



EXCALIBUR

EXCALIBUR CONTINUES TO WORK ON DRIVING A CHANGE IN SOIL MANAGEMENT BASED ON BIODIVERSITY

EXCALIBUR aims to initiate a biodiversity-based change in crop soil management practices through prebiotic and probiotic approaches. To this end, new multifunctional microbial soil inoculants and bioeffectors are being tested on tomato, apple and strawberry, and the effects on native biodiversity monitored under different experimental and open field conditions across Europe. Over five years, researchers will study how crops, soil and micro-organisms interact, with the final aim of promoting productive and sustainable horticultural practices in the long term.

The third annual General Assembly of the EXCALIBUR project brought together a total of 48 members of the Consortium and was held last September in London. During the conference, the status of the various research activities was described, and preliminary research findings were presented. First, promising results were obtained in tomato and strawberry field trials treated with biopesticides. These trials will continue during the coming months in order to obtain further results during the upcoming phase of EXCALIBUR.

Innovative biosensors developed

CREA has introduced and explored new biosensors for detecting specific microbial species in soil to help researchers in tracking the fate and the persistence of a bioinoculant in soil; farmers in managing the dose and the timing of applications; farmers' advisors and manufacturers of bioinoculants in optimizing the applications, and EFSA (the European Food Safety Authority) in providing a new versatile tool.

In particular, a new biosensor for tracking the microorganism of the species *Bacillus subtilis* in the organic and inorganic sample has been developed, and the results have been protected under a patenting process.

Early career researchers section available

A new section dedicated to early career researchers is now available on the project website! It seeks to promote and make visible young researchers' profiles with great scientific projection who participate or have started their careers in the project. In this way, it highlights the need of the youngest researchers for the progress of science.

About EXCALIBUR

EXCALIBUR is an international research project launched in June 2019 and funded by the European Union's research and innovation programme Horizon 2020 under grant no. 817946. EXCALIBUR, led by Dr Stefano Mocali at the Council for Agricultural Research and Economics (CREA, Italy), brings together other 15 European partners: NHM and NIAB (UK), InHort and Intermag (Poland), RI.NOVA and UNITO (Italia), KIS (Slovenia), NIOO-KNAW (The Netherlands), UCPH (Denmark), TUGRAZ (Austria), UGR and IZERTIS (Spain), and KOB and FÖKO (Germany).

Dr. Stefano Mocali
stefano.mocali@crea.gov.it

CREA
Via di Lanciola, 12/A
50125 Cascine del Riccio, Florence, Italy
excaliburh2020.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 817946.

