Application of an organic bio-fertilizer technology for sustainable date palm production and cultivation systems

http://www.fertiledatepalm.net/

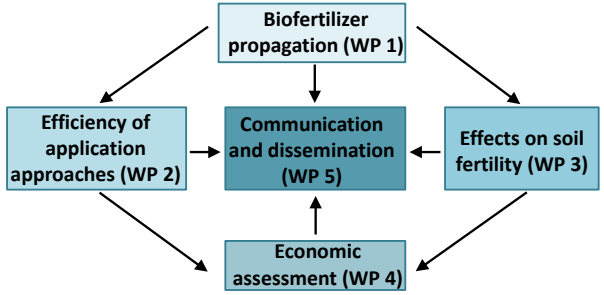
OBJECTIVES

- To elaborate customized bio-fertilizer propagation approaches to establish a bio-fertilizer culture collection of native arbuscular mycorrhizal fungi (**AMF**) and plant growth promoting rhizobacteria (**PGPR**) isolated from Maroccan and Tunisian date palm groves.
- To assess the efficiency of adopted bio-fertilizer application approaches combined with comost and intercropping at different stages of date palm cultivation to improve crop performance and resource management.
- To assess the effect of applied measures in order to increase soil fertility and improve ecosystem services in date palm plantations.

- To establish innovation platforms to evaluate and adopt elaborated approaches jointly with stakeholders and assure the transfer of knowledge and technological innovations across national and international scales.

WORK PACKAGES (WPs)

- Establishment of customized bio-fertilizer propagation technologies (WP 1)
- Efficiency assessment of adopted application approaches using organic bio-fertilizer technology (WP2)
- Soil investigations to assess the effect of organic bio-fertilizer technology on soil fertility (WP3)
- Economic assessment of adopted application approaches (WP4)
- Communication and dissemination (WP5)



IMPACTS

- Improved resource efficiency of oasis agroecosystems
- Enhanced productivity of date palm groves

- Improvement of soil fertility of oasis agroecosystems
- Socio-economic benefits (like food and nutrition security and income) for phoeniculturists (smallholder farmers and tissue culture laboratories)

INNOVATION PLATFORMS

Social space of exchange between researchers, phoeniculturists like the Moroccan Interprofessional Federation of Dates (FIMADATTES), and institutions like the National Office of the Agricultural Council (ONCA), the Regional Office of Agricultural Development of Tafilalet (ORMVAT) and the National Agency for the Development of Oases and Argan (ANDZOA).

The innovation platform is designed as a communication network with the aim to target and solve problems of its members by systematic communication and trainings in order to achieve innovation in a given geographic area.

The innovation platform is seen as a social and dynamic learning process that can generate innovation through different sources (science, indigenous knowledge and others).

A network is created to connect farmers, researchers, the various innovation platforms and project partners and to promote their exchange and mutual support beyond the various geographic areas.

PARTNERS

FUNDING

Swiss Programme for Research on Global Issues for Development

In light of global challenges, the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF) launched in 2012 the joint «*Swiss Programme for Research on Global Issues for Development*» (r4d programme). The main goal of the r4d programme is the generation of new knowledge and the application of research results that contribute to solving global problems and securing public goods in low- and middle-income countries within the framework of global sustainable development. The r4d programme consists of six modules, five with thematic priorities and one for thematically open calls.
www.r4d.ch

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Swiss Agency for Development and Cooperation SDC

FNSNF
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