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

Country: Philippines

Post: Manila

Report Category: Biotechnology - Plants and Animals, Grain and Feed, Climate Change/Global Warming/Food Security

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Report Highlights:

On July 21, 2021, the Philippines became the first country in the world to approve Golden Rice for commercial propagation, which aims to reduce malnutrition. In so doing, the Philippines has again demonstrated its commitment to embracing scientific innovation as a tool to advance Sustainable Development Goal number 2. This decision follows a multi-agency review confirming Golden Rice is as safe as conventional rice.

Background

For impoverished populations that depend on rice for their daily caloric intake, including those in the Philippines, Vitamin A deficiency is a major source of blindness and can lead to other diseases, particularly for vulnerable populations such as young children and pregnant women. As such, the Philippine Rice Research Institute (PhilRice) in Nueva Ecija and International Rice Research Institute (IRRI) in Laguna have led the Golden Rice project for the past two decades to provide a more nutritious version of the staple crop following the success of European researchers in the 1980s and 1990s to genetically engineer rice to contain high levels of beta carotene, which in turn is converted by the body into vitamin A. While beta carotene is naturally available in fruits, vegetables, and whole grains, it is not present in milled rice.

The Philippines is a major rice consumer, with a population of roughly 110 million and annual per capita rice consumption of 133 kg. Rice is typically eaten at every meal and provides the largest share of the average Filipino's caloric intake. PhilRice notes that "only 2 out of 10 Filipino households meet the estimated average requirement for vitamin A" in their daily diet.

Golden Rice Poised to Boost Philippine Sustainable Development Goals

Through the biofortification of vitamin A in its main staple, the Philippines will be better positioned to meet Sustainable Development Goal number 2: end hunger, achieve food security, and improved nutrition and promote sustainable agriculture. Specifically, Golden Rice will contribute to the Philippines meeting Targets 2.1 and 2.2:

- Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round and
- Target 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

Approval Follows Science-Based Regulatory Process

The Philippine government's approval of Golden Rice followed the regulatory procedures as detailed in the Joint Department Circular No. 1 Series of 2016. For more information on the process read here. A recent timeline of events following earlier confined trials follows:

- The Department of Agriculture's Bureau of Plant Industry (DA-BPI) released the biosafety permit for field trials on May 20, 2019, with field trials completed by October 2019 in PhilRice stations in Munoz, Nueva Ecija, and San Mateo, Isabela.
- DA-BPI issued a permit for Golden Rice's direct use as food and feed or for processing on December 18, 2019.
- DA-BPI issued a permit for Golden Rice's commercial propagation in the Philippines use as food and feed or for processing on July 22, 2021.

Golden Rice is the second genetically engineered product approved for cultivation in the Philippines following corn and the first designed to specifically address nutrition. Regulatory bodies in Australia, New Zealand, Canada, and the United States earlier issued positive evaluations on the food safety of Golden Rice in 2018.

Attachments:

No Attachments.