



FABRE TP researchers call in support of the smart and safe use of Gene Editing in animal breeding

European researchers in animal breeding and reproduction of FABRE TP (the Farm Animal Breeding and Reproduction Technology Platform) are deeply concerned about recent decisions and announcements that could have a big impact on the future of research, innovation and sustainability of the livestock sector in Europe.

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Last July, the European Court of Justice published a ruling stating that legally, organisms obtained by modern mutagenesis methods must fall under the scope of the GMO directive, 2001/18. FABRE researchers were disappointed with this outcome. FABRE TP, while recognizing that a regulatory safe framework should exist for Gene editing, believe that this 17-year old directive, is not the most appropriate legal text for this modern technology.

On 13th November, The Group of Chief Scientific Advisors of European Commission, launched a Scientific Perspective of the situation of the legislative framework for new breeding techniques in Europe. The statement says that Europe must not be left behind at the international level in this field. And it calls European authorities in *“revising the existing GMO Directive to reflect current knowledge and scientific evidence, in particular on gene editing and established techniques of genetic modification. This should be done with reference to other legislation relevant to food safety and environmental protection.”*

Finally, FABRE TP members were shocked and saddened by the announcement last week from a Chinese scientist claiming to have helped created the first gene-edited human babies. It is well known that gene editing can be used for making precise changes in the genome but this should be applied with the greatest care and after a significant period of testing. We are worried that this news can **highly damage the trust of citizens and authorities in Science**. While Gene editing could be the answer for some societal and agricultural production challenges of next years in Europe, the race to be first in media has a negative impact on societal and political acceptability. This is a dangerous outcome that potentially limits the ability of our scientists and technologists to address some of the most important issues of our time. All scientists together, we need to build Trust in Science with our fellow citizens, politics and authorities before applying this technology. Not only research but also dialogue is required to ensure smart and safe use of these techniques.

Research institutes, companies, cooperatives and associations of FABRE TP working in animal breeding and reproduction in Europe are **convinced that NABTs like Genome Editing can provide efficient tools to increase the sustainability of the animal breeding sector**, but we are also well aware that it is important to learn more about NABTs like Genome Editing and to investigate their effects e.g. by comparing **novel animal breeding techniques (NABTs)** with the originals. For this reason, NABTs like Genome Editing are deserving a place on the EU Research Agendas. We call also for a fair and smart dialogue between research, companies, authorities and citizens.



Research on NABTs like Genome Editing should be regulated but not prohibited by any regulation. Gene editing techniques represent a promising technology for animal producers and breeders, specifically when reproducing the exact modifications which already occur in nature. Scientists working on this technology must of course adopt **strict ethical and food safety regulation**. Any potential barriers to research presents a risk of losing some of the most promising and best researchers in Europe to organizations outside of the EU and Europe missing out of key talent and innovation into the future.

The ruling of ECJ of 25th July makes it very difficult for EU animal breeding and reproduction innovation to compete with companies in countries outside the EU. Moreover, small companies should also have more difficulties in terms of cost applying for agreements in each MS because of the GMO directive. In this respect, FABRE TP asks the EU Commission for a **legal and clear European framework for animals bred by NABTs like Genome Editing and outside the scope of the GMO Directive**. We, therefore, applaud the scientific perspective published by the Group of Chief Scientific Advisors of European Commission launched on 13th November.

FABRE TP also asks the EU Commission to provide a **legal import framework in order to ensure transparency** with the introduction of Genome Edited animals, off-spring and products of Genome Edited animals in Europe. Efficient methods must be developed to identify and trace Genome Edited animals or products. Otherwise, European animal producers and breeders will be unfairly competing against GE products imported and developed from outside the EU, while they are prevented from using this technology.

About FABRE TP

FABRE TP is an industry-led platform of breeding and reproduction organizations and knowledge institutes, with members located across Europe. Together we share a common **vision on farm animal breeding and reproduction** to enhance the sustainability of farm animal production in Europe, and globally, through development and uptake of better approaches to breeding and reproduction.