

## BACCALAUREAT GENERAL ET TECHNOLOGIQUE SESSION 2021 EPREUVE SPECIFIQUE MENTION « SECTION EUROPEENNE OU DE LANGUE ORIENTALE »

Académie de Nantes, Binôme : Anglais/SVT

Thème 3 – De la plante sauvage à la plante domestiquée 3-B - La domestication des plantes

## Are Genetically Modified Crops the Answer to World Hunger?

Use the documents and your knowledge to answer the question above<sup>1</sup>.

## **Document:**

Hunger is one of the greatest global challenges of the 21st century. GM crops are plants that have been modified, using genetic engineering, to alter their DNA sequences to provide some beneficial trait. For example, genetic engineering can improve crop yield<sup>2</sup>, resulting in greater production of the target crop. Scientists can also engineer pest-resistant crops, helping local farmers better withstand environmental challenges that might otherwise wipe out a whole season of produce. Crops can even be engineered to be more nutritious, providing critical vitamins to populations that struggle to get specific nutrients needed for healthy living.

However, GM seeds are produced primarily by only a few large companies who own the intellectual property for the genetic variations. A transition to GM crops would closely align global food production with the activities of a few key companies. If that company failed, then the crop it provides would not be available to the people who depend on that crop. Moreover, a large proportion of those affected by malnutrition are small farmers in sub-Saharan Africa, where use of GM crops is less common. Since attitudes toward GM crops tend to correlate with education levels and access to information about the technology, there is a concern that sub-Saharan African farmers may be hesitant to adopt GM crops. More generally, public perception of GM foods is plagued<sup>3</sup> by concerns of safety, from the potential for allergic response to the possible transfer of foreign DNA to non-GM plants in the area. None of these concerns are backed by evidence, but they persist nonetheless.

https://www.nationalgeographic.org/article/are-genetically-modified-crops-answer-world-hunger/,

January 28, 2020

1: ci-dessus; 2: rendement; 3: affecter.