

Voluntary Report – Voluntary - Public Distribution

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Report Name: Philippine Bt Cotton - 4th GE Crop Approved for Commercial Propagation

Country: Philippines

Post: Manila

Report Category: Biotechnology and Other New Production Technologies, Biotechnology and Other New Production Technologies Addendum, Biotechnology - Plants and Animals, Cloning

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Report Highlights:

On August 24, 2023, the Philippines marked Bt cotton as the 4th genetically engineered crop approved for commercial propagation after corn (2002), rice (2021), and eggplant (2022). The Bureau of Plant Industry (BPI) issued a Biosafety Permit for the commercial propagation of a Bt cotton trait (GFM cry1A) developed by the Philippine Fiber Industry Development Authority (PhilFIDA). Bt cotton replaces the need to control the bollworm through the application of synthetic chemical pesticides.

Application Review Followed Science-Based Regulatory Process

On March 17, 2023, the Philippine Fiber Industry Development Authority (PhilFIDA) submitted its [application for biosafety permit](#) for commercial propagation of Bt cotton (GFM cry1A) under the Joint Department Circular No. 1 Series of 2021 ([JDC1](#)) to the Bureau of Plant Industry (BPI). On March 20, 2023, BPI sent the [acceptance](#) to PhilFIDA having completed the required documents.

On April 20, 2023, the BPI reviewed PhilFIDA's [Public Information Sheet](#) (PIS) and found it sufficient. The JAG composed of representatives from Department of Science and Technology, Department of Agriculture, Department of Environment and Natural Resources and Department of Health, and Department of Agriculture-Biosafety Committee.

Issued Biosafety Permit

The BPI issued the [Biosafety Permit](#) for the commercial propagation of Bt cotton on August 24, 2023. PhilFIDA was granted the permit after completion of the biosafety evaluation and requirements outlined in [JDC1](#).

Bt cotton is a genetically engineered cotton resistant to bollworm (*Heliothis armigera*), which contains the Bt fusion gene GFM cry1A, synthesized based on the protein template of Cry 1Ab and Cry1Ac protein. Bt cotton includes a gene taken from the soil bacterium *Bacillus thuringiensis* (Bt) which was also introduced in corn, and eggplant in the Philippines. Bt crops defend themselves against pests, and the use of chemical insecticides is significantly reduced. Field trials have shown that this transformation leads to more harvestable bolls and reduced the use of pesticides.

PhilFIDA conducted multi-locational field trials in Luzon and Mindanao with promising results. The Bt cotton could yield 3 tons per hectare compared with 1-2 tons using present local varieties. Bt cotton addresses the issue of pests while increasing yields and delivering higher profits for farmers.

Next Steps

Initially, PhilFIDA plans to conduct its techno-demonstration with the cotton producers in Ilocos, Pangasinan, Nueva Ecija, Sarangani, and South Cotabato involving 40 one-hectare cotton farms.

To date, the bulk of the target areas are slated for South Cotabato and Sarangani in Mindanao, and the rest will come from the Ilocos Norte and Pangasinan. These areas are now being geotagged by the team of PhilFIDA for commercialization. PhilFIDA plans to undertake commercial propagation of Bt cotton together with the promotion of the production of heirloom cotton and the implementation of organic cotton production technology.

Attachments:

No Attachments.