

Reflections from the OECD conference on genome editing in agriculture

Yoko Takasu – Environment, Safety and Health, Environment Directorate, OECD

Genome editing has dramatically expanded the potential of bioengineering. Currently, it offers attractive new varieties of agricultural products created from plants animals and micro-organisms. This technology does not necessarily need a transgene to modify DNA, which often raises regulatory issues associated with the legal definitions of genetically modified organisms (GMOs) which vary among countries. Many countries in Asia and Europe are still deliberating regulatory decision whether genome-edited products are to be regulated as GMOs, while other countries including Argentina, Brazil, Canada, New Zealand, as well as the United States and the European Union have each clarified a regulatory status for genome editing. The OECD has promoted the exchange of information and discussion for harmonised regulatory development, through country representatives in several working groups and workshops. Based on these activities, the *OECD Conference on Genome Editing: Applications for Agriculture – Implications for Health, Environment and Regulation* was held on 28-29 June 2018 in Paris. The conference consisted of three sessions addressing: 1) Applications of genome editing in agriculture, 2) Risk and safety considerations, and 3) Regulatory aspects. About 200 people, including policy makers, academics, innovators and other stakeholders, participated in this event and shared the updates in the technology and regulatory status in different countries. Also discussed were some major concerns surrounding genome editing, such as how the technology should develop in the future, improving public acceptance, balancing risks and benefits, coping with the burden of current regulatory risk assessment, as well as safety and regulatory considerations for similar products obtained through different breeding procedures.