
# The Harnesstom phenotyping training course closes its first edition successfully, with more than 150 participants in the various activities

From July 3rd to 13th, the Harnesstom and RoxyCost initiatives jointly organized the "Tomato Plant and Fruit Phenotyping Training Course," engaging in various activities over 120 participants from 15 countries and 52 institutions. The course took place at the Maritsa Vegetable Crops Research Institute's (MVCRI) in Plovdiv, Bulgaria. The initial two days of the course consisted of theoretical and practical sessions focused on the phenotyping of plant, leaf, and tomato fruit traits. These sessions included an online and in-person seminar on the "Theory of Phenotypic Traits," featuring experts from Italy's *Universita degly Study della Tuscia*, Spain's *Universitat Politècnica de València* and *Universitat Politècnica de Catalunya*, and Bulgaria's *MVCRI*. Additionally, researchers provided practical demonstrations in the field and laboratory to explain the methodologies and protocols for fine characterization of various phenotypic traits.

Following this, a team of 13 researchers from Italy, Spain, Bulgaria, and the Netherlands collaborated on phenotyping the Harnesstom repository, comprising 242 accessions selected for their favourable agronomic and quality traits. These materials underwent phenotyping for 31 plant, fruit, agronomic, and chemical traits, resulting in a comprehensive database with detailed characterization of the accessions and resulted in more than 2,300 pictures of plants, trusses and fruits, more than 7,200 analyses and measurements for fruit quality traits, and more than 20,000 datapoints for agronomic, qualitative and quantitative traits. These results have only been possible thanks to the collaboration of a team of researchers from different countries who have worked side by side for more than 10 days. Throughout the phenotyping jamboree, researchers shared their knowledge on the different traits and worked together to achieve a thorough characterization of this collection. "*Every participant demonstrated a remarkable eagerness to share knowledge, exchange ideas, and actively participate in all phenotyping activities, creating a dynamic and vibrant learning environment that has been immensely beneficial for everyone involved. We hope that the knowledge gained during this training course will continue to inspire and empower all involved researchers in their future endeavors. Thank you all for your valuable contributions and for making this training course a memorable and impactful event*", said Ivanka Tringovska, the local organizer from MVCRI. The findings will be shared with farmers, as a continuation of the different Participatory Plant Breeding activities that have been organized with this collection. Ultimately, these results will contribute to the development of an effective pipeline for transferring research project outcomes to farmers, citizens, and stakeholders.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No *101000716*

## Access to the videos

The course videos can be found at the following link: https://www.youtube.com/playlist?list=PLwc--TBN28avahQhX33ZI1auHvQWkAmN8


Image 1. Participants, visiting the experimental field at MVCRI during the second day of the training course.



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Image 2. Researchers working on the phenotyping of different traits during the phenotyping jamboree of the HARNESSTOM repository.



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