

## FACTS

**16**  
project partners

**14**  
associated partners

**4,372,015**  
Euro EU contribution

**42**  
months

**103**  
R&D staff active on the project

**52**  
male R&D participants

**51**  
female R&D participants

## OUTREACH ACTIVITIES

**15**  
participations in exhibitions and food fairs

**255**

**6**  
TRADITOM Kids events

**11**  
traditional tomato recipes collected

**37**  
publications to date

**6**  
training and demonstration events performed

**82**  
workshops and conferences attended/organised

**#**  
Find updates on Twitter via #Traditom

## FARM TO FORK

**1,800**  
traditional tomato varieties and their hybrids are available in TRADITOM database

**340**  
consumers tested

**286+52**  
varieties are present in the TRADITOM core collection

**92**  
varieties are included in the TRADITOM GOURMETOM collection

**3**  
TOP 3 tomatoes identified in consumer tests

**35+**  
TRADITOM tomato varieties were sent to 3-Michelin star chef

## FARM TO FORK BACKGROUND-INFO

**1,800** The project assembled the largest collection of European traditional tomato varieties by requesting seeds from dispersed seed banks, research laboratories and farmers' associations. The current collection exceeds **1,800 different varieties** (500 more than initially planned). The **TRADITOM database** for browsing and retrieving information for these varieties and their hybrids has been set up. It contains passport and phenotypic information for ~1800 accessions conforming the TRADITOM collection.

**340** **340 consumers** participated in hedonic tests in France, Italy and Spain. In France, the panel consisted of 100 consumers; in Italy, the panel was composed of 107 consumers while a total of 133 consumers performed the tests in Spain.

**286+52** The **TRADITOM traditional collection** consists of **286 accessions**, from which 60 are modern and a **TRADITOM de Penjar collection** of **52 accessions**, of which 8 cultivars are modern. With respective 286 and 52 accessions selected to be part of the TRADITOM traditional and TRADITOM de Penjar core collections, the size of the collection exceeds the original target of 200 accessions. In order to allow analysis of what discriminates traditional TRADITOM accessions from modern accessions, 60 modern cultivars representing the traditional types and 8 modern cultivars representing the de Penjar types were selected and included in the respective core collections.

**92** The **GOURMETOM** collection encompasses **92 traditional tomato varieties**. It was cultivated near La Albufera Natural Parc (Spain) following traditional practices by Esteve Martínez Serrano, a farmer recently awarded "Best Collaborative Farmer" at the first meeting of the Tomata Valenciana in El Perelló in May 2017. The set of GOURMETOM varieties cultivated was used as an exhibition for variation in tomato colours and shapes for the local farmers that visited the field.

**35+** A sample of **35+ TRADITOM tomato varieties** were sent to 3-Michelin star chef **Quique Dacosta** for tasting and evaluating the culinary possibilities of GOURMETOM TRADITOM tomatoes.

**3** The **TOP 3 tomato varieties** identified in hedonic consumer tests per country were: **Marbonne** (France), **Pomodoro di Sorrento** (Italy), **Cauralina** (Spain). In general, preferences for all consumers were oriented towards a 'juicy', 'sweet', 'aromatic' and 'fleshy' product, opposite to 'unpleasant aftertaste', 'bland taste', 'acid', 'mealy texture' and 'hollow'.

## ANALYSIS & DATA COLLECTION

**1,691**

non-redundant varieties were assessed in terms of genotypic and phenotypic variability

**480,891**

data points are included in the TRADITOM database

**1,444**

accessions were successfully genotyped

**15,725**

plants have been phenotyped by TRADITOM partners

**867**

metadata for 867 metabolites stored in the TRADITOM database

**1,118**

TRADITOM varieties were visually classified in nine fruit shape categories

**2,132**

accessions present in the TRADITOM seed repository

**32,000**

plants were analysed to investigate effect of environmental and cultivation conditions

**11,124**

samples were analysed to profile health and flavour metabolite complement of a core set of TRADITOM varieties

**20,8**

kilograms of seeds contained in the TRADITOM seed repository

**8,691**

pictures are available from the TRADITOM database

## ANALYSIS & DATA COLLECTION BACKGROUND-INFO

**1,691**

Valuable information has been obtained for 141 quantitative and 43 qualitative characteristics covering interests of farmers, breeders, food technologists and consumers. In total **>1691 varieties**, 422F1 and >28BC breeding lines have been evaluated. In close collaboration between academic and industrial partners, we identified the best materials and crosses to increase the resilience of traditional tomatoes while maintaining their traditional flavour.

**1,444**

A total of **1,444 accessions** were successfully genotyped, representing ~20% more than initially planned. The data was used to identify a core collection of tomato traditional varieties that were subjected to thorough biochemical analysis.

**15,725**

A total of **15,725 plants**, corresponding to 1,448 varieties from the whole TRADITOM collection, have been phenotyped by TRADITOM partners (as of March 2017). The whole TRADITOM collection has been exhaustively phenotyped for plant characteristics and structure, agronomic performance, inflorescence characteristics, fruit characteristics and quality and post-harvest performance. This phenotyping includes qualitative, quantitative and morphometric descriptions.

**867**

To support the need for centralization and integration of metabolic data into a broader biological framework (i.e. genotype, phenotype, and passport data), we adapted the information interactive TRADITOM database to include metabolic data. The database stores **metadata for 867 metabolites** corresponding to:

- 656 semi-polar metabolites (SPM)
- 51 non-polar metabolites (NPM)
- 90 primary metabolites (PM)
- 72 volatile compounds (VOC)

**1,118**

Out of TRADITOM varieties genotyped, **1,118 varieties were visually classified** in nine fruit shape categories (**Phenotyping kit I and II**): flat, round, rectangular, ellipsoid, heart, long, obovoid, oxheart and bell pepper.

**2,132**

The TRADITOM seed repository includes **2,132 accessions**. It is essential to ensure the conservation, access and availability of the collection of traditional varieties and breeding materials obtained in the project. It further ensures the availability of seed material for the propagation of the TRADITOM accessions being used in the project as well as its long term availability for the use of other interested parties.

**32,000**

The effect of environmental and cultivation conditions in the expression of traits, such as fruit size, shape, colour, productivity, post-harvest behaviour, etc. has been analysed in trials involving almost **32,000 plants** and their fruits (4 limited-stress conditions, tested over 3 years in 12 different locations).

**11,124**

**11,124 samples analysed:** The improved set of health and flavour metabolites has been used to define the varieties that will represent different combinations of those metabolites and eventually be preferred by different types of consumers.