



DEVELOPING A POOL OF NOVEL AND ECO-EFFICIENT APPLICATIONS OF ZEOLITE FOR THE AGRICULTURE SECTOR (ECO-ZEO)

FP7-ENV-2011-ECO-INNOVATION. Project number : 282865



ECO-ZEO figures

ECO-ZEO is a 48 months (2012 – 2016) collaborative project subsidized by the 7th Framework Programme with a contribution of 2.014.772€.

ECO-ZEO scope

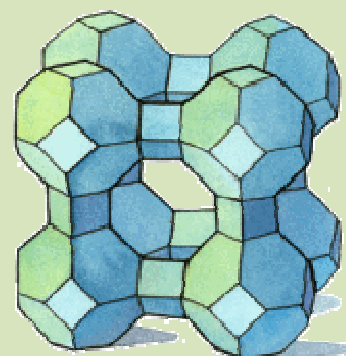
ECO-ZEO aims at the development of a new pool of green crop protection products, based on zeolites, delivering a wide range of beneficial effects including reduced water consumption, increased crop yield, lower chemical input, crop protection and tolerance to abiotic stress and healthier conditions to workers in agriculture and agrochemical sectors.

Zeolites

Zeolites are crystalline, hydrated aluminosilicates, that have a lot of commercial uses.

Zeolite 4A is a synthetic zeolite with a high selectivity in front of polar molecules as water and carbon dioxide.

This behavior, applied on crop plants, may increase photosynthetic efficiency, and water efficiency. Remarkably, Zeolite 4A has proved to be an innocuous substance in terms of environmental impact and toxicity, so the use of zeolites may contribute to the overall sustainability.





Target crops and threats

The selection of crops has been made considering water demand, vulnerability to pests, higher added value and productive extension in climate regions with low rainfall. Major threats have been selected in terms of vulnerability for each crop, average production losses and economic cost and efficacy of state of the art treatments.

Crop	Insect pest	Fungal disease
Apple	Codling moth (<i>Cydia pomonella</i>)	Apple scab (<i>Venturia inaequalis</i>)
Tomato	Tomato leafminer (<i>Tuta absoluta</i>)	Botrytis (<i>Botrytis cinerea</i>)
Grape	European grapevine moth (<i>Lobesia botrana</i>)	Downy mildew (<i>Plasmopara viticola</i>)
Orange	Mediterranean fruit fly (<i>Ceratitis capitata</i>)	

Project partners

ECO-ZEO consortium is constituted by 10 participants from 8 different countries covering Research Organizations (IRTA, BATEM, LEI and UGENT), Industry (FMC and FITO), Agro-biotech SMEs (TERRA, FERRER and CEMAS) and a EU Association of farmers (AREFLH) as a necessary background to ensure successful development of new Sustainable Crop Protection Strategies.

More info in the project web: www.ecozeo.eu

