

Factsheet

Acronym HARNESSTOM

Full title Harnessing the value of tomato genetic resources for now and the future

Programme Horizon 2020 / SFS-28-2018-2019-2020 - Genetic resources and pre-breeding

communities / H2020-SFS-2020-1 - Genetic resources and pre-breeding communities

Contract Number 101000716

Abstract

Tomato is a paradigm of crop domestication: a widely cultivated and consumed vegetable but with reduced genetic diversity and therefore highly vulnerable to emerging diseases and climate change. Fortunately, tomato is rich in genetic resources and information to overcome those difficulties and a coalition of scientists and breeding experts which have generated a large amount of this information have been organized under an effective management structure and a series of objectives to overcome those threats. HARNESSTOM aims to demonstrate that increasing use of Genetic Resources is key for food safety and security and can lead to innovation and benefit all stakeholders. By capitalizing on the large effort done recently in several EU-funded projects to connect phenotypes/genotypes in a large number of accessions from different germplasm banks and academia, HARNESSTOM will first collect, centralize and normalize this wealth of information in a way that is easily searchable and displayed in a user-friendly manner adapted to different type of users. Second, HARNESSTOM will develop four prebreeding programs addressing the major challenges of the field: 1) introducing resistances against major emerging diseases, 2) improving tomato tolerance to climate change, 3) improving quality 4) increasing resilience in traditional European tomato by participatory breeding. And additional goal is to increase speed and efficiency in prebreeding what is needed to be able to respond to the emerging challenges in a timely and effective manner. Joint leadership of both academia and industry in each of the WP and the participation of two NGOs representing different stakeholders guarantees the results of the project will have an impact in industry innovation and also in the society. An efficient management and outreach and communication platform is also in place to make sure the project runs smoothly and the interests of all stakeholders are protected.

Duration 48 months (1/10/2020- 30/09/2024)

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- Universidad Politécnica de Valencia, Spain
- Wageningen University & Research, Netherlands
- Unniversità degli studi di Napoli Federico II, Italy
- Instituto Valenciano de Investigaciones Agrarias, Spain
- The Hebrew University of Jerusalem, Israel
- Maritsa Vegetable Crops Research Institute, Bulgary
- Asociación de Productores y Comercializadores de la Tomata de Penjar d'Alcalà de Xivert, Spain
- Enza Zaden Centro de Investigación S.L., Spain
- Gautier Semences, France
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- Phenome Networks, Israel
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- National Taiwan University, Taiwan
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Website http://harnesstom.eu