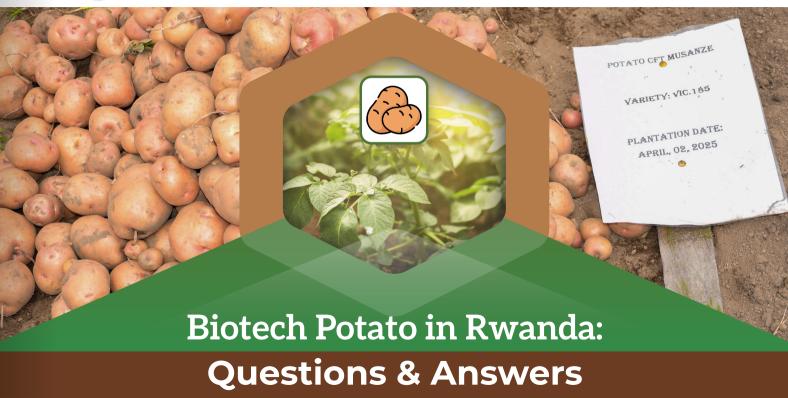


# **Rwanda Agri-Biotech Programme**







#### Q1. What is biotech potato?

Biotech potato is a variety of potato that can protect itself against late blight disease, the most serious of all potato diseases. It can wipe out 80% of a crop in Rwanda during severe outbreaks.

#### Q2. How will Rwandan farmers benefit from biotech potato varieties?

Biotech potatoes offer farmers many benefits, including:



Resistance to late blight disease

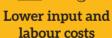


Higher yields



Reduced use of fungicide sprays





Biotech potatoes deliver higher yields with up to 90% reduction in fungicide use, saving farmers money and time and reducing harm to the environment.

# Q3. Why are biotech potato varieties being grown in Rwanda?

The Rwanda Agri-Biotech Programme, with the support of the Government of Rwanda, is improving potato, maize, and cassava to protect these important foods against the diseases and insect pests that destroy these crops. Currently, farmers try to control these threats by spraying the plants numerous times with costly pesticides that are not easily available and often ineffective. Biotech potatoes do not require fungicide sprays because they provide in-plant disease protection against late blight.

The Rwanda Agri-Biotech Programme is using the modern tools of biotechnology to:

- Cut potato yield losses by more than 70%
- Reduce maize yield losses by **up to 75%**
- Protect cassava farmers from total (100%) yield loss

This will benefit more than 500,000 farmer households through higher yields, food security, reduced pesticide use, and economic growth.



MODERN TOOLS TO PROTECT FARMERS FROM:

















# Q4. What is the difference between biotech and conventional potatoes?

Biotech and conventional potato varieties look, grow, and taste the same. The only difference is the biotech potato has in-plant protection against late blight disease and less fungicide residue than conventional potatoes.



# Q5. How does late blight protection work in potatoes?

Wild potato varieties contain hundreds of genes that provide natural resistance to the late blight disease. Through advanced technology, three of the late blightresistant genes from wild varieties have been introduced into popular potato varieties. This approach allows the plant to defend itself against the disease naturally, eliminating the need for fungicide sprays.

## Q6. Can biotech potatoes become susceptible to late blight over time?

Perhaps. The biotech potato may lose its resistance to late blight if adequate stewardship is not undertaken. That's why biotech crop projects develop stewardship plans to ensure that improved crops continue to benefit smallholder farmers. Biotech crops are deployed with extensive farmer education and communication programmes that explain the importance of good stewardship.



Yes. Extensive studies have demonstrated that the biotech potato is safe for humans, livestock, and the environment.



## **Q8.** How does Rwanda review the safety of biotech potatoes?

The Government of Rwanda has adopted a robust legal and institutional framework for the safe and responsible use of modern biotechnology. The Rwanda Environment Management Authority (REMA) conducts safety assessments before any biotech varieties can be grown and used. REMA considers changes in the biotech crop compared to conventional varieties; any potential risk to the environment where the biotech crop would be released; and the food and feed safety of the biotech crop and any products derived from it. The variety evaluation is done by the Rwanda Inspectorate, Competition and Consumer Protection Authority (RICA).





## Q9. Is the biotech potato approved in Rwanda?

Yes. Research partners, working with REMA and RICA, are currently conducting field trials to select the best varieties for different growing conditions in Rwanda. They will be registered on the variety catalogue.



## Q10. When will farmers in Rwanda have access to biotech potato seed?

Farmers will get access after RICA has cleared the varieties for release and registration.



#### Q11. How much will biotech potato seed cost in Rwanda?

Biotech potato seed will be available to Rwanda farmers at the same price as conventional potato seed.





Biotech Potato in Rwanda: Questions & Answers

## Q12. Who owns biotech potato varieties in Rwanda?

The Rwanda Agriculture and Animal Resources Development Board and its partners under the Rwanda Agri-biotech Programme, a public-private partnership, have negotiated access to the biotech potato varieties to make them available to farmers in Rwanda.



Yes. Farmers in Nigeria began planting biotech (Bt) maize in 2024 and 2025. They have been growing biotech cowpea (beans) and cotton since 2020. Ghana farmers have been growing biotech cowpea since 2024. In South Africa, biotech cotton. maize, and soybean have been grown since the late 1990s, covering millions of hectares. Kenya, Ethiopia, Eswatini, and Sudan also grow biotech cotton. Several other African countries are conducting field trials on biotech rice, maize, wheat, sorghum, bananas, cassava, and sweet potato. Kenya's National Biosafety Authority is currently considering an application for the same late blightresistant potato approved in Rwanda.

Globally, approximately 176.85 million hectares of land were planted with enhanced crops by 2021.





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For more information, contact: The **Rwanda Agriculture and Animal Resources Development Board** (RAB), P.O. Box 5016, Kigali. Email: info@rab.gov.rw, Website: https://www.rab.gov.rw/