The international debate on the regulation of the new gene editing methods

The times of the old regulation on transgenic plants is over, we need new strategies to ensure the safety of the coming Gene Edited crops. Still, some few things we should be aware of:

a) The process of transgenesis and of natural mutation are identical, the whole war on basic differences in the making of transgenic crops was built on wrong science, this was known since decades, but the fascination of the new breeding possibilities with transgenic crops was so huge that people lost in their general view of GMOs and followed a scientifically flawed Genomic Misconception.

b) It is since more than two decades clear that regulators based their complex laws on false premises of definitions of transgenic crops, The EU legislation on “GMOs” is based in important parts between scientific nonsense and protectionism: An unfortunate and ongoing Schumpeterian chain of public choices.

c) Since decades there has not even a headache been reported as a negative health impact of transgenic plants, unless it was based on questionable statistics and selective data.

The regulation of new Gene Editing is much easier, since the most precise methods do not even contain foreign DNA, the alterations in the new crops are reduced to a few, precisely defined sequences of another crop species or crop variety, which will be advantageous for the new breed. These “oligo-mutated” crops need a minimum of regulation and according the US regulatory agency APHIS it should be not taken as GM plant to be regulated at all, but the US Environmental Office and European Regulatory units have not decided yet on the regulatory status, they are still in a tedious and long enduring process of scientific debates. The opposition of GM crop breeding is maintaining the resistance against Gene Editing, and wants not only to exclude it from their own ideas on crop breeding, but also include it together with the transgenic crops in a strict and costly regulatory process with strict political and weak scientific arguments.

The authors opinion can be summarized according to the ideas of Wolt and Podevin, they base their view on a dynamically flexible regulatory system, with a lowest category of short term regulation during a few years for the oligo-mutation breeds, ending on the highest level of regulation with the old transgenic crops.

Biography


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