

Paris, le 12 mars 2020

**The French Academy of Agriculture (A A F) publishes
a Position Paper on
" Genome editing, ethics and trust",
in the context of cultivated plants and trees and farm animals.**

The Position Paper of the A A F on “Genome editing, ethics and trust” was approved by the French Academy of Agriculture on January 8, 2020 by 85 votes to 7 against with 12 abstentions (80% in favor). After the vote, an additional opinion: "Academics' point of view" was signed by 15 members going beyond the adopted position (see Addendum)

Paul Vialle and Bertrand Hervieu, co-rapporteurs of the working group, moderated the debates on this very sensitive issue, which led to the drafting of this Position Paper. At the end of this paper, the Academy sets out 8 recommendations based on 4 guiding principles to guide action:

- Act responsibly,
- Respect the precautionary principle,
- Engage the public. Inform society. Act transparently,
- Re-evaluate regularly.

The Position Paper analyzes new genome editing technologies (including that of CRISPR Cas9), which are more precise, faster, less expensive than previous methods, which in some cases act without the introduction of novel DNA, making the editing undetectable. The ethical question divides in two: a) should the genome be considered as programmable code we can manipulate, or b) is it record of a long evolutionary history, allowing the cell to explore solutions given enough time? One response consists in widening the debate to the various stakeholders, including citizens and consumers, in order to openly rank priorities, by sharing all information with society. After analyzing many diverse examples, it is clear that each case is unique, and that this diversity must be considered both in terms of benefits and potential risks. During the work of the Academy, the Court of Justice of the European Union (CJEU), on the basis of European directive 2001-18, made a decision classifying all products resulting from these techniques as GMOs, independently of the evolution of scientific thinking over the past 20 years. The “State Council” (“Conseil d’Etat”) has since followed this decision.

The **Academy affirms** the value of these techniques for fundamental research, as is already happening in human health research. The Academy is convinced that applications of gene technologies will be part of the solution for current urgent global challenges: biodiversity loss, climate change, global population growth, and they fit with current political priorities, such as agroecology or animal health.

The **Academy supports** the need for official regulatory processes, but there needs to be better adapted protocols and monitoring of time-limited but rescindable permits where there is a capacity for them to be reinstated. Article 7 of Directive 2001-18 establishing a differentiated regulatory procedure (apparently never used) may provide, without changing the current legislation, for a testable legal framework. To avoid a mismatch between science and law, the AAF proposes a review of the texts governing these types of activities every 7 years, as exists for the National Consultative Council on Ethics.

The Academy urges public authorities to change their wait-and-see position. The Academy wishes to contribute to further development of regulations and, to do this, is ready to solicit and support legislators, along with other French and European academies.