Nobel laureates call on EU to relax rules on genetic modification

Friday 19 January 2024, The Guardian

The EU must "reject the darkness of anti-science fearmongering" before a key vote on gene editing, 34 Nobel prize winners have said.

In an open letter shared with the Guardian and other European newspapers, the laureates demanded that lawmakers relax strict rules on genetic modification to embrace new techniques that target specific genes and edit their code. The technology could make crops more resistant to disease and more likely to survive extreme weather events that are growing more violent as the planet heats up.

The scientists said old methods of breeding crops over years and decades was taking too long. "We do not have this time in an era of climate emergency," they wrote.

The letter sent to MEPs* on Friday was organised by WePlanet, an environmental nonprofit that campaigns for technologies like nuclear power, gene editing and cellular agriculture, as well as rewilding most of Europe. The more than 1,000 signatories to the letter range from leading biologists and geneticists – including the scientists who won a Nobel prize for discovering the Crispr "genetic scissors" at the heart of the debate – to celebrity authors such as the psychologist Steven Pinker and philosopher Peter Singer.

Supporters say the new rules could help farmers use fewer pesticides and less fertiliser. Some plants that are hard to breed by conventional means – such as fruit trees, grape vines and potatoes – use some of the most harmful pesticides in the EU, the scientists said.

For the most part, environmental groups have fiercely opposed efforts to change the genetic code of plants and other organisms, voicing fears about their safety and the danger of changes with unintended consequences. Proponents of the technologies, particularly highly targeted ones, have argued that such risks pale in comparison to the known dangers of biodiversity loss, the climate crisis and hunger. The European Food Safety Authority has found no new hazards from targeted gene editing in plants compared with conventional breeding.

But in 2018, the European court of justice ruled that any plants made by changing genes – whether targeted or not – were genetically modified organisms that fall under the EU's GMO rules. It said the risks to the environment and human health could not be established with certainty.

The European Commission has accepted that plants made with new methods of gene editing are GMOs but wants to exempt them from the existing safety rules, which supporters of the technology say are outdated and restrictive. Lawmakers in the parliament's environment committee will vote on its plan on Wednesday.

A previous open letter signed by a smaller group of scientists in December – including molecular biologists and geneticists, many of whom work for nonprofit groups – argued that the commission's proposal should be "rejected or extensively revised" because the safety of the environment and human health cannot be guaranteed. They called for all gene-edited plants to be subject to a mandatory risk assessment on a case-by-case basis.