

# Basic substances as an environmentally friendly alternative to synthetic pesticides for plant protection (BasicS)



## Funding

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## Research consortium

UNIVPM (IT), CREA (IT), CIHEAM (IT), EPPO (Int), NSW (AU), UEL (BR), SZPT (CN), SCAU (CN), CUT (CY), UDA (CO), CRI (CZ), ARC (EG), ITAB (FR), UNIDEB (HU), AZAD (IR), UNIBA (IT), UNIBO (IT), UNIFG (IT), UNIMI (IT), UNINA (IT), UNITE (IT), UNITO (IT), UNIVR (IT), NPI (MX), ITT (MX), POZNAN (PL), CSIS (ES), INRAT (TN), UE (TR)

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## Goals and objectives

The opportunity to use natural crop protection products such as basic substances in agriculture depends on the possibility to multiply trials in order to identify new substances or to extend the use of existing ones. The project will demonstrate the use of basic substances to manage postharvest diseases of fresh fruit, vegetables and aromatic plants and to the management of seedborne pathogens on several crops (such as cereals and vegetables), for which there is a reduced number of effective synthetic pesticides.

## Key outputs and results

- Review of the current knowledge on applications of potential basic substances as a) preharvest and postharvest management b) field management c) seed treatment
- Report on the efficacy of treatments with potential basic substances
- Report on the detection of the main seedborne pest of vegetables
- Report on seed treatment using essential oils and chitosan
- Report on seed treatment using the mixture of essential oils and chitosan
- Report on the performance of each method assessed through a collaborative test performance study