

**I FORO INTERREGIONAL  
MEDITERRANEO DE LUCHA  
CONTRA LA DESERTIFICACION**

**I FORUM INTERREGIONAL  
MEDITERRANEEEN DE LUTTE  
CONTRE LA DESERTIFICATION**

**I INTERREGIONAL  
MEDITERRANEAN  
FORUM TO COMBAT  
DESERTIFICATION**

**VISITA A FINCA EXPERIMENTAL  
EN CORVERA (MURCIA)**

**LIFE AMDRYC4**

**5 DE JULIO DE 2022**

Impulsado por



Financiado por Programa LIFE de la Unión Europea





## THE LIFE AMDRYC4 PROJECT — EN

The main objective of the LIFE AMDRYC4 project is the promotion and promotion of climate resilience of rain-fed agriculture in Mediterranean areas and its sustainable, smart and integrated management, as a basic tool for ecosystem-based climate change adaptation (AbE) and strengthen its mitigation role as carbon sinks, so that they are sustainable and persistent.

The project, with an end in December 2022, has a budget of 1,863,EUR 729 (60 % European co-financing — EUR 1,118,166 from the LIFE programme, and is coordinated by the University of Murcia, and has the Ministry of Water, Agriculture, Livestock, Fisheries, Environment and Emergencies of the Region of Murcia, COAG, Engineering of the Natural Environment and New Culture for Climate as associated beneficiaries.



## EXPERIMENTAL ESTATE CORVERA — EN

The experimental farm “Corvera”, located in the Municipal Term of Murcia, is a traditional farm of almond tree in dry (*Prunus dulcis*), which after the implementation of the LIFE AMDRYC4 project was in technical abandonment due to the lack of productivity of the crop.



This farm was suitable, first carrying out a productive plantation of almond, olive tree (*Olea europaea*) and carob (*Ceratonia siliqua*), followed by actions to adapt to climate change

The adaptation measures introduced on the farm consist of the installation of margins and islands of vegetation and natural native in the most degraded and steeper areas, following the criteria of the Ecosystem-Based Adaptation (AbE) in order to promote biodiversity, curb erosion and enhance the mitigating effect of climate change, which was applied to 1.15 hectares of the more than 7 hectares occupied by the estate. The species used were selected by field presence criteria, in addition to being species resistant to prolonged droughts due to both the current climatic conditions in the area and the foreseeable effects of climate change on rainfall and temperature regimes.



In addition, adaptation measures aimed at improving soil fertility and favouring the local economy, such as the addition of organic matter from local sources, as well as the application of green fertilisation annually with legume and cereal seeds, have been applied to the area under cultivation.

Finally, to mitigate the effects caused by run-off, we have developed on-site containment infrastructure transversally to the flow line preferred for rainwater runoff, using natural stone material for this purpose the estate itself.





With the information obtained through DRONES, soil carbon in the different areas is being monitored in order to determine the contribution of adaptation actions to the increase in soil organic carbon, as well as to initiative 4 per thousand, so that solutions for governance can be applied and dictated in terms of adaptation to climate change in dry agricultural systems in the Mediterranean environment.

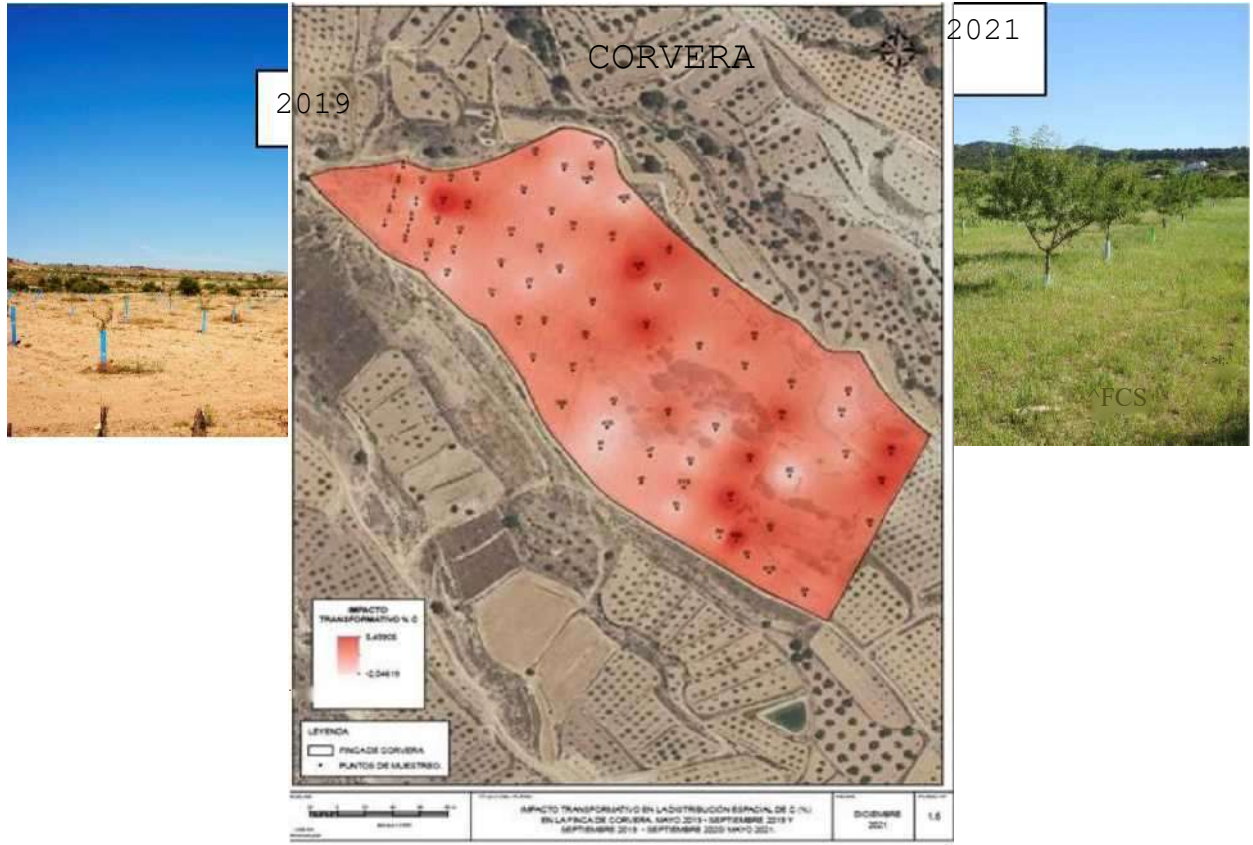
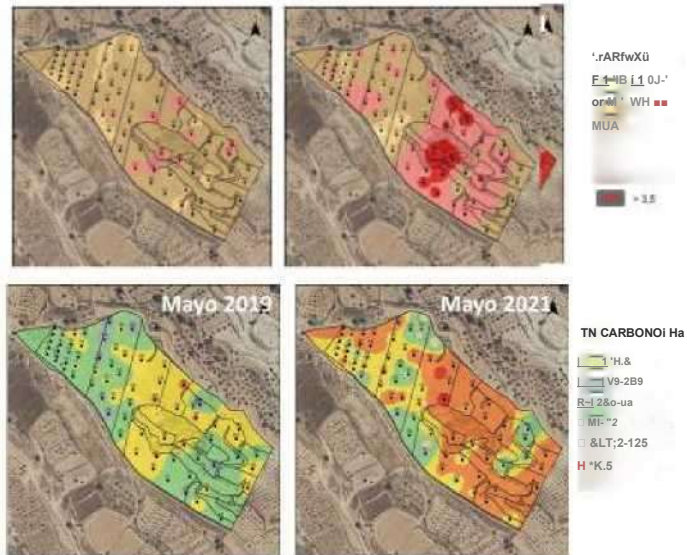


Figure Transformative impacts by increasing soil carbon in %C/year between 2019 and

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D.I Monitoring of biodiversity generated through the anthropic improvements. Analysis of plant dimensions employees

The follow-up of dimensional variables has been developed in Corvera and Nogalte (action C3), as well as for pollinators monitoring, in more than 800 plants:

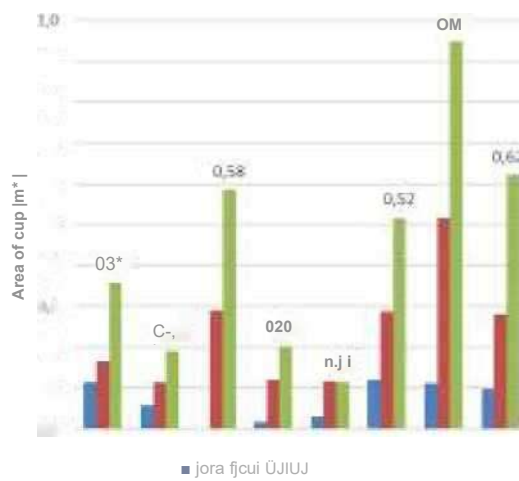




## D.1 Monitonzación of biodiversity generated through the anthropic improvements. Analysis of plant dimensions employees

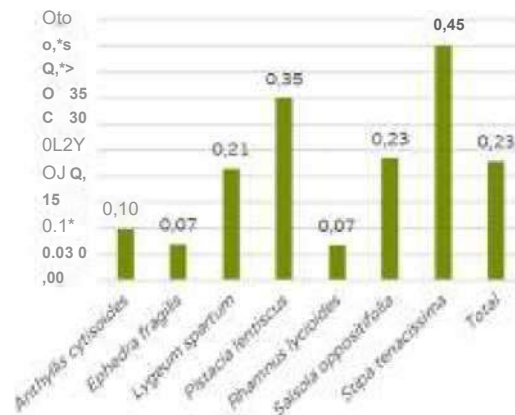
The development of biodiversity monitoring continues, with interesting results (Action C3):

Evolution of the  $\text{m}^2$  crown area by species during the 3 years of seguimiento in Corvera



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03  
04

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## THE LIFE AMDRYC4 PROJECT — IN

The main objective of Project LIFE AMDRYC4 is the promotion and encouragement of climate resilience of rainfed agriculture in Mediterranean areas and its sustainable, intelligent and integrated management, as a basic tool for ecosystem-based adaptation to climate change (EbA) and strengthen their mitigating role as carbon sinks, so they are sustainable and persistent.

The project, ending in December 2022, has a budget of EUR 1,863,729 (60 % European Co-financing — EUR 1,118,166 from the LIFE Programme, and is coordinated by the University of Murcia, and Consejería de Agua, Agricultura, Livestock, Fisheries, Environment and Emergencies of the Region of Murcia, COAG, Engineering of the Natural Environment and Nueva Cultura por el Clima as associated beneficiaries.

## EXPERIMENTAL SITE CORVERA — EN

The experimental site “Corvera”, located in Murcia, is a traditional farm of rainfed almond cultivation (*Prunus dulcis*), which prior to the implementation of LIFE AMDRYC4 project, was in technical abandonment due to the lack of productivity of the crop.

This farm was adequate, carrying out in the first place a productive plantation of almond, olive (*Olea europaea*) and carob tree (*Ceratonia siliqua*), which was followed by actions of adaptation to climate change.

The adaptation measures introduced in the farm consist of the installation of margins and islands of vegetation in the most degraded and steepest areas, following the criteria of Ecosystem-Based Adaptation (EbA) in order to promote biodiversity, stop erosion and enhance the mitigating effect of climate change.

These actions were implemented in 1.15 hectares of the more than 7 that the farm occupies. The species used were selected for criteria of presence in the surrounding area, in addition to being species resistant to prolonged droughts both due to the current climatic conditions of the area and the foreseeable effects of climate change on rainfall and temperature regimes.



In addition, adaptation actions have been applied on the area of cultivation in order to improve soil fertility,



and favoring the local economy, such as the addition of organic matter from local sources, as well as the application of green manure annually consisting of legume and cereal seeds.

Finally, to mitigate the effects caused by runoff, natural containment infrastructures have been developed on the ground transversely to the preferred flow line for rainwater runoff, using natural stone material from the environment itself.

With the information obtained through DRONES, the carbon in the soil of the different areas is being monitored in order to determine the contribution of adaptation actions to the increase in soil organic carbon, as well as to the 4 per 1000 initiative, so that solutions can be applied and dictated for governance in terms of adaptation to climate change in rainfed agricultural systems in the Mediterranean area.