

## Point of view of some Academicians

### “Genome editing, ethics and trust” Biotechnologies, necessary and essential tools for our future

The French Academy of Agriculture adopted on January 8, 2020 a Position Paper on genome editing, ethics and trust. **In addition, the undersigned academicians wish to highlight the major conclusions from this paper.**

The modification of genomes and the flow of genes between species are very natural processes. In the laboratory, genome modification techniques have existed for several decades for the generation of what are called "GMO". Genome editing tools (called genetic "scissors") have been greatly refined recently. Gene manipulations provide varieties of plants or animal breeds with higher average yields or which are resistant to various pests and diseases. For plants, this can help avoid the use of chemical actives or aggressive cultivation methods and reduce production costs and risks for farmers.

However, in our country, the public often expresses alarm that these "genetic manipulations" will lead to unexpected negative consequences, and wants a narrow definition of the precautionary principle to be applied to regulate their development. This delays progressing relevant science knowledge and may be reducing the competitiveness for our farmers.

Faced with these concerns, the undersigned academicians affirm that:

1 °) None of the GMOs currently in use around the world to date have suggested or exhibited any particular danger or negative impact on either human health or the environment as a whole. It is certainly impossible to say that "no danger will ever occur" (and this justifies caution). It is absurd, however, to escalate regulatory precautions, far beyond that necessary given the observed level of potential risk and given the potential benefits such approaches they bring.

2 °) It is even less justified to prevent research in this field, since it is precisely through research that potential hazards and risks can be demonstrated. From this perspective, it should be recognized that the most recent “genome editing (rewriting)” techniques allow for a much more rigorous control of the resulting products than those used a few years ago, such that the occurrence of a possible side effect is less likely today than it was ten years ago.

3 °) Finally, the systematic rejection of GMOs makes no sense when, in the name of perhaps questionable liberal free trade, GM products authorized in other countries are imported by us in large quantities, disregarding the rules of competition, and with the potential to affect the livelihoods of our own producers.

For these reasons, we remain concerned about the attitude of the public towards GMOs and similar types of products. We demand better school education in science, as well as better general information for the public. We recommend intensifying research in this field. In particular, we recommend that the destruction of experimental plots of GMOs be taken very seriously particularly given such offenses are a violation of property rights.

**Signatories (alphabetical order)**

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- 2. Jean-Pierre Bastié, section Productions végétales**
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