EcoStack

Stacking of ecosystem services:

mechanisms and interactions for optimal crop protection, pollination enhancement and productivity

Photo by Rothamsted Research Limited

The Project

Agriculture has to face the great challenge of balancing the demand for high productivity, imposed by the global increase of human population, with environmental impacts and social acceptability of new production strategies.

EcoStack, a 5-year Research and Innovation Action, under the EU Horizon 2020 programme, has started on September 10, 2018, and includes 24 partners with complementary expertise, covering all major pedoclimatic production zones and major agricultural production systems in Europe.

The overall goal of the project is to develop and support ecologically, economically and socially sustainable crop production via stacking of biodiversity service providers and bio-inspired tools.

EcoStack will use transdisciplinary research methods and will promote active participation of multi-actor groups across Europe in order to create new knowledge, transfer the know-how, co-design new cropping systems, and use stakeholder-guided development of new agricultural concepts for generating economic and ecological benefits for farmers, biodiversity and society.

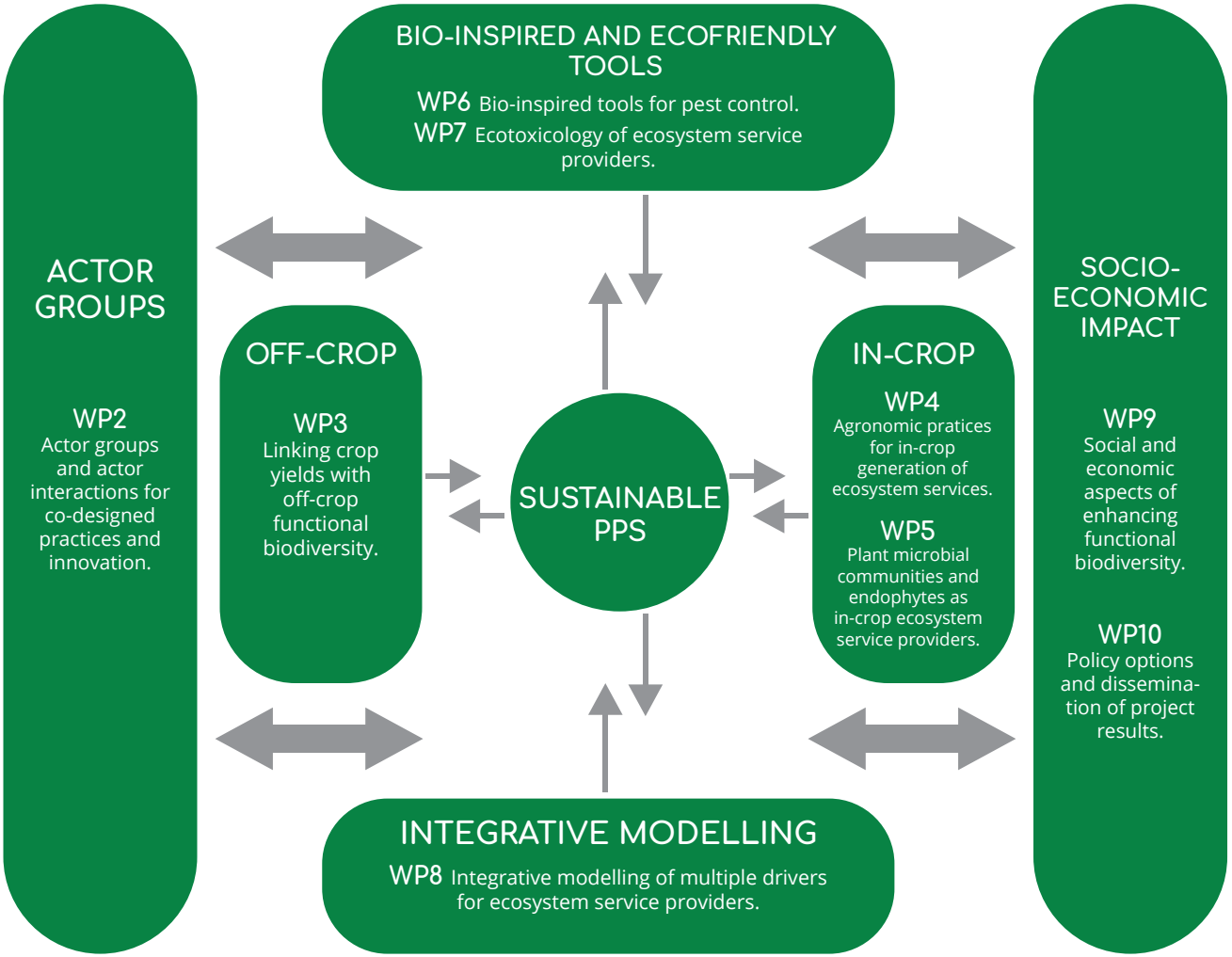
Objectives

EcoStack has four major objectives:

- Assess sustainable crop production needs, and EcoStack outcomes, based on functional biodiversity, using an interactive forum of actor groups and stakeholders, to achieve sustainable productivity gains
- Evaluate and optimise the role of main off-crop habitats supplying ecosystem services for crop production
- Design and test in-crop interventions, which support the generation of ecosystem services within the crop, and which may carry over to the next crop in the rotation
- Develop, design and implement integrated systems for optimised provision of ecosystem services and use of plant protection tools, with focus on ecological, economic and social sustainability of integrated systems

Structure

The structure of EcoStak incudes 9 scientific Work Packages (WP), that are designed to develop sustainable strategies for plant production and protection strategies (PPS).



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24 PARTNERS FROM 13 COUNTRIES

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Partners

01 – UNA Italy

Università degli Studi di Napoli Federico II

02 – SLU Sweden

Sveriges Lantbruksuniversitet

03 – AU Denmark

Aarhus Universitet

04 – Rres United Kingdom

Rothamsted Research Limited

05 – UNE United Kingdom

University of Newcastle Upon Tyne

06 – ISARA France

Institut Superieur d'Agriculture Rhone Alpes I.S.A.R.A.

07 – JKI Germany

Julius Kuhn-Institut Bundesforschungsinstitut fur Kulturpflanzen

08 – UKA Germany

Universitaet Kassel

09 – LUKE Finland

Luonnonvarakeskus

10 – AUPL Bulgaria

Agraren Universitet-Plovdiv

11 – FBUB Serbia

Faculty of Biology University of Belgrade

12 – UBL Bosnia Herzegovina

Univerzitet u Banjoj Luci

13 – UJA Poland

Uniwersytet Jagiellonski

14 – UC Portugal

Universidade de Coimbra

15 – UB Spain

Universitat de Barcelona

16 – ProAG Finland

Proagria Keskusten Liitto Ry

17 – UVEG Spain

Universitat de Valencia

18 – KON Germany

Kompetenzzeentrum Okolandbau Niedersachsen GMBH

19 – FOR Finland

Forestum OY

20 – AT Finland

Aasatek OY

21 – LLH Germany

Hessisches Ministerium fur Umwelt, Klimaschutz, Landwirtschaft und Verbraucherschutz

22 – KOP Spain

Koppert Espana SL

23 – UTU Turun Yliopisto

Finland

24 – CPI United Kingdom

Centre for Process Innovation Limited

EcoStack

Website:
www.ecostack-h2020.eu

E-Mail:
info@ecostack-h2020.eu

Project Coordinator:
Professor Francesco Pennacchio
University of Napoli “Federico II – Italy

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