



## "THE IMPORTANCE OF GENETIC RESOURCES IN DEVELOPING NEW TOMATO VARIETES COVERED by SCIENTISTS AND BREEDERS IN TOULOUSE"

More than fifty scientists and breeders from Harnesstom (Harnesstom.eu) gathered in Toulouse for 2 days (from November 14 till November 15, 2023) to discuss the latest results on the use of GenRes for improving tomato. One of the highlights of the two days of the meeting was the report on the identification of a number of accessions that are resistant to the tomato rugose fruit virus TBRFV. These accessions were identified in large screenings of over 1000 accessions that included tomato varieties and wild type relatives of tomato. Genetic analyses conducted within Harnesstom resulted in the development of a series of genetic markers that are currently used in marker assisted breeding programs (MASPB) to develop resistant tomato varieties against the rugose virus disease. Similarly, promising pre-breeding materials are being developed by introducing into a series of elite lines from the participating tomato seed companies, a number of genomic regions from wild relatives of tomato that confer tolerance to high temperature and drought conditions. Finally, a number of advanced backcross lines have been produced with the aim to improve the flavor composition of cherry and salad tomato types. Further activities reported during the meeting include the implementation of visualization tools in the most comprehensive one-stop-shop tomato database of genotypic and phenotypic information (HarnesstomDB), the development of speed breeding protocols that allows 4.5-5 tomato breeding cycles per year and a series of citizen science and participatory breeding activities that were awarded a European Prize for Citizen Science activities. More information can be found at the news and event session in [harnesstom.eu](https://harnesstom.eu).



Harnesstom participants at the 3<sup>rd</sup> annual meeting that took place in Toulouse Nov 14<sup>th</sup> and 15<sup>th</sup> 2023.



