhilFIDA), with office address at 3/F, DA-PCAF Bldg., Department of Agriculture, Elliptical Road Diliman, Quezon City has satisfactorily undergone biosafety assessment for commercial propagation pursuant to the DOST-DA-DENR-DOH-DILG Joint Department Circular (JDC) No. 1, Series of 2021. Further, the permittee has satisfactorily complied with all requirements for the issuance of the biosafety permit for commercial propagation. This permit is hereby issued for the commercial propagation of the said regulated article.

This Biosafety Permit for Commercial Propagation shall not excuse the permittee from complying with relevant regulations of other government agencies.

Issued on **August 24, 2023** at the Bureau of Plant Industry, San Andres St., Malate, Manila subject to conditions stated at the back of this permit. This permit shall remain valid unless revoked for any reasons set forth under Section 15.J. Revocation of Biosafety Permit for Commercial Propagation.

GERALD GLENN F. PANGANIBAN, Ph.D.
Director
Bureau of Plant Industry

Biosafety Permit Conditions

1. The permit holder must comply with the approved Insect Resistance Management (IRM) Plan, submit regular report of seed sales, and conduct the required technical studies;
2. The permit holder must have a valid Plant Incorporated Protectant (PIP) permit, and must comply with other relevant requirements of the Fertilizer and Pesticide Authority (FPA);
3. The permit holder shall likewise implement the BPI-approved IRM plan, including the conduct of required technical studies and regular monitoring reports, in case a stacked trait product containing the Bt Cotton – GFM *cry1A* is developed;
4. The permit holder shall provide reference materials (positive and negative controls) of the transformation event;
5. The permit holder shall not cause the planting and/or commercial propagation of the regulated article in areas that are not identified as agricultural lands; i.e., those classified as Alienable and Disposable (A&D) lands;
6. The permit holder shall immediately notify the Director of BPI, in writing, in the event that new information becomes available, indicating that the regulated article would pose greater risks to human health and the environment as compared to its conventional counterpart;
7. In the event that new information becomes available indicating that the regulated article could pose greater risks to human health and the environment as compared to its conventional counterpart, the permit holder shall, on its own, immediately take measures necessary to protect human health and the environment; and
8. The permit holder shall not cause the commercial propagation in areas where the local government unit has a known policy or ordinance prohibiting the propagation or entry of regulated articles. For this purpose, it shall include in the labeling of products that these are not intended for propagation in prohibited areas.

Violation of any condition shall lead to revocation of this permit as provided in the DOST-DA-DENR-DOH-DILG Joint Department Circular No.1, Series of 2021 Article VI, Section 15J. In the event new information becomes available indicating that the regulated article could pose greater risks to human and animal health and the environment as compared to its conventional counterpart, the permit holder shall, on its own, immediately take measures necessary to protect human and animal health and the environment.

I have read and understood the Terms and Conditions herein set forth and I enter in this agreement voluntarily and with my express consent; I hereunto affix my signature with full knowledge of its legal effect.

ATTY. GENEVIEVE E. VELICARIA-GUEVARRA, CESE
Assistant Secretary
and Concurrent OIC, Executive Director
Signature over printed name of the Technology Developer

AUG 31 2023
Date

Bt Cotton IRM Monitoring

- Monitoring for the insect resistance management was being implemented.
- 100 pre-tagged cotton plants were inspected using a zigzag sampling pattern.
- Observation on the presence of target pest, Cotton Bollworm (*Helicoverpa armigera*), other arthropods, plant diseases, and weeds.
- Gene testing was performed to confirm the expression of the Bt (Cry1Ab/Ac) protein in the monitored plants.

Local GMO related innovation

STATUS OF LOCALLY DEVELOPED CROPS

Golden Rice 'GR2E'

EE-1 eggplant

The Supreme Court is currently holding deliberations on the submitted petition for review of the Court of Appeal's ruling.

STATUS OF LOCALLY DEVELOPED CROPS

High Iron High Zinc Rice

Bt Cotton

Public engagement/ public awareness

LOCAL INTERNATIONAL ENGAGEMENTS

- Serves as a resource person to share knowledge and experiences that can help local groups understand policies and guidelines for GM and gene-edited products.

Nutritionists-Dietitians Association of the Philippines (NDAP) Biotechnology Regulatory Dialogue held on February 18, 2024

Stakeholders Consultation Workshop Bump up Biotech Project (CARAGA State University) held on October 24, 2024

National Biotechnology Week 2024: Kapihan Series Perspectives on Philippine Regulations held on November 27, 2024

INTERNATIONAL ENGAGEMENTS

- Serves as a resource person to share insights and experiences, while also drawing from lessons learned in other countries, to support the development of gene-editing guidelines.

APSA Regional Plant Breeding Innovation| July 8-9, 2025

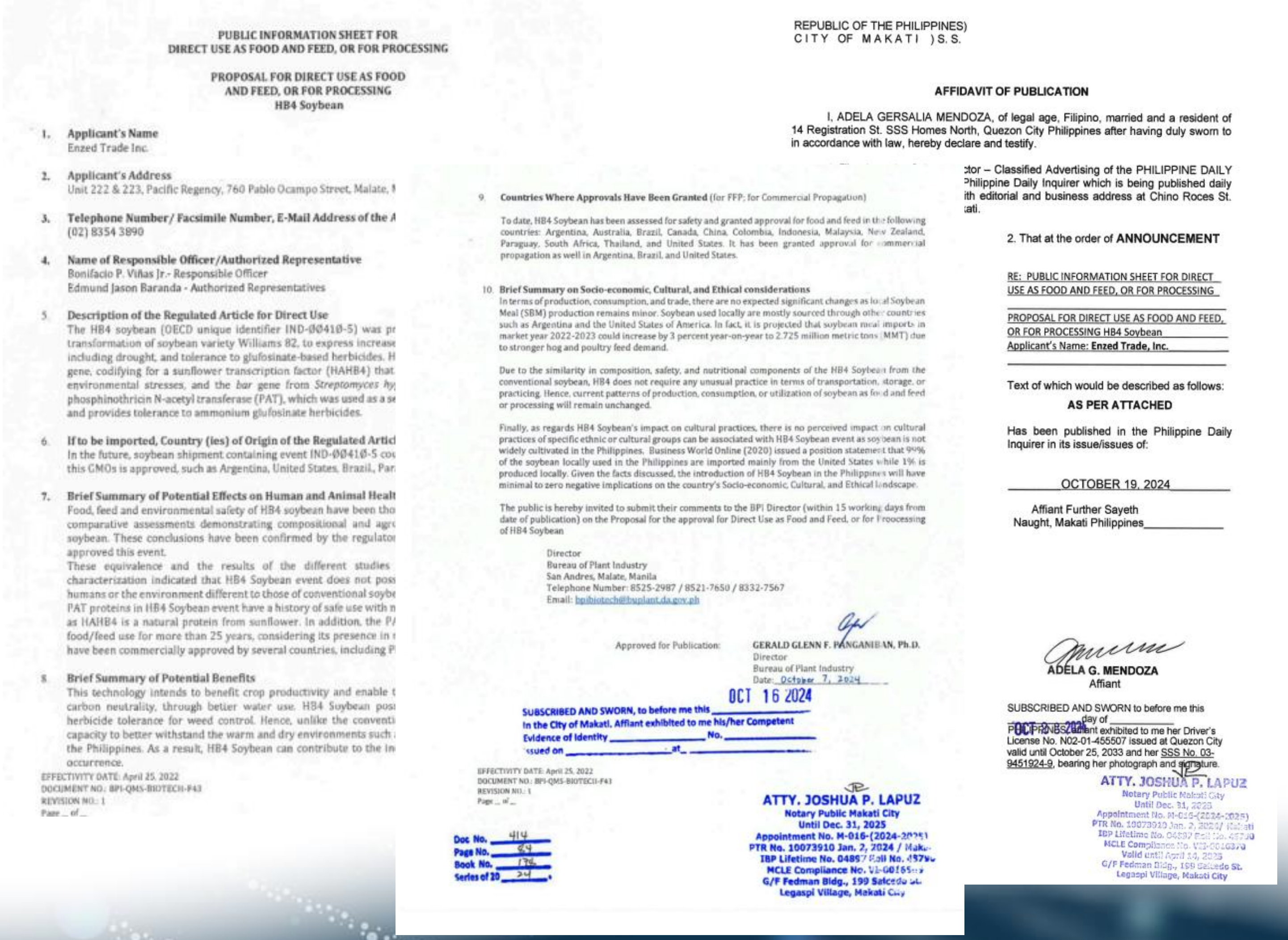
Precision, Policy, and People: A Genome Editing Workshop for Crop Improvement held in Thailand on May 13–16, 2025

2024 Asian Seed Congress held in Sanya, China on December 3–5, 2024

16th Meeting of the Conference of the Parties (COP16) to the Convention on Biological Diversity (CBD) held in Cali, Colombia on October 19–November 4, 2024

PUBLIC PARTICIPATION FOR GM CROPS

- GM Application for Direct Use and Commercial Propagation requires the following:
  - ✓ Posting of the Public Information Sheet (PIS) to applicant and BPI website
  - ✓ Publication of the PIS to a newspaper of a general circulation
  - ✓ Public commenting period of 15 working days after posting or publication of the PIS



PUBLIC INFORMATION SHEET FOR
DIRECT USE AS FOOD AND FEED, OR FOR PROCESSING

PROPOSAL FOR DIRECT USE AS FOOD
AND FEED, OR FOR PROCESSING
HB4 Soybean

1. **Applicant's Name**
   Enzed Trade Inc.
2. **Applicant's Address**
   Unit 222 & 223, Pacific Regency, 760 Pablo Ocampo Street, Malate,
3. **Telephone Number/ Facsimile Number, E-Mail Address of the**
   (02) 8354 3890
4. **Name of Responsible Officer/Authorized Representative**
   Bonifacio P. Viñas Jr.- Responsible Officer
   Edmund Jason Baranda - Authorized Representatives
5. **Description of the Regulated Article for Direct Use**
   The HB4 soybean (OECD unique identifier IND-ØØ41Ø-5) was pr transformation of soybean variety Williams 82, to express increase including drought, and tolerance to glufosinate-based herbicides. H gene, codifying for a sunflower transcription factor (HAHB4) that environmental stresses, and the *bar* gene from *Streptomyces hy* phosphinothricin N-acetyl transferase (PAT), which was used as a se and provides tolerance to ammonium glufosinate herbicides.
6. **If to be imported, Country (ies) of Origin of the Regulated Artic**
   In the future, soybean shipment containing event IND-ØØ41Ø-5 cou this GMOs is approved, such as Argentina, United States, Brazil, Par
7. **Brief Summary of Potential Effects on Human and Animal Healt**
   Food, feed and environmental safety of HB4 soybean have been tho comparative assessments demonstrating compositional and agr soybean. These conclusions have been confirmed by the regulato approved this event.
   These equivalence and the results of the different studies characterization indicated that HB4 Soybean event does not poss humans or the environment different to those of conventional soybe PAT proteins in HB4 Soybean event have a history of safe use with n as HAHB4 is a natural protein from sunflower. In addition, the P food/feed use for more than 25 years, considering its presence in have been commercially approved by several countries, including P
8. **Brief Summary of Potential Benefits**
   This technology intends to benefit crop productivity and enable carbon neutrality, through better water use. HB4 Soybean pos herbicide tolerance for weed control. Hence, unlike the conventi capacity to better withstand the warm and dry environments such the Philippines. As a result, HB4 Soybean can contribute to the in occurrence.

EFFECTIVITY DATE: April 25, 2022
DOCUMENT NO.: BPI-QMS-BIOTECH-F43
REVISION NO.: 1
Page _ of _

9. **Countries Where Approvals Have Been Granted** (for FFP; for Commercial Propagation)

   To date, HB4 Soybean has been assessed for safety and granted approval for food and feed in the following countries: Argentina, Australia, Brazil, Canada, China, Colombia, Indonesia, Malaysia, New Zealand, Paraguay, South Africa, Thailand, and United States. It has been granted approval for commercial propagation as well in Argentina, Brazil, and United States.

10. **Brief Summary on Socio-economic, Cultural, and Ethical considerations**
    In terms of production, consumption, and trade, there are no expected significant changes as local Soybean Meal (SBM) production remains minor. Soybean used locally are mostly sourced through other countries such as Argentina and the United States of America. In fact, it is projected that soybean meal imports in market year 2022-2023 could increase by 3 percent year-on-year to 2.725 million metric tons (MMT) due to stronger hog and poultry feed demand.

    Due to the similarity in composition, safety, and nutritional components of the HB4 Soybean from the conventional soybean, HB4 does not require any unusual practice in terms of transportation, storage, or practicing. Hence, current patterns of production, consumption, or utilization of soybean as food and feed or processing will remain unchanged.

    Finally, as regards HB4 Soybean's impact on cultural practices, there is no perceived impact on cultural practices of specific ethnic or cultural groups can be associated with HB4 Soybean event as soybean is not widely cultivated in the Philippines. Business World Online (2020) issued a position statement that 99% of the soybean locally used in the Philippines are imported mainly from the United States while 1% is produced locally. Given the facts discussed, the introduction of HB4 Soybean in the Philippines will have minimal to zero negative implications on the country's Socio-economic, Cultural, and Ethical landscape.

The public is hereby invited to submit their comments to the BPI Director (within 15 working days from date of publication) on the Proposal for the approval for Direct Use as Food and Feed, or for Proocessing of HB4 Soybean

Director
Bureau of Plant Industry
San Andres, Malate, Manila
Telephone Number: 8525-2987 / 8521-7650 / 8332-7567
Email: bpibiotech@buplant.da.gov.ph

Approved for Publication: GERALD GLENN F. PANGANIBAN, Ph.D.
Director
Bureau of Plant Industry
Date: October 7, 2024

OCT 16 2024
SUBSCRIBED AND SWORN, to before me this ______
In the City of Makati. Affiant exhibited to me his/her Competent
Evidence of Identity ______ No. ______
issued on ______ at ______

EFFECTIVITY DATE: April 25, 2022
DOCUMENT NO.: BPI-QMS-BIOTECH-F43
REVISION NO.: 1
Page _ of _

Doc No. 414
Page No. 84
Book No. 176
Series of 20 24

ATTY. JOSHUA P. LAPUZ
Notary Public Makati City
Until Dec. 31, 2025
Appointment No. M-016-(2024-2025)
PTR No. 10073910 Jan. 2, 2024 / Makati
IBP Lifetime No. 04897 Roll No. 457...
MCLE Compliance No. VI-00165...
G/F Fedman Bldg., 199 Salcedo St.
Legaspi Village, Makati City

REPUBLIC OF THE PHILIPPINES)
CITY OF MAKATI)S.S.

AFFIDAVIT OF PUBLICATION

I, ADELA GERSALIA MENDOZA, of legal age, Filipino, married and a resident of 14 Registration St. SSS Homes North, Quezon City Philippines after having duly sworn to in accordance with law, hereby declare and testify.

...ctor – Classified Advertising of the PHILIPPINE DAILY ...Philippine Daily Inquirer which is being published daily ...ith editorial and business address at Chino Roces St. ...kati.

2. That at the order of **ANNOUNCEMENT**

RE: PUBLIC INFORMATION SHEET FOR DIRECT USE AS FOOD AND FEED, OR FOR PROCESSING

PROPOSAL FOR DIRECT USE AS FOOD AND FEED, OR FOR PROCESSING HB4 Soybean
Applicant's Name: **Enzed Trade, Inc.**

Text of which would be described as follows:
AS PER ATTACHED

Has been published in the Philippine Daily Inquirer in its issue/issues of:

OCTOBER 19, 2024

Affiant Further Sayeth Naught, Makati Philippines______

ADELA G. MENDOZA
Affiant

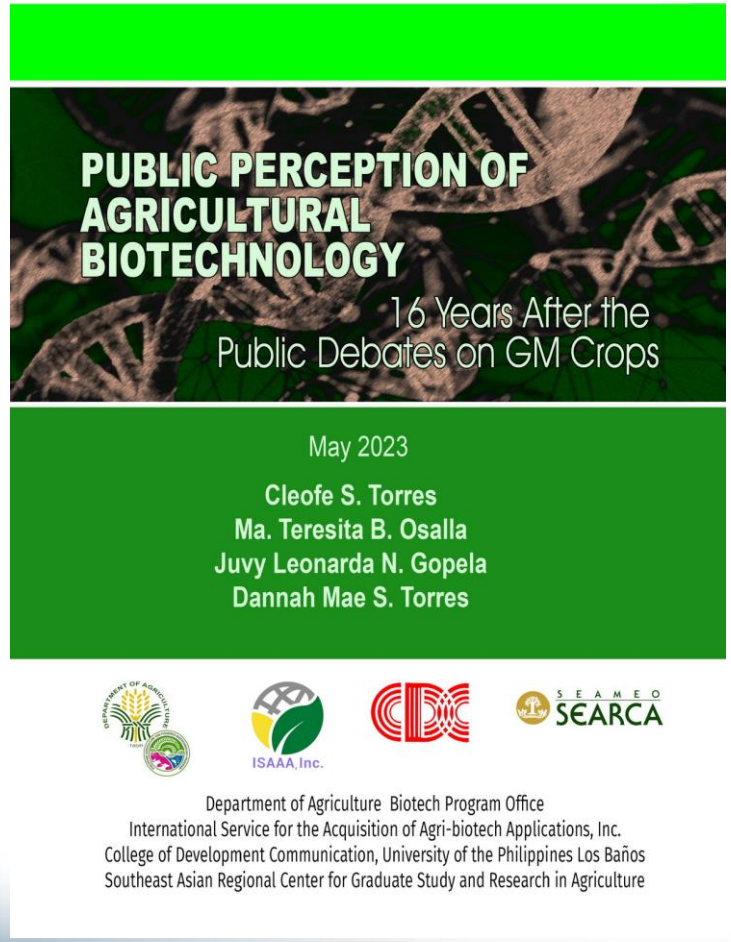
SUBSCRIBED AND SWORN to before me this ______ day of ______ OCT 2 8 2024 PHILIPPINES, affiant exhibited to me her Driver's License No. N02-01-455507 issued at Quezon City valid until October 25, 2033 and her SSS No. 03-9451924-9, bearing her photograph and signature.

ATTY. JOSHUA P. LAPUZ
Notary Public Makati City

PUBLIC PARTICIPATION OF GM CROPS

- GM Application for Field Trial requires the following:
  - ✓ Post the PIS in at lease two conspicuous places un the trial site municipality, with a 15 working day public comment period.
  - ✓ Conduct a public hearing for stakeholder and citizens to raise question or clarifications on the technology or regulation.

STUDY ON PUBLIC PERCEPTION



- Conducted: 2022
- Published: May 2023
- Total of 1,180 respondents
- 10 provinces
- 9 stakeholder groups
  1. Businessman and trader
  2. Consumers
  3. Extension Worker
  4. Farmer Leaders and Community Leaders
  5. Journalist
  6. Policy makers
  7. Religious Leaders
  8. Scientist
  9. Students

MISCONCEPTIONS

1. Genes being misconstrued as present only in GM foods
2. Human genes being modified by mere eating GM foods
3. Plant viruses being transferred to humans when they eat vegetables and fruits infected with virus

CONCLUSION OF THE STUDY

1. Filipino stakeholders generally support biotech in crop production (food and medicines) but are less certain about its use in animals.
2. Scientists are the most trusted sources but are not accessible, so people often rely on social media despite low trust.
3. Stakeholders need clearer understanding of genes and viruses, which are often misunderstood and cause concern.
4. Scientists and media/journalists are the most supportive and optimistic about biotech.
5. Key concerns are safety and health for crop biotech, and morality for animal biotech.
6. After 16 years, perceptions improved in:
   a. Usefulness, quality, and understanding of biotech information
   b. Trust in regulations for safety and health
   c. Willingness to join biotech activities (if low cost/time)
   d. Focus on food and medicine benefits in decision-making

RECOMMENDATIONS

For enhancing favorable perception of agri-biotech:

1. Tap scientist as key information sources and talkers
2. Improve public knowledge about genes and viruses
3. Expand level of optimism to other key stakeholders
4. Make biotech reporting more balanced
5. Enlighten stakeholders more on animal biotech
6. Nurture students as corp of biotech advocates
7. Maximize the role of national mass media in public information and education
8. Establish a trustworthy social media platform manned by a credible source

THANK YOU