



Supported by:

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Horizon 2020:

SolACE - Solutions for improving Agroecosystem and Crop Efficiency for water and nutrient use

Practical problem

European agriculture is challenged by the need to produce more crops with fewer inputs of fertilizers, especially nitrogen (N) and phosphorus (P), under conditions of reduced or more variable water availability. Water limitation will affect nutrient availability and acquisition in general.

Partners

Names:

Institut National de la Recherche Agronomique (FR) ; Ait Austrian Institute of Technology Gmbh (AT) ; Consiglio Per la Ricerca E Sperimentazione In Agricoltura (IT); Forschungsinstitut fur Biologischen Landbau Stiftung (CH); The James Hutton Institute (UK); Kobenhavns Universitet (DK); Sabanci Universitesi (TR); Sveriges Lantbruksuniversitet (SE); Universite Catholique de Louvain (BE); Universidade de Evora (PT); Universitaet Hohenheim (DE); University of Newcastle Upon Tyne (UK); Universidad Politecnica de Madrid (ES); Eidgenoessisches Departement Fuer Wirtschaft, Bildung Und Forschung (CH); Arvalis Institut du Vegetal (FR); Con.Cer. Societa' Cooperativa Agricola (IT); De Ceuster Meststoffen (BE); European Conservation Agriculture Federation (BE); Inra Transfert S.A. (FR); Linking Environment And Farming Lbg (UK); Okologial Mezogazdasagi Kutatointezet Kozhasznu Nonprofit Kft (HU); Ontwikkelingsmaatschappij Hetidee (NL); Sp Sourcon Padena GmbH (DE); Syngenta France Sas (FR); Vogt Wolfgang (DE)

Project

Objectives:

SolACE's overarching goal is to help European agriculture face the challenge to deal with more frequent combined limitations of water and nutrients in the coming decades. It will design novel crop genotypes and agroecosystem management innovations to improve water and nutrient use efficiency.

Expected results:

- New crop varieties and agronomical innovations to cope with combined water and nutrient stresses;
- a better understanding of below-ground responses to water and nutrient limitations;
- tools for the training of farmers and farm advisors on the importance of below- and above-ground processes and traits;
- below-ground traits introduced as a novel concept for breeding to breeders.

Results so far/first lessons:

As SolACE started only in May 2017, no results are available yet. Progress can be followed on the website: <http://www.solace-eu.net/>

Who will benefit:

Farmers, farm advisors, agri-business industry, breeders, NGOs, policy makers, scientific community, the general public.

