Title

Bacterial hosts for production of bioactive phenolics from berry fruits (BacHBerry)

Abstract

Bacterial hosts for production of bioactive phenolics from berry fruits (BacHBerry) is a 3 year project initiated in November 2014 that is funded by the Seventh Framework Programme for Research and Technological Development (FP7) of the European Union. Together with DISCO and TriForC the project falls under the theme KBBE.2013.3.1-01: “Plant High Value Products – from discovery to final product”. The consortium includes twelve research groups, five small and medium-sized enterprises, and one large enterprise coming from 10 different countries, including Chile, China, and Russia. The overall goal of BacHBerry is to develop a sustainable and a cost-effective pipeline for production of high-value berry phenolic compounds using microbial platforms. The process is to be designed in a way to allow subsequent commercialization, aiming at providing socio-economic benefits for communities inside and outside of Europe. The project covers the entire scope of discovery and pre-commercialization activities, from germplasm collection screening and identification of novel bioactive polyphenols to functional characterization of the corresponding biosynthetic genes and construction of Gram-positive cell factories, with further optimization of extraction methods and scale-up of the production by fermentation up to pilot scale. At the time of the symposium the project would be completed and the key outcomes of it would be presented herein.