



Conference

The CAP post-2020 green Architecture *Deepening in Eco-schemes*

EIP-AGRI Operational group
"Management of multifunctional margins in dryland farming for a better balance in carbon and biodiversity "



Grants to the operation of the operational groups within the framework of the rural Development program of Andalusia 2014-2020

Zafra, 31 May 2019



IFAPA Instituto de Investigación y Formación Agraria y Pesquera



syngenta

SAT | San Arcadio

The multifunctional margins: agronomic and environmental benefits

The implementation of multifunctional margins (MFM) is a **good agricultural practice source of multiple agronomic and environmental benefits:**

- ❑ **Protective soil capacity;** vegetal cover that **reduces the loss of soil and organic matter;** physical barrier for runoff and **prevents diffuse contamination** of water courses and surface water.



- ❑ **Biodiversity (better crop pollination and increased abundance of auxiliary insects).**



- ❑ Incorporation **of nutrients and biomass to the soil,** increase of **organic matter** and soil organic **carbon stocks** (mitigation of climate change).

Project background

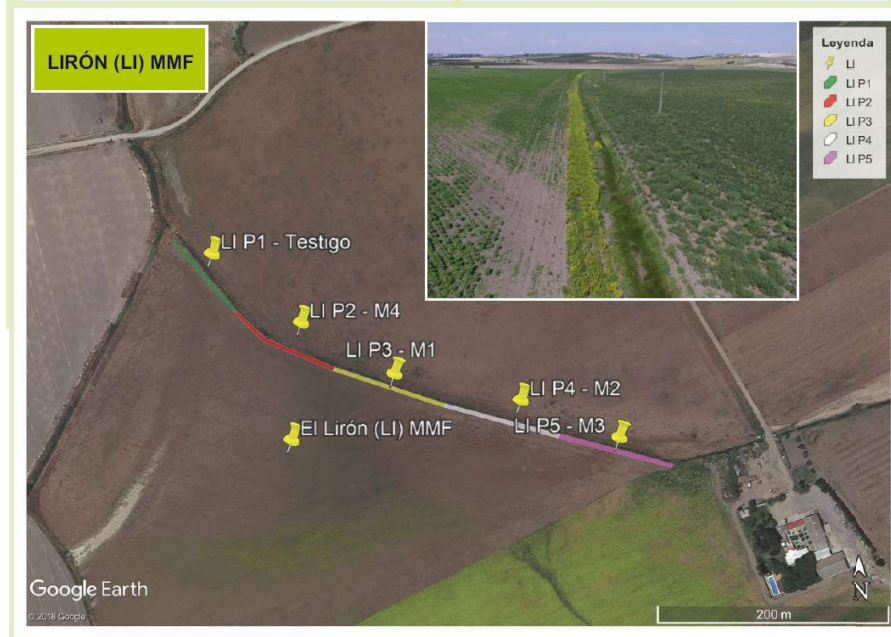
- PAC Greening Process (**greening**, agri-env. schemes), **PAC 2021-2027** (protecting the environment and combating climate change among its priorities); strategies for the creation of a **green infrastructure**.
- Collaboration with Syngenta in the framework of *Operation pollinator*. More than 200 hectares of margins voluntarily implemented by partners of ASAJA-Sevilla (2015-2017).
- Very limited experience in field implementation of MFM.
- In 2015, Andalusia for the first time collects MFM in its RDP within the Operation 10.1.4 (sustainable systems of dryland arable crops). Almost zero acceptance in call 2018.

Specific project objectives

- Elaboration of practical recommendations so that the **management and implementation in the field of MFM is as simple as possible**, without jeopardizing the profitability of the holdings;
- **To optimise the methodology for the implantation and management of multifunctional margins (MFM)** in the dryland arable crops of Andalusia;
- **Expand the knowledge base available to farmers and administration (selection of species and management adapted to Mediterranean climate conditions)**, and facilitate a successful incorporation of the multifunctional margins to the cast of **voluntary measures** available in the coming years within the framework of the **common agricultural policy**.



| Barbechos melíferos | Márgenes multifuncionales | PDR-Andalucía 1 | PDR-Andalucía 2 |
|---|--|---|---|
| M1 | M2 | M3 | M4 |
| <i>Vicia sativa</i> <i>Trifolium suaveolens</i> <i>Trifolium resupinatum</i> <i>Onobrychis vicifolia</i> <i>Lupinus luteus</i> <i>Coriandrium sativus</i> <i>Brassica napus</i> | <i>Borago officinalis</i> <i>Coriandrum sativus</i> <i>Sinapis alba</i> <i>Medicago sativa</i> <i>Salvia pratensis</i> <i>Vicia sativa</i> <i>Chrysanthemum coronarium</i> | <i>Medicago sativa</i> <i>Trifolium resupinatum</i> <i>Trifolium vesiculosum</i> <i>Nepeta tuberosa</i> <i>Marrubium vulgare</i> <i>Asphodelus ssp.</i> <i>Ononis natrix</i> <i>Salvia ssp.</i> <i>Borago officinalis</i> <i>Coriandrum sativus</i> <i>Sinapis alba</i> | <i>Medicago sativa</i> <i>Trifolium resupinatum</i> <i>Trifolium vesiculosum</i> <i>Nepeta tuberosa</i> <i>Marrubium vulgare</i> <i>Asphodelus ssp.</i> <i>Ononis natrix</i> <i>Achillea ageratum</i> <i>Dittrichia viscosa</i> <i>Foeniculum vulgare</i> <i>Mentha rotundifolia</i> <i>Psoralea bituminosa</i> <i>Salvia ssp.</i> <i>Borago officinalis</i> <i>Coriandrum sativus</i> <i>Sinapis alba</i> |



Sphere of activity

GO mmmf
GESTIÓN DE MÁRGENES MULTIFUNCIONALES

Mapa zonas de actuación

IFAPA (ALAMEDA DEL OBISPO, CÓRDOBA)

CORTIJO MAESTRE (ALCALÁ DE GUADAÍRA)

OJÉN (OSUNA)

LOS ARENOSOS (OSUNA)

EL LIRÓN (LEBRIJA)

The image displays a map of southern Spain with five red location pins. Each pin is accompanied by a photograph: IFAPA shows a tractor in a field; Cortijo Maestro shows a row of young plants in a field; Ojén shows a tractor in a field; Los Arenosos shows a field of yellow flowers; and El Lirón shows a field of white flowers. A green banner at the top left contains the project logo and title. The map background shows topographical features and roads.

Some preliminary conclusions

- c (First of the two agricultural campaigns of the project to be completed in July-August 2019)
- Need for a **win-win approach** (winning strategies, where everyone wins: the environment, society and farmers) and **that adequately compensates for direct costs** (seed acquisition, machinery operations, set-aside of productive area) **and indirect costs** (e.g., seed bank of unwanted species) **of implantation of the multifunctional margins**. Pertinent measure for eco-schemes and agri-env. schemes.
- **Simple measures from an agronomic point of view** (*the best, enemy of the good*).
 - Selection of mixtures with few species (3-5), easily available and with good capacity to adapt to the particular conditions of each region.
 - Possibility of variable location of the margins from one campaign to another (to avoid the proliferation of weeds).
 - To establish quantitative objectives regarding the surface with multifunctional margins, with flexibility in the way of carrying out its implantation (sowing in bands respecting a minimum width, concrete area of a parcel to the free choice of the farmer). Non-compulsory perimeter implantation.
 - To delink the implementation of margins of other additional commitments that may hinder their adoption (e.g., also to carry out integrated production, direct sowing, etc.).





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for a better balance in carbon and biodiversity*



Thank you very much for your attention!



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#GOMMF

More information at www.asajasevilla.es

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