



Master in Agricultural and hYdrological Approaches MAYA

**Special mobility strand for supporting and complementing
the training of teachers on the integrated management of
water, agriculture and environmental resources**

Girona, Spain, 15th-19th July 2019

Official languages: English and French

Program of Day 1

11:00-13:00 Presentation of the research lines of each Tunisian research groups

13:00- 14:00 Lunch

14:30-17:00 Presentation of the research lines of each Tunisian research groups

Program of Day 2

9:00-9:20 Presentation of the Irrigation Engineering and Management research group of the Universitat de Girona



9:20-9:50 Presentation of the scientific experiences on the effect of reclaimed effluents on drip irrigation systems

9:50-10:20 Presentation of the project of automation of canals at the Baix Ter area

10:20- 10:50 Presentation of the scientific experiences on irrigation of rice using subsurface drip irrigation

10:50- 11:30 Discussion and comments

11:30-12:00 Coffee break

12:00-13:00 Identification and discussion of possible opportunities of scientific collaboration among the different research groups

13:00- 14:30 Lunch

14:30-17:00 Discussion of the teaching methods and application of the proposed methodologies to the Tunisian studies related to the module: Conjunctive use of surface water and ground water for irrigation supply

Program of Day 3

9:00-9:20 Presentation of the research team on Limnology of Mediterranean lagoons and wetlands of the Institute of Aquatic Ecology (UdG)

9:20-9:50 Presentation of the scientific experiences on biotic indexes and ecological status assessment

9:50-10:20 Presentation of the research on metacommunity dynamics and structure

10:20-10:50 Presentation of the scientific experiences on wetland restoration

10:50- 11:30 Discussion and comments

11:30-12:00 Coffee break



12:00-13:00 Identification and discussion of possible opportunities of scientific collaboration among the different research groups

13:00- 14:30 Lunch

14:30-17:00 Discussion of the content and teaching methodologies of the module “Ecological integrity of streams and wetlands in agricultural areas” of the MAYA project.

Program of Day 4

9:00-9:20 Presentation of the research group Geologia i Cartografia Ambiental (GEOCAMB) of the Universitat de Girona.

9:20-11:00 Presentation of the scientific experiences on hydrochemistry and groundwater pollution issues associated to agricultural activities: examples on nitrate and emergent contaminants study cases. Discussion and contribution from the Tunisian experiences.

11:00-11:30 Coffee break

11:30-13:00 Identification and discussion of possible opportunities of scientific collaboration between the Tunisian and UdG research groups on groundwater quality issues.

13:00- 14:30 Lunch

14:30-17:00 Discussion of the teaching methods and application of the proposed methodologies to the Tunisian studies related to the module: Water quality issues and protection strategies related to agricultural practices (nutrients and emergent pollutants)

Program of Day 5

Field trip:

Visit to the hydraulic tests for wastewater reuse under drip irrigation using different filtration systems at the Celrà wastewater plant.



Visit to the field tests with subsurface drip irrigated rice in Pals.

Guided tour in the restored wetlands of the Pletera (Baix Ter, Torroella de Montgrí, Baix Empordà)

A brief introduction to the groundwater dynamics in the Baix Ter coastal wetlands, aquifer nitrate pollution and natural attenuation processes in wetlands.