

# Monday June 15, 2015 – Scientific talks from APMed results

Talks in English or French with translation English <-> French

\* **Registration (compulsory): 08:30 – 09:00**

\* **09:00 -09:15 - Pierre-Eric LAURI** (INRA, Montpellier, France) - Introduction to the conference.

\* **Session 1 - Fruit-tree water status and irrigation management.**

**09:15–09:45 - Luca CORELLI-GRAPPADELLI** (University of Bologna, Italy) - Fruit growth and tree water relations. Combining light and water management for efficient fruit production.

*Note: Fruit development in apple and peach in relation to water stress: environment as driver of the physiology of growth. Linking orchard light microclimate to water savings.*

**09:45–10:15 - Amos NAOR** (MIGAL, Israel) - Irrigation scheduling of fruit trees - Water stress assessment and the interaction of crop load with irrigation.

*Note: The presentation will include critical review of current water stress indicators and the effect of crop load on thresholds of stem water potential for irrigation scheduling.*

**10:15–10:45 - Joan GIRONA & Jordi MARSAL** (IRTA, Lerida, Spain) - Crop coefficient and use in the orchard.

*Note: We will present the concept of crop coefficient and ongoing developments to use it for water management in orchards.*

**10:45 – 11:15 – Coffee-Break**

**11:15–11:45 - Abdellah KAJJI** (INRA, Meknès, Morocco) - Monitoring irrigation in dry climate - Importance of regulated deficit irrigation (RDI) to save water and increase fruit quality.

**11:45-12:00 – Questions on “fruit-tree water status and irrigation management”.**

\* **Session 2 - Interactions between fruit-trees and insects.**

**12:00-12:30 - Marie-Odile JORDAN & Marie-Hélène SAUGE** (INRA, Avignon, France) - Could usual cultural practices contribute to the control of pest: what we already know and what remains to know about the plant pest interactions.

*Note: this talk aims to give a brief description of the literature.*

**12:30–13:00 - Marie-Odile JORDAN, Marie-Hélène SAUGE & Haim REUVENY** (MIGAL, Israel) - Irrigation and fertilization as possible tools to control pest infestation, Realistic or not?

*Note: Based on our results we will open to a discussion on how to solve the compromise between optimizing plant vigor (production potential, nutrient and water status) and plant defense.*

**13:00-14:30 – Lunch at Agropolis**

**14:30-15:00 - Abdellali BLENZAR** (University of Meknès, Morocco) - The effect of deficit irrigation and fertigation treatments on plant resistance to pests and on commercial yield (fruit load and quality) in Moroccan commercial orchards.

*Note: On how to pass from research to production.*

**15:00-15:15 – Questions on “interactions between fruit-trees and insects”.**

\* **Session 3 - Modeling growth and fruiting under various water status.**

**15:15-16:00 – Joan GIRONA** (IRTA, Lerida, Spain), **Evelyne COSTES** (INRA, Montpellier, France) & **Gilles VERCAMBRE** (INRA, Avignon, France) - Modeling tree architecture and functioning – A research tool for water management in the orchard.

**16:00 – 16:30 – Coffee-Break**

\* **Session 4 - Genetic variability responses of apple to drought.**

**16:30–17:00 - Pierre-Eric LAURI** – Morphological and ecophysiological responses of a range of apple genotypes under moderate and severe water restriction.

*Note: Based on our results we will discuss the interest of the methodology for the breeder.*

**17:00-17:30 - Pasquale LOSCIALE** (CRA-SCA, Bari, Italy) - Leaf physiological traits and plant based indices for detecting water stress tolerance in apple.

*Note: Based on our results we will open to a discussion on: (i) how the knowledge of leaf physiological traits can be helpful for detecting drought tolerance among genotype, and (ii) if the new developed index can overtake some bottlenecks related to leaf performance measurements.*

**Dinner at 20:00 – place to determine**