

OBJECTIVES

To characterize genetic and physiological traits providing tolerance and resilience to drought, heat, and salinity, To adapt crop management systems to tolerant/resilient varieties.

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To profile and/o develop new stress-adapted genotypes by exploiting local genetic diversity as well as novel genotypes and hybrids.



EXPECTED OUTPUT



New genotypes of tomato, pepper and melon adapted to climate change efficient in using limited resources/productive in Mediterranean area.

Crop management practices suitable for local varieties.

The uptake of these results will be enabled through demonstration in Mediterranean farms and will contribute to mitigation of risks posed by climate-change to food security, health, and social well-being in the Mediterranean basin and beyond.

CONTACTS

Project Coordinator: **Andrea Schubert**Project Manager: **Daniela Minerdi**University of Turin
Department of Agricultural, Forest and Food Sciences
Largo Paolo Braccini 2, 10095 Grugliasco (TO), Italy
andrea.schubert@unito.it
daniela.minerdi@unito.it



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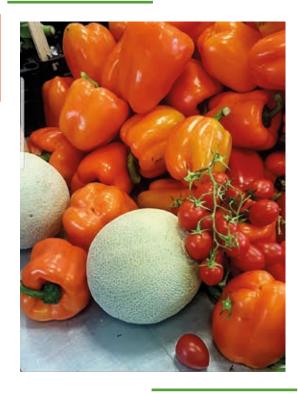


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VEG-ADAPT

Adapting Mediterranean vegetable crops to climate change-induced multiple stress









THE CHALLENGE

In the Mediterranean area, climate change causes and worsens environmental stresses such as drought, heat and salinity. Increasing temperatures are being recorded, together with a general decrease and discontinuity in rainfall.



Long hot and dry periods are posing severe limits to non-irrigated crops and, in the case of irrigated vegetable crops, water resources may become insufficient to successfully grow commercial elite varieties.



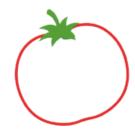
A further problem induced by climate change is a higher risk of salt stress, brought upon by reduced irrigation and rainfall and heat-driven evaporation, which may force farmers to use low-quality salty water for irrigation.





Vegetable crops in the Mediterranean are increasingly exposed to climate change-induced, single and multiple stresses, in particular drought, heat and salinity.

THE OPPORTUNITIES



Improving plant resilience to stress in correctly planned crop management systems is key to achieve vegetable crop adaptation to climate changeinduced stress.

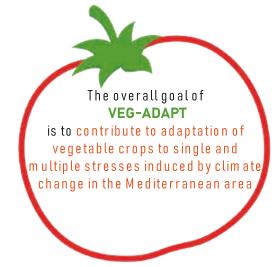


This goal can be reached by exploring and exploiting untapped genetic variability often preserved in local and often neglected genotypes. In order to optimize growth and production of these genotypes, crop management techniques must be however tuned to their needs under conditions of stress.



Tomato, pepper, and melon are the major providers of fruit to the Mediterranean countries, with a total yield reaching 45 million tonnes in 2016. These vegetables have carotenoid-rich fruit, significantly contributing to the dietary uptake of antioxidants in the Mediterranean population, and their consumption is estimated to 40 kg per capita and year collectively.













Budget 2 m lns euros

Duration
36 months
(October 2019
September 2022)

Tomato Pepper Melon

13 Partners 8 countries

THE TEAM



























