Stella Kyriakides

“Plants obtained with new genomic techniques could help build a more resilient and sustainable agri-food system. Our guiding principle will remain the safety of the environment and of consumers”

What are New Genomic Techniques (NGT)?

Since the invention of agriculture, humans have selected and bred plants to improve production of crops for food and feed. Advancements in biotechnology have led to new genomic techniques that help breed new plant varieties by altering the genetic material of an organism faster and with higher precision than conventional breeding techniques. NGT can produce a wide diversity of products. Some can lead to limited changes that may also occur in nature or through conventional breeding, others can lead to more extensive modifications.

Some NGT products under development

Potato producing substantially less acrylamide (a carcinogenic substance formed at high cooking temperatures) when they are baked, fried or roasted at high temperatures.

Tomato resistant to fungal pathogens and therefore needing less fungicides during growth.

Rice tolerant to drought and salt, thus able to cope with stress related to climate change.

Wheat with increased protein content and grain size leading to higher yields and lower need for agricultural land.
Why should the EU act?

1. Innovative tools needed to reach the objectives of the Green Deal and Farm to Fork Strategy
   - NGTs are under rapid development around the world. They can contribute to a more resilient and sustainable agri-food system.
   - NGTs can produce plants which could:
     - Be more resistant to pests, diseases and adverse environmental conditions and to the effects of climate change;
     - Require less natural resources, fertilisers and pesticides thus contributing to conservation of biodiversity;
     - Improve the nutrient content of food and feed;
     - Reduce the content of harmful substances such as toxins and allergens.

2. Protection of health and the environment to be maintained
   - NGTs can produce a wide diversity of plants, with changes ranging from limited to more extensive ones.
   - Some plants obtained by NGTs are as safe as natural and conventionally bred plants.

3. Current GMO legislation is not fit for purpose for certain NGT plants and their products
   - Adaptation is needed to scientific and technological progress.
   - Current legal requirements are not adapted to diverse risk profiles.
   - The legislation does not take into account whether products have the potential to contribute to sustainability.

What is the Public Consultation about?
   - Designing an appropriate legislation for plants obtained from targeted mutagenesis and cisgenesis and their food and feed products.
   - Enabling innovative techniques to contribute to a resilient and sustainable economy and agri-food system.
   - Maintaining a high level of protection of human and animal health and the environment.

Through the Public Consultation, the Commission seeks views and evidence from public authorities, stakeholders and citizens how best regulate plants obtained from targeted mutagenesis and cisgenesis.

Timeline

- From 29/04/2022 to 22/07/2022: Public consultation
- In the course of 2022: Impact assessment being conducted