

Philippines becomes second country in the world to OK commercial cultivation of Bt eggplant



The Philippines has become the second country in the world to approve the commercial cultivation of the borer-resistant Bt eggplant, next to Bangladesh.

The decision was made last October 18 by the Bureau of Plant Industry under the Department of Agriculture.

The decision was made official by the DOST-DA-DENR-DOH-DILG Joint Department Circular (JDC) No. 1, Series of 2021, granting “Biosafety

Permit for Commercial Propagation (No. 22-001 Propa)” of Bt Eggplant (Event EE-1) to the University of the Philippines Los Baños (UPLB).

The approval comes after the borer-resistant Bt eggplant passed a series of strict and comprehensive biosafety evaluations conducted by the Assessment Group comprised of representatives from Competent National Authorities-Biosafety Committees, and the certification of the Event EE-1 as a Plant Incorporated Protectant (Group 11A Insecticide) by the Fertilizer and Pesticide Authority.

Based on the announcement released by UPLB, the Bt eggplant has previously been approved for direct use as food, feed, or for processing (21-078FFP) on July 21, 2021, which affirms its safety for consumption.

Based on studies, Bt eggplant contains a natural protein from the soil bacterium *Bacillus thuringiensis*, which makes it resistant to the eggplant fruit and shoot borer (EFSB). This Bt protein is targeted only towards the EFSB larvae and is safe for humans, animals, and other non-target arthropods.

There has also been various scientific evidence that has demonstrated the safety of Bt eggplants not only for consumption but also for the environment such as a 2016 study on the impact of Bt eggplants on non-target arthropods. The study revealed that eggplant varieties containing the event EE-1 are unlikely to pose greater risks to the environment when cultivated in open fields, as compared to their non-Bt eggplant counterparts. The study also suggested that Bt eggplant can be an integral component of the Integrated Pest Management program, particularly of EFSB, while dramatically reducing the dependence on conventional insecticides.

Another advantage of the Bt eggplant, apart from its resistance to EFSB, is lower production cost for farmers which can increase their income due to reduced pesticide use.

“The biosafety approval for commercial propagation allows us to scale up our operations and ensure the availability of the Bt eggplant seeds in the coming years”, said Dr. Lourdes Taylo, the current lead of the Bt Eggplant Project in the Philippines.

After the approval for commercial propagation, the next steps will be seed production, varietal registration, and farm demonstrations. Concurrent with the pilot planting activities, an extensive growers’ education program will also be launched as part of the product stewardship activities within the following year.