



Implementation of efficient irrigation management for a sustainable agriculture. LIFE+ project IRRIMAN

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In water scarcity areas, it must be highlighted that the maximum productions of the crops do not necessarily imply maximum profitability. Therefore, during the last years a special interest in the development of deficit irrigation strategies based on significant reductions of the seasonal ET without affecting production or quality has been observed. The strategies of regulated deficit irrigation (RDI) are based on the reduction of water supply during non critical periods, the covering of water needs during critical periods and maximizing, at the same time, the production by unit of applied water. But its success greatly depends on the adequate application of the water deficit and requires a continuous and precise control of the plant and soil water status to adjust the water supplies at every crop phenological period.

The main objective of this project is to implement, demonstrate and disseminate a sustainable irrigation strategy based on deficit irrigation to promote its large scale acceptance and use in woody crops in Mediterranean agroecosystems, characterized by water scarcity, without affecting the quality standards demanded by exportation markets. With the adoption of this irrigation management we mean to ensure efficient use of water resources, improving quantitative water management, preserving high level of water quality and avoiding misuse and deterioration of water resources. The adoption of efficient irrigation will also lead to increments in water productivity, increments in the potential carbon fixation of the agroecosystem, and decrease energy costs of pressurized irrigation, together with mitigation and adaptation to climate change. The project will achieve the general objective by implication of farmers, irrigation communities, agronomists, industry, consultants, associations and public administration, by increments in social awareness for sustainable irrigation benefits, optimization of irrigation scheduling, improvements in technology, and dissemination of sustainable irrigation guidelines.

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