" Harnesstom participates in Phytofactories"

Harnesstom includes prebreeding activities to improve tomato quality to satisfy the increasing demand by consumers for healthier, more nutritious and more flavour some tomatoes. Many of those fruit properties rely on the accumulation of specialized metabolites in the fruit which is considered by some experts like a highly effective metabolite factory for healthy compounds.

Phytofactories 2023, an international conference on Plant Molecular Farming, took place on 7-9 June 2023 in Luxembourg and was organized by the Luxembourg Institute of Science and Technology (LIST). Phytofactories 2023 has some commonalities with Harnesstom as it is centered on the exploitation of plant diversity although preferentially using cell and tissue cultures and aims as HARNESSTOM to cover the valorization chain of plant resources. Phytofactories 2023 brought together over 170 participants from more than 20 nationalities, mostly experts in the production and characterization of specialized plant metabolites. Of special interest were those applying this knowledge in dedicated pilot processes, including the establishment and optimization of plant cell and tissue cultures, including in vitro, aeroponics and hydroponics. Metabolite characterization was also discussed together with the latest innovations in bioprocessing and metabolic engineering.

Harnesstom coordinator Antonio Granell presented results where both traditional breeding and new plant breeding technologies are combined in dedicated prebreeding programs to obtain tomatoes with higher level of health related compounds.

The meeting was an excellent opportunity for reaching out to other researchers and industries, communicating HARNESSTOM activities while exploring additional avenues for further research and collaborations in the agrofood industry.

Harnesstom coordinator during his presentation of tomato fortification by a combination of traditional and new breeding tools at the Phytofactories 2023 meeting in Luxemburg on June 6, 2023.