Change the EU regulations that slow down plant breeding

On July 25, 2018, the Court of Justice of the European Union presented its decision in a case concerning a certain form of plant breeding - with far-reaching consequences for plant research and plant breeding. Contrary to the recommendations of the scientific community, the EU's scientific advisors (Scientific Advice Mechanism, SAM), the Court's own Advocate General, national authorities in many of the EU member states, and authorities in many other parts of the world, it was decided that all plants improved with these new mutation techniques with high precision including CRISPR should be regulated according to the regulations of genetically modified (GM) organisms. It also applies to plants that do not contain any new DNA that is "foreign to the species" but are rather identical to natural mutants, or those that plant breeders created with conventional mutagens, which are not regulated as GM plants. GM plants are regulated extremely hard within the EU. In addition to the high requirements for risk assessment - despite the fact that there is no evidence that the method is risky - a political blockage has resulted in that not even one such variety has passed the regulatory needles eye since the current regulations were introduced in 2001-2003.

The court's decision led to strong reactions within the scientific community, which, among other things, emphasized that:

- It prevents us from getting an environmentally friendly and climate-adapted agriculture, locally, regionally and globally
- It makes it harder for the countries in the European Union to produce food and other supplies in an environmentally friendly way
- Many of the EU's own goals and the global sustainability goals will be more difficult to fulfil
- It slows down basic research and blocks innovation and plant breeding
- The publicly funded plant scientists in the EU risk to be severely affected; do taxpayers want to finance research where the results can only be applied outside the EU?
- Genetically identical plants are tainted by identical risks and should be treated equally regardless of how they are produced
- Since it is often not possible to determine whether a particular variety has been produced by conventional plant breeding or modern gene editing, the latter are not traceable. Traceability is a requirement in the EU regulatory framework for GM plants and we thus get a regulatory framework that cannot be enforced.
- International trade and the EU's own regulations are challenged because genetically engineered plants will be grown in the rest of the world but not regarded as GM and thus not treated separately outside Europe.

The court interpreted the current legislation and its decision cannot be appealed. We, Swedish research organizations, academies and financiers, believe that this is a consequence of an outdated legislation, which needs a long overdue revision. The decision of the Court of Justice of the European Union illustrates its dysfunctionality and leads to serious consequences. The investigation of the Swedish Board of Agriculture on the consequences for Swedish companies and research (Appendix 1), and their unanswered questions about how the decision can be implemented (Appendix 2), speak for themselves. We therefore urge Swedish politicians, especially at the EU level, because the European Parliament and the European Commission have the exclusive right to raise the question, to get involved in achieving an expedited change in GMO legislation. If this is does not happen, European research and European agriculture, Europe's development towards a sustainable future and thus Europe's inhabitants and environment, will be disadvantaged.

Appendix 1: The Swedish Board of Agriculture: Consequences of the EC-ruling according to Swedish companies and research groups

Appendix 2: The Swedish Board of Agriculture: Follow-up from PAFF-meeting on September 11, 2018

Hans Adolfsson, Vice-Chancellor, Umeå University

Erik Alexandersson, Director, PlantLink

Stefan Bengtsson, President and CEO, Chalmers

Göran K Hansson, Secretary General, The Royal Swedish Academy of Sciences

Lars Hultman, Chief Executive Officer, Swedish Foundation for Strategic Research

Pär Ingvarsson, Chairperson, Linnean Centre for Plant Biology in Uppsala

Åke Iverfeldt, Chief Executive Officer, Swedish Foundation for Strategic Environmental Research (Mistra)

Sigbritt Karlsson, President, KTH Royal Institute of Technology

Maria Knutson Wedel, Vice-Chancellor, Swedish University of Agricultural Sciences

Ove Nilsson, Director, Umeå Plant Science Centre

Eva Pettersson, Academy Secretary General and Managing Director, The Royal Swedish Academy of Agriculture and Forestry

Torbjörn von Schantz, Vice-Chancellor, Lund University

Astrid Söderbergh Widding, President, Stockholm University

Tuula Teeri, President, Royal Swedish Academy of Engineering Sciences