

## Factsheet



**Acronym** BRESOV

**Full title** Breeding for Resilient, Efficient and Sustainable Organic Vegetable production

**Programme** H2020-SFS-07-2017

**Contract number** 774244

**Abstract** The project deals with the urgent need to provide climate-resilient cultivars addressed to organic vegetable production systems. These new cultivars will benefit organic growers, and the organic seed industry, providing much needed security both under current and future scenarios of climate change. In this project, we will exploit the genetic variation of broccoli, kohlrabi, bean and tomato for enhanced productivity, by exploiting up-to-date knowledge of genome structure and function. This work will be enhanced by the active involvement of farmers, advisory services, research institutes, breeding companies and food processors from diverse geographical/climatic contexts in Europe and Non-EU countries. The selection of pre-breeding/ breeding lines for the three species will be undertaken in organic vegetable farming systems, utilizing an annual crop rotation scheme. New cultivars will be selected for efficiency when grown under water, temperature, and nitrogen stress, for resistance to some pests and diseases, for desirable product quality traits such as taste, visual appearance, post-harvest performance. The Stakeholder Board will contribute to the expected outcomes of the project. Crop genetic diversity will be broad as we will be utilizing several landraces (LRs) and crops wild relatives (CWRs) provided by partners for the foreseen pre-breeding and breeding activities. We will adopt an innovative approach, where plant traits related to the roots-zone, and to root-growth, and architecture that enable a better interaction with organic soil and its microbiome, are sought to benefit the end-users. This approach will ensure that the available genetic resources and bred-germplasm, combined with the best on-farm management practices will enhance resource use efficiency and productivity. The germplasm from this project will act to pump-prime the production of new seed for the organic growing sector and will also serve as a model for the enhancement of other crops.

**Duration** 48 months (01/05/2018 - 30/04/2022)

**Project funding** 5,962,019.75 €

**Coordinator** Prof. Ferdinando Branca  
Università degli Studi di Catania, Italy  
Email: [fbranca@unict.it](mailto:fbranca@unict.it)  
Phone: +39 095 234307

- Partners**
- Università degli Studi di Catania, Italy
  - European Seed Association, Belgium
  - Universidad de Almeria, Spain
  - Universidade de Tras-Os-Montes e Alto Douro, Portugal
  - Vyzkumny ustav rostlinne vyroby, v.v.i., Czech Republic
  - Forschungsinstitut für biologischen Landbau (FiBL), Switzerland
  - Università Politecnica delle Marche, Italy
  - Vegenov-BBV, France
  - The University of Liverpool, United Kingdom
  - Universitat Politecnica de Valencia, Spain
  - Vegetable Research and Development Station Bacau, Romania
  - Consiglio per la ricerca in agricoltura e l'analisi dell'economia Agraria (CREA), Italy
  - Beijing Academy of Agriculture and Forestry Sciences, China
  - Zhejiang Academy of Agricultural Sciences, China
  - Universite de Tunis el Manar, Tunisia
  - Servicio Regional de Investigacion y Desarrollo Agroalimentario del Principado de Asturias (SERIDA), Spain
  - Prospecierara, Switzerland
  - Itaka Srl., Italy
  - Institut National de la Recherche Agronomique (INRA), France
  - Chungnam National University, Korea
  - Station Essais en Cultures Légumières du 22 (SECL), France
  - EURICE - European Research and Project Office GmbH, Germany

**Project website** [www.bresov.eu](http://www.bresov.eu)