

Statement

Statement from CRAG regarding the review of the European regulatory framework on gene editing and its use in agriculture

Genetic improvement of plants and animals has allowed mankind to increase the production and quality of food throughout history. Now, however, in a context of exponential growth of the world's population, it becomes difficult to keep increasing cultivated areas, and obtaining the necessary water and fertilizers to achieve desired production levels.

We are faced with the challenge of continuing to increase food production and quality while making agriculture and livestock activities more sustainable. And all of this, in addition, in a context of climate crisis.

It is precisely to address these huge challenges that we need all the tools at our disposal.

The new gene editing techniques

For a few years now, we have had the possibility of using gene editing techniques to improve plant and animal varieties. These new techniques allow for changes to be introduced into the genome of plants and animals in a directed manner, much more precisely than the random mutagenesis techniques, widely used since the 1950s.

The first products obtained from edited plants are already on the market in the US, and others are about to be commercialized in other countries. In the European Union (EU), however, edited plants are considered genetically modified organisms (GMOs), and they are subject to the same regulation that was developed in 2001 for transgenic plants. Hence, edited plants have to undergo the same risk analysis established for all GMOs, with a cost in terms of time and money (10-15 years and 10-16 million euros) that is only within reach of large multinational companies and for extensive agriculture products with high potential returns, leaving out products with local interest and small producers.

Given that these technical validations do not seem proportionate to the potential risk of these products and that the required investment would heavily limit their use, the European Commission has been asked to draft a legislative proposal to allow for the potential benefits of these techniques to be applied while ensuring the safety of these products at the same time.

This proposal will be made public in early June, from which point the process of debate between member states and political groups in the European Parliament to accept, modify or reject this proposal will begin.

CRAG's position

In this situation, CRAG wants to once again, and always based on scientific evidence, reaffirm the following:



- Genetic improvement has always used all the scientific and technical knowledge available, throughout history. Thanks to this, humanity currently has a quantity and diversity of food like never before.
- Gene editing is a technique with great potential, particularly for the genetic improvement of plants.
- CRAG agrees with the scientific community and EU authorities that the current legislative framework is not adequate for these new technologies.
- CRAG believes that the new legislation should allow for the benefits that these techniques allow while ensuring a high degree of safety of the products obtained.

CRAG as a reference center

CRAG is an international center of reference in plant and animal genomics, both in terms of basic research and in knowledge transfer to productive sectors. CRAG researchers are strongly committed to scientific advisory and risk analysis, being part of working groups and committees at both national and European levels. In addition, CRAG is aware that challenges related to agriculture require citizen involvement, and actively contributes to the dissemination of scientific results to society and to public engagement activities.

From CRAG, we want to promote an informed debate and become a reference center for information on gene editing in plants. We consider this to be a topic of great interest to the entire population and that only with contrasted arguments and taking into account the scientific knowledge can we address the current major challenges related to the increase in the world population and to climate change.

Centre for Research in Agricultural Genomics

Bellaterra, 18 April 2023