



Background information of the Pilot area

In the area of Stornara and Tara, Consortium farmers produce citrus, table grapes, stone fruit, olives, and summer vegetables for large market chains and export. The region is described through a maritime Mediterranean bioclimate, with an average yearly rainfall of 550 mm distributed mainly in winter and autumn. As a result, summer droughts are frequent. This makes irrigation from April to September a necessity for agriculture. In the Consortium, farmers receive the needed irrigation water, however, they need to cope with an inadequate irrigation schedule. Soils only have little water retention capacity, which further exacerbates the situation. Therefore, farms rely on aquifer irrigation. Groundwater overexploitation is responsible for higher water salinity and increased operational costs for pumping.

Contact information:

Practitioners interested in the restoration action can contact the Diomedea farm with the help of the Consortium of Stornara and Tara (Director: Dr. Giovanni Merlino)

Consorzio di Bonifica Stornara e Tara. Viale Magna Grecia 240, 74121 – Taranto. Tel. (+39) 099 7357111.
e-mail: consorzio@bonificastornaratara.it.
Sito web: [http://www.bonificastornaratara.it/Azienda Diomedea](http://www.bonificastornaratara.it/Azienda_Diomedea).

<https://www.instagram.com/marinellafrutta/>
Istituto Agronomico Mediterraneo di Bari. <https://www.iamb.it/>.
Via Ceglie 9, 70010 Valenzano (Bari). e-mail: iamdir@iamb.it

Links to further resources on the restoration action

<https://feder.bio/>
<https://www.regione.puglia.it/web/osservatorio-agricoltura-biologica/linee-guida>
<https://www.agricolturaorganica.org/>

REACT4MED

Land degradation such as soil erosion and desertification, along with climate change, are serious threats to agriculture in the Mediterranean. In order to restore degraded soils, we need solutions that pay off and which are good for the people and the environment.

The REACT4MED project aims to improve agricultural productivity, promote innovation, restore soils, and thus improve livelihoods in Mediterranean communities.

In eight pilot areas situated in Turkey, Morocco, Israel, Egypt, Cyprus, Greece, Spain, and Italy, large-scale land restoration actions are initiated and monitored. These actions include combating soil erosion through conservation agriculture, terracing, cover crops, reforestation, mulching and improved irrigation practices.

Stay in touch through our website:

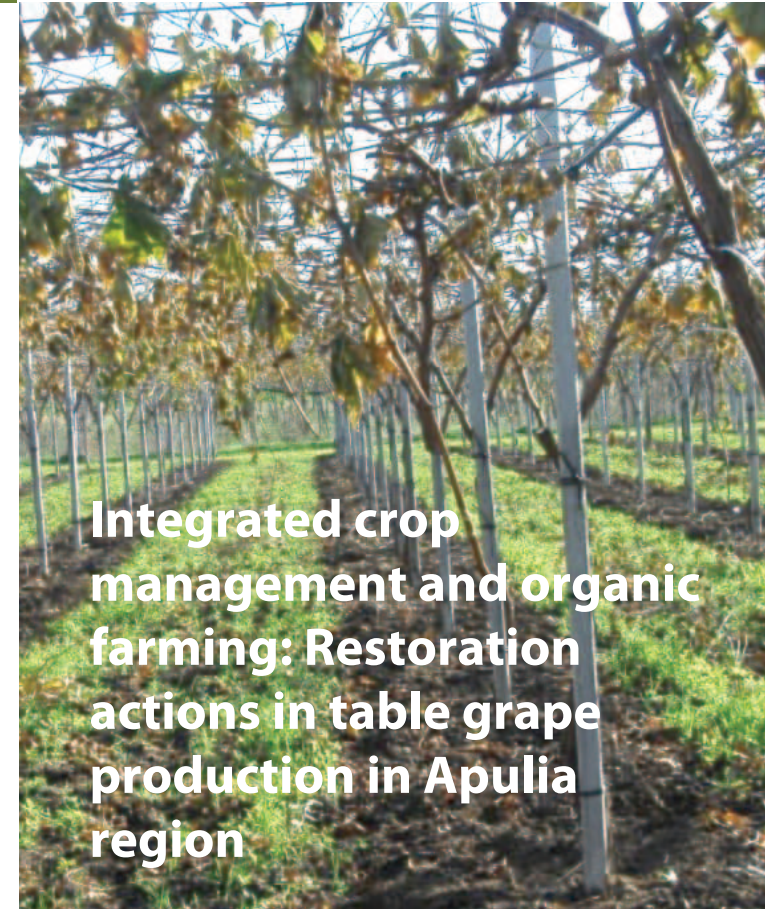
www.react4med.eu

and follow us on social media:



Project duration:

May 1 2022 to October 31 2025



Integrated crop management and organic farming: Restoration actions in table grape production in Apulia region



PRIMA

PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA



Implementation story from the pilot area

The Marinella farm, owned by the Diomedea family, is managed by two young agricultural entrepreneurs who cultivate table grapes. With their strong belief in organic farming, they chose table grape varieties that have a lower water demand but still respond to the market trend.

In the area of Stornara and Tara, most farmers are members of a Consortium that manages their water supply. The Consortium is also an institutional hub for coordinating action and decision-making with the Apulia Region local Government and research institutions. Dr. Giovanni Merlino, Director of the Consortium, supported the REACT4MED project with his place-based knowledge and facilitated collaboration with local farmers.

The role of the research institute in the Pilot Area

In Italy, researchers from the Mediterranean Agronomic Institute of Bari investigate the table grape farming systems. Their work focuses on innovative technologies and sustainable soil management to reduce water usage and preserve soil health. The research team, together with the Diomedea family and other farmers, are also testing new and alternative crop varieties to decrease water consumption, preserve the traditional landscape, and support local plant biodiversity

Implementation requirements

Effective management should treat the vineyard as an agroecosystem, where all resources are used efficiently to support a diverse range of plant species, including those from green infrastructures. To cope with the difficult farming situation, integrated crop management and turning to organic production are suitable restoration actions.

Both management options require information about how the farming system can be supported through natural means. For that, substantial knowledge of natural processes is essential and requires a high willingness to learn. Getting in contact with farmers who have already transitioned to organic farming is crucial in this first step. Once the knowledge basis is built, the most suitable practices should be collected and tried out on a small scale. This way, the suitability of the practices to the local conditions can be secured. If a management plan has been designed, the entire farm practice can be converted.

Due to the profoundness of the changes, contact with farm advisors and networks of organic farming is crucial.



Benefits

On the Marinella farm, the Diomedea family applies a mixture of restoration actions. By minimizing tillage and using high-quality fertilizers and irrigation water, soil health could be improved. Through organic farming and integrated crop management, a variety of benefits can be achieved, as presented in the table. Furthermore, organically grown production can yield higher market prices.