

"HARNESSTOM supports new plant breeding techniques at the ARRIGE meeting"

HARNESSTOM coordinator has participated in the ARRIGE workshop on "Genome Editing in Plants (and Animals) in the European Union versus other countries in the world" that held as both in presence (CNB in Madrid) and virtual one day meeting on May 9th, 2023.

NPBT and genome editing in particular are revolutionary tools for plant breeding and are within the focus of HARNESSTOM activities on tools to speed up breeding. They are also included as part of our monitoring of the legal aspects related to breeding and the use of genetic resources. Harnesstom coordinator presented a talk on "Genome Editing in Crop Plants" were he described the importance of genome editing to increase the precision, accuracy and speed of tomato breeding and in other crops.

ARRIGE (https://www.arrige.org/) stands for Association for Responsible Research and Innovation in Genome Editing (ARRIGE) and is a non-for-profit association for genome editing and it has four main objectives: 1. to promote a global governance of genome editing through a comprehensive setting for all stakeholders, including academics, researchers, clinicians, public institutions, private companies, patient organizations and other non-governmental organizations, regulators, citizens, communication media, governmental agencies and decision makers; 2. to push forward the scientific, ethical, social, legal and political reflection in the field of genome editing; 3. to foster the development of genome editing technologies within a safe and ethical framework for individuals and for our societies; 4. the dissemination of reliable information regarding genome-editing technology for experts (all fields included), politicians and citizens throughout the world.

Of special interest was the presentation by a representative the Spanish Ministry of Agriculture who giver view of the current situation of NPBT in Europe and the excellent opportunity for pushing a balanced position for these technologies once Spain takes the presidency of the EC in a few months. Several presentations including one covering the situation in Argentina were very inspiring. The experience from the last years in Argentina, where SN1 edited plants are not considered as GMO indicates that they follow a much faster development rate from bench to market than GMOs. Such

Developments also are led mostly by small and medium enterprises (SMEs) and public research institutions in contrast to the large corporations associated to Plant GMOs. In addition, the traits "improved-" by genome editing are more diversified and include consumer related traits. Clearly this presentation indicated that NPBT can have an important and already emerging impact in the agricultural and biotechnology sectors particularly in developing countries but in SME worldwide.

More info on program at the end of the doc and on Arrige can be found at https://www.arrige.org/







Harnesstom coordinator during his presentation on Genome Editing in Crop plants at the ARRIGE meeting on NPBT.



HARNESSTOM coordinator Antonio Granell (IBMCP, SP) at the discussion round table with Lluís Montoliu (CNB, Madrid, SP), Pere Puigdomènech (CRAG, Barcelona, SP) and Daniel Voytas (University of Minnesota at the Center for Precision Genomics and CEO of the biotech company Calyxt.



PROGRAM

2023 ARRIGE Annual meeting – **Monday**, **8 May 2023 at CNB-CSIC** (**Madrid**, **Spain**), **on site** + **online**

Genome Editing in Plants (and Animals) in the European Union versus other countries in the world.

10:00 – 10:10 Welcome and introduction to ARRIGE

Mario Mellado, Director of CNB-CSIC

Lluís Montoliu, CNB-CSIC, Madrid (Spain), President of ARRIGE

10:10 – 10:30 Setting the stage: genome editing in plants in the EU

Pere Puigdomènech, CRAG, Barcelona (Spain)

10:30 – 10:50 Examples of genome editing in plants

Toni Granell, IBMCP, València (Spain)

10:50-11:10 Evolution of the GMO legal framework in the EU and the discussion on genome editing regulation

Josep Casacuberta, CRAG, Barcelona (Spain) - ONLINE

11:10 – 11:30 Round table discussion

Pere Puigdomènech, Toni Granell, Josep Casacuberta

11:30 - 12:00 Coffee break

12:00 – 12:20 The current EU legislation on genome editing in plants and animals

Leire Escajedo, UPV/EHU, Leioa (Spain)

12:20 – 12:40 Policy/Government perspectives from Spain

Ana Judith Martín, MAPA, Madrid (Spain)

12:40 – 13:00 Genome editing in plants and animals in Latin America

Martina Crispo, Institut Pasteur de Montevideo (Uruguay)

13:00 - 13:30 Round table discusión

Leire Escajedo, Ana Judith Martin, Martina Crispo

13:30 - 14:30 Lunch break

14:30 – 14:50 Genome editing in plants from Antama Foundation

Soledad de Juan, Madrid (Spain)

14:50 – 15:10 Genome editing in plants from ANOVE

Antonio Villarroel, Madrid (Spain)

15:10 – 15:30 Genome editing in plants from BIOVEGEN

David Lapuente, Madrid (Spain)

15:30 – 15:50 Genome editing in plants in the USA

Daniel Vovtas, Univ. Minnesota, USA - ONLINE

15:50 – 16:10 Genome editing in livestock and aquaculture

Ana Granados (EFFAB, Brussels, Belgium)

16:10 - 16:30 Round table discusión

Soledad de Juan, Antonio Villaroel, David Lapuente, Daniel Voytas, Ana Granados

16:30 – 16:45 Introducing the GeneHumdi COST action

Javier Molina, GENYO, Granada (Spain)

17:00 End of the meeting

