



Juan José Alarcón Cabañero
Director CEBAS-CSIC



CSIC Research Institutes and Associated Units

Institutes: 116 # Exclusive # Joint

10 Service Centers



Associated Units: 134



Through its network of institutes and associated units, the CSIC collaborates with 40 universities and 27 institutions (other public research organizations, regional governments and local entities)



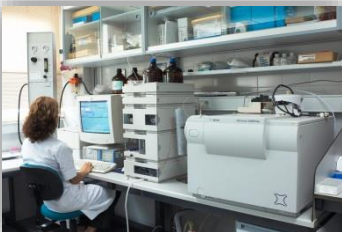
CEBAS-CSIC BUILDING





Facilities (CEBAS-CSIC)

The modern building offers the scientists modern laboratories, new culture chambers and pilot plants suited to the expanded research lines of CEBAS (BASIC AND APPLIED RESEARCH).



PILOT PLANT

CEBAS LABORATORIES

CULTURE CHAMBERS

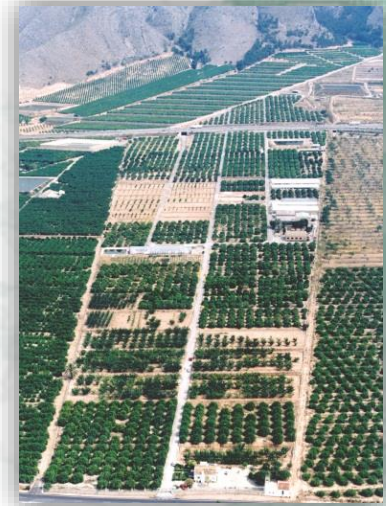


Facilities (CEBAS-CSIC)

EXPERIMENTAL FIELD STATION. CEBAS-CSIC has an experimental field station, with an extension of 33 hectares; the field station has greenhouses available for the research groups. There are four people (civil servant) to help to research groups in the experiences



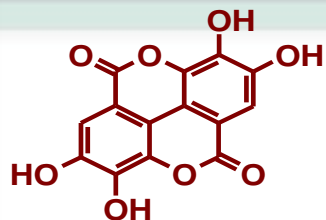
EXPERIMENTAL FIELD



GREENHOUSES



AGRICULTURAL SCIENCES CSIC



Approach: Basic and Applied research

LABORATORY



SCIENTIFIC PUBLICATION

FUNDING

GREENHOUSE

PATENTS



FIELD



INDUSTRY

SOIL and WATER  PLANT  FOOD



PERSONNEL CEBAS-CSIC

Permanent Staff (126)

62 Senior Researchers

47 Technical Assitances

17 Administrative Personal

Non Permanent Staff (110)

TOTAL : 236



GROUPS RESEARCH

Department Soil and Water
Conservation and and Organic

Group on Soil Enzymology and Bioremediation and
Organic Wastes

Group on Soil Erosion and Conservation

Group on Sustainability of Soil-Plant Systems

Department Irrigation

Group on Irrigation

Department Plant Nutrition

Group on Aquaporinas

Group on Nutrición Vegetal

Department Biology of Stress
and Plant Pathology

Group on Abiotic Stresses, Production and Quality

Group on Plant pathology

Department Plant Breeding

Fruit Breeding Group

Biotechnology of fruit trees Group

Department Food Science and
Technology

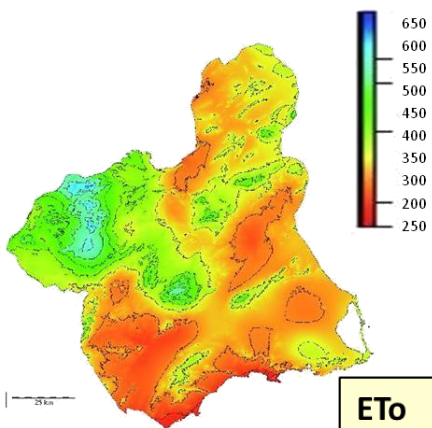
Group on Quality, Safety and Bioactivity of Plant
Foods



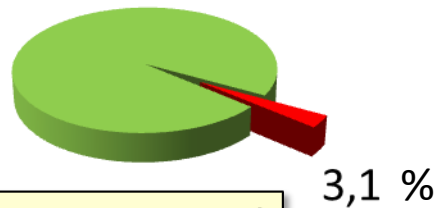
Juan José Alarcón Cabañero

IRRIGATION DEPARTMENT
CENTRO DE EDAFOLOGÍA Y BIOLOGÍA APLICADA DEL
SEGURA- CEBAS (WWW.CEBAS.CSIC.ES)
MURCIA

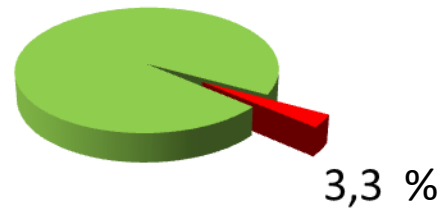
WATER SUSTAINABLE MANAGEMENT IN MEDITERRANEAN AGROSYSTEMS



Population



Irrigation water

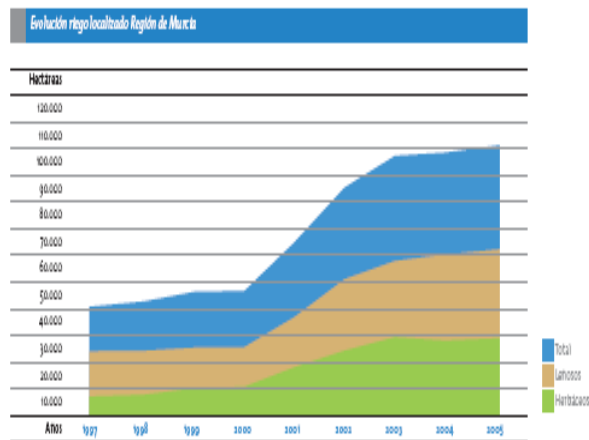


Fruit & Vegetables Exports



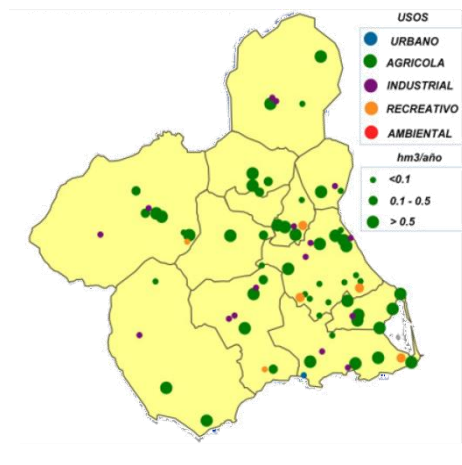
Modernization

80-90 %



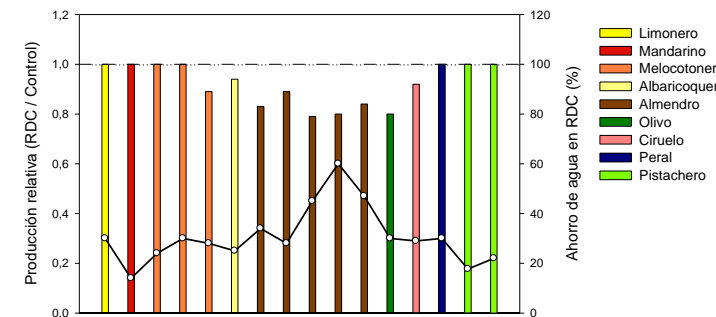
Reuse

92 WWTP- 102 Hm³/ year



Deficit management

Regulated Deficit Irrigation



Agronomic Techniques to increase Water Use Efficiency

1) Water efficient irrigation:

Regulated deficit irrigation.

Precision irrigation.

2) Waste-water reuse in agriculture.

Regulated Deficit Irrigation

The principle of the RDI technique is that plant sensitivity to water stress is not constant during the growth season and that intermittent water deficit during the growth specific periods may benefit WUE, increase water savings and even improve harvest quality.

IRRIQUAL

Sixth Framework Programme

STREP – Food Quality and Safety
(FP6)

Title: Sustainable orchard irrigation
for improving fruit quality and
safety

CE Contribution: 2.249.963 €

Number of partners: 13

Spain, Italy, Netherlands, France,
Greece, Lebanon, Morocco.



FP6-FOOD-CT-2006-023120
Start date: July 1, 2006; duration: 42 months



Conferencia con traducción simultánea inglés-español

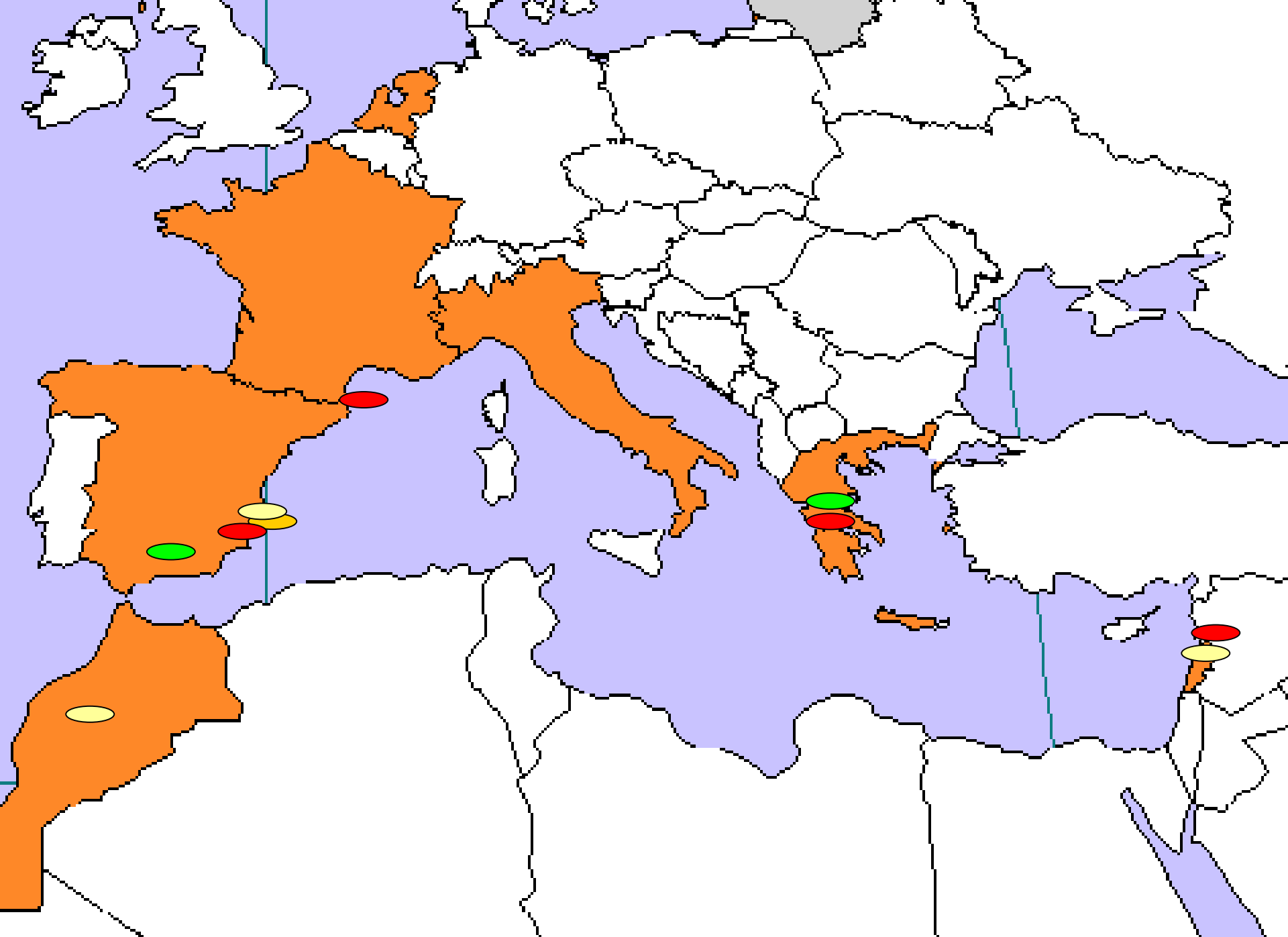
FINAL CONFERENCE IRRIQUAL

Sustainable orchard irrigation for improving fruit quality and safety

Friday 4th December

LOCATION: Salón de actos de la Consejería
de Agricultura y Agua de la Región de Murcia





Main Objective

The main aim of IRRIQUAL is to study the effects of different irrigation strategies (Regulated deficit irrigation and water quality) on fruit quality and safety in tree crops

[Home](#)[Project overview](#)[Consortium](#)[Events](#)[Media center](#)[Deliverables & Publications](#)[Contact](#)[Links](#)

"Sustainable use of irrigation water in the Mediterranean Region"

This project is supported by the European Commission under the EFP7 Cooperation Theme "Food, Fisheries and Biotechnologies."

SIRRIMED

SUSTAINABLE USE OF IRRIGATION WATER IN THE MEDITERRANEAN REGION

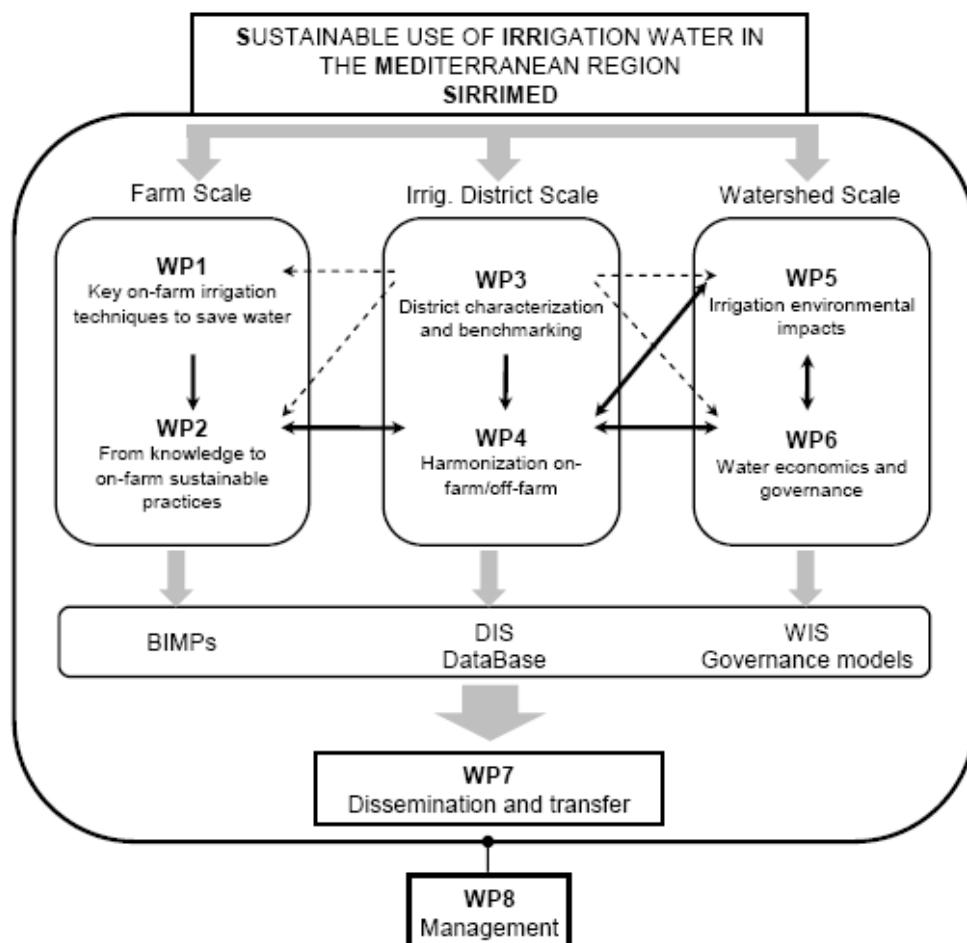


SIRRIMED

SUSTAINABLE USE OF IRRIGATION WATER IN THE MEDITERRANEAN REGION



Graphical presentation of the components showing their interdependencies





Online Professional **IR**rigation Scheduling Expert System

Call: FP7-KBBE-2013-7-single-stage

Funding scheme: CP-TP (Collaborative Project targeted to a special group)

EU contribution \approx 840 000 Euros

Duration: 24 months (Dec 2013 – Nov 2015)



www.opiris.eu



Researcher

Operator

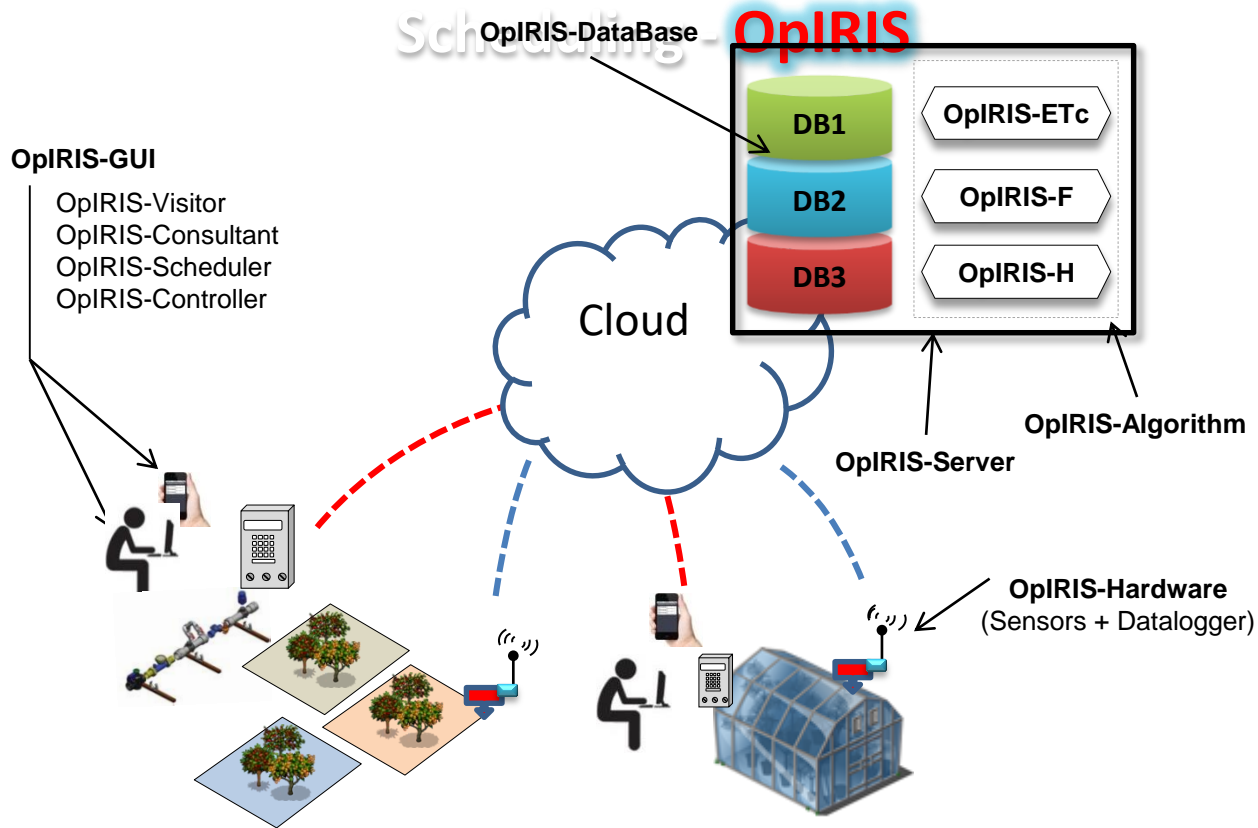
User




Disseminator



OBJETIVOS

Online Professional Irrigation



DB1: Data from previous FP projects; **DB2:** Users' archive; **DB3:** Historical ETo records and crop coefficients (Kc); **OpIRIS:** Online Professional Irrigation Scheduling () Irrigation Programmer; () Sensors + device-to-web datalogger; () Smart_Phone application

¡MUCHAS GRACIAS!

