



**EU Technical Assistance Project for the Implementation of
Farm Advisory Services**

EuropeAid/139625/DH/SER/CY



Niche agricultural products - The Option of medicinal and aromatic plants Presentation of Action Plan

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Project funded by the EU Aid Programme for the Turkish Cypriot community, implemented by NIRAS IC Consortium

Aims of the project

1. **Collection and sharing of information and knowledge** on the potential of the northern part of Cyprus for the production of medicinal and aromatic plants and derivatives. **(also regarding wild flora)**
2. **Improving local actors' knowledge and skills** on medicinal plant production. Either wild collected or commonly grown, consistent with the area and with the soil and climatic conditions, relevant for the creation of local short supply chains and for export to high value markets.
3. **Creation of production models** and dissemination of knowledge on cultivation methods in the Mediterranean/Semi-Arid environment, with low input and reduced water use.
4. **Training of people on processing herbs and producing botanical derivatives**, to raise awareness on quality and safety standards, to evaluate their suitability both for the local market and possibly for the international market. Also, to evaluate the use of by-products in other rural production contexts (e.g. forage, litter, veterinary and animal wellbeing)

Activities fo the project

- ◆ Organization of demo events;
- ◆ Conducting research trials;
- ◆ Organization of online and face-to-face seminars, workshop and information meetings;
- ◆ Exchange of experiences and best practice from EU member countries;
- ◆ Production and promotion of educational video films;
- ◆ Active use of Internet and social media;
- ◆ Development and printing of information material;



Activities fo the project

- ◆ Organization of demo events;
- ◆ Cnducting research trials;



Practical activities

- ◆ Organization of online and face-to-face seminars, workshop and information meetings;
- ◆ Exchange of experiences and best practice from EU member countries;
- ◆ Active use of Internet and social media;



Exchange/share/train

- ◆ Production and promotion of educational video films;
- ◆ Development and printing of information material;



to document and leave a trace

Organization of demo events

Field trips to natural areas:

Natural areas still play an important role as source of material for the market, but also as a source of potential germplasm. A visit as a free wandering on the natural area to identify useful species, collect samples, collect vegetative material.

Date: 15 December next, possibly on spring (beginning of March).

Plantation day

In the area where experimental trial will be realized, a walk through the MAPs plantation to evaluate the way of plantations and all details about the up to date agrotechnique.

Date: beginning of March

Field trips to experimental plots

During baby plants production, after plantation (15 days) before harvesting (1 week)

Harvesting day

The crops ready, a visit to see how the plants are harvested, to see the parameters of quality into the field, to understand the way how to process the plants to make them ready to be stored or further processing (e.g. extraction)

Date: mid May (estimated)

Conducting research trials;

This activity consist in realizing an experimental field where a number of species of MAPs will be planted and raised until the harvesting.

Also an area for plant nursering, conservation and (in future) selection will be realized (Turkmenkoy research centre)

The field will be the pivot of main demonstration activity (Plantation Day/Harvesting Day) but also for intermediate field trips and visits to show to whoever is interested the result of the action. Field trip are interesting also during growing period and should be organized as an open event to the nursery site and to the experimental plot (14 days after plantation and one week before harvesting;



Data to be collected (agronomics)

Name of the plant (scientific/vernacular)	
method of propgation	
n° of prepared plantlets	
n° of planted plantlets	
spacing (interrow X withinrow)	
irrigation	
fertilisation	
plant protection products if any	
q.ty of water durign the season	
% of living plants after 15 days	
% if living plants at harvest	
average weight of plants at harvesting time (kg fresh and dry)	
essential oil content	
overal organoleptic quality (based upon commercial samples)	

Data to be collected (economics)

Activity	subject	unit	q.ty	price*	total
plantation	seeds/plantlets	n°	25000	€ 0,03	€ 750,00
fertilization	ammonium nitrate/natural dung	quintals	5	€ 17,50	€ 87,50
manure spreading	machinery	hectare	1	€ 35,00	€ 35,00
irrigation	labour	hours	40	€ 15,00	€ 600,00
watering	tariff	cub met	4500	€ 0,11	€ 495,00
weeding	labour	hours	60	€ 15,00	€ 900,00
mechanical tillage	machine cost/rent	hours	4	€ 40,00	€ 160,00
workers	labour	hours	4	€ 15,00	€ 60,00
tillage with special equipment	machine cost/rent	hours	4	€ 45,00	€ 180,00
workers	labour	hours	12	€ 15,00	€ 180,00
weeding	labour	hours	60	€ 15,00	€ 900,00
mechanical tillage	machine cost/rent	hours	2	€ 35,00	€ 70,00
workers	labour	hours	2	€ 17,00	€ 34,00
tillage with special equipment	machine cost/rent	hours	4	€ 45,00	€ 180,00
workers	labour	hours	12	€ 15,00	€ 180,00
Harvest	machine cost/rent	hours	3	€ 65,00	€ 195,00
workers	labour	hours	4	€ 16,00	€ 64,00
harvest	machine cost/rent	hours	2	€ 65,00	€ 130,00
workers	labour	hours	4	€ 17,00	€ 68,00
totale costi di mantenimento (euro/ha/anno)					€ 4.431,00

* values are referred to Italy

Exchange of experiences and best practice from EU member countries

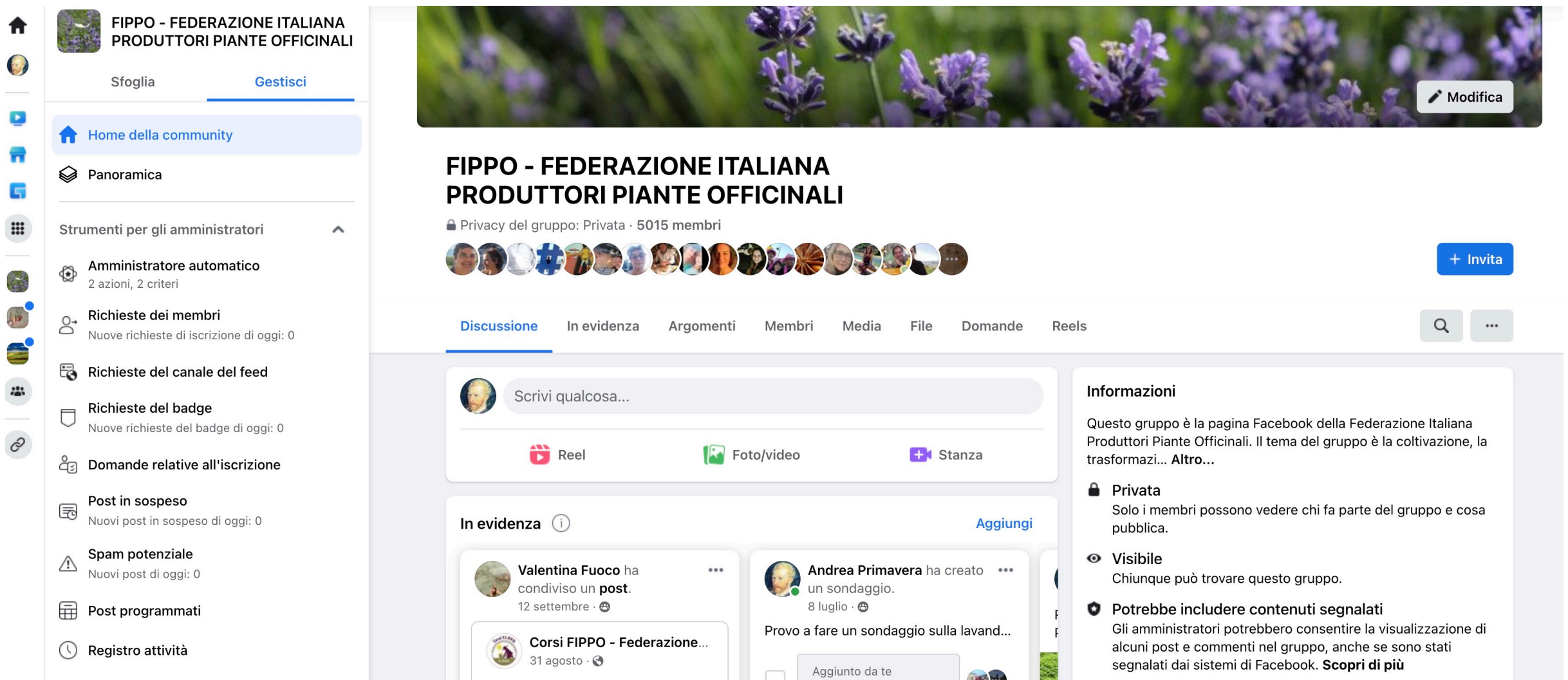
FAS project- Sicily study trip

- With the technical organisation of F.I.P.P.O., the trip was organised in Sicily with the purpose of learning and understanding how to enhance the agricultural sector and the ways to promote farm products thanks to the certification. The farms were:
 - ♦ Exchange of experiences and best practice from EU member countries;
- Case Don Ignazio with Ciokarrua (carob production)
- Terrazzino (olive and almond production)
- Sari-azienda agricola and Boniser (MAPs farms)
- AgriNopal srl (prickly pear)
- Consorzio Ragusano DOP (cheese preservation)
- Feudo Pollichino (Pecorino Siciliano DOP and Vastedda della Valle del Belice DOP)
- Dott. Agr. Salvatore Ciulla (RDP workshop)



Exchange/share/train

- Organization of online and face-to-face seminars, workshop and information meetings
- Production and promotion of educational video films;
- Active use of Internet and social media;



The screenshot displays the Facebook interface for the 'FIPPO - FEDERAZIONE ITALIANA PRODUTTORI PIANTE OFFICINALI' group. On the left, a sidebar lists navigation options: 'Sfoglia' (Browse) and 'Gestisci' (Manage), with 'Gestisci' selected. Below this, a 'Home della community' section includes 'Panoramica' and 'Strumenti per gli amministratori' (Tools for administrators). The tools list includes 'Amministratore automatico' (2 actions, 2 criteria), 'Richieste dei membri' (New membership requests today: 0), 'Richieste del canale del feed', 'Richieste del badge' (New badge requests today: 0), 'Domande relative all'iscrizione' (Questions related to registration), 'Post in sospeso' (New posts on hold today: 0), 'Spam potenziale' (New potential spam today: 0), 'Post programmati' (Scheduled posts), and 'Registro attività' (Activity log).

The main content area features a cover photo of purple flowers with a 'Modifica' (Edit) button. The group name 'FIPPO - FEDERAZIONE ITALIANA PRODUTTORI PIANTE OFFICINALI' is prominently displayed, along with the privacy setting 'Privata' (Private) and '5015 membri' (5015 members). A row of member profile pictures is shown below the name, followed by a '+ Invita' (Invite) button. Navigation tabs at the bottom include 'Discussione' (Discussion), 'In evidenza' (Featured), 'Argomenti' (Topics), 'Membri' (Members), 'Media', 'File', 'Domande' (Questions), and 'Reels'. The 'Discussione' tab is active, showing a post by Valentina Fuoco (shared a post on September 12) and a post by Andrea Primavera (created a poll on July 8). A 'Corsi FIPPO - Federazione...' post is also visible. On the right, an 'Informazioni' (Information) section states: 'Questo gruppo è la pagina Facebook della Federazione Italiana Produttori Piante Officinali. Il tema del gruppo è la coltivazione, la trasforma... Altro...' (This group is the Facebook page of the Italian Federation of Official Plant Producers. The theme of the group is cultivation, transformation... More...). It also lists settings: 'Privata' (Private), 'Visibile' (Visible), and 'Potrebbe includere contenuti segnalati' (May include reported content).

Workshops/seminars

Opening workshop: now

Topics: the project, timing, the plant list, propagation

Intermediate seminar: during harvesting time

Topics: agronomics, harvesting and processing techniques, quality issues, product evaluation and testing

Final wrap-up workshop: end of the season
Data sharing, perspectives.



list of proposed plants

A total of 24 species are listed in this proposal. The list is prepared upon the following criteria

- totally safe use as food, food supplement or medicine
- well established properties
- arid resistant/mediterranean (14 over 22 can be raised with small amount or none irrigation)
- large and established use in international market
- multiple use (tea/cosmetic/medicine)
- locally used or typical of the region
- high market potential

The list can be amended whenever the stakeholders/actors/participant want to. E.g. adding new species, enlarging ore restricting the test plants

Botanical name	cycle	water needs	English name	collected parts	derivatives
Achillea millefolium	perennial	**	yarrow	flowers/herba	dried flowers or herb/essential oil
Calendula officinalis	annual	***	calendula	flowers	dried flowers/fresh flowers
Crithmum maritimum	perennial	*	sea fennel	leaves	fresh plant/leaves
Foeniculum vulgare	annual	*	fennel	seeds	dried seeds/essential oil
Lavandula angustifolia	perennial	**	lavender	flowers	dried flowers/essential oil
Lavandula stoechas	perennial	*	butterfly lavender	flowers	essential oil
Malva sylvestris	annual	***	mallow	leaves/flowers	dried leaves
Matricaria chamomilla	annual	*	chamomile	flowers/herba	dried/essential oil
Menta sp.	perennial	***	mint	aerial part	dried leaves/essential oil
Origanum dubium	perennial	*	Cyprus oregano	aerial part	dried
Origanum majorana	perennial	**	marjoram	aerial part	dried/essential oil
Origanum vulgare (red)	perennial	**	red oregano	aerial part	dried



Subsp. mauritiana

Malva sylvestris L.

Subsp. sylvestris



prodotti dalla malva



Origanum vulgare subsp *viridulum* (ex *O. hirtum*)



componenti: timolo/carvacrolo

Origanum vulgare subsp *vulgare*



componenti: spatulenolo/germacrene

Origanum dubium Boiss.



Origanum majorana



Origanum onites



Origanum dictamnus









Thymus vulgaris L.







Development and printing of information material

1. Technical data sheets (TDS) will be prepared containing essential data for each species/accession, such as the correct botanical name, the main agronomic traits, data on yields and the technical equipment necessary to achieve a good result.

2. SOPs (Standard Operating Procedures) will be prepared as elementary guidelines for each processing technique, i.e. drying (cutting and selection), distillation, extraction in liquid food grade solvents. For each processed herb also a template of material data sheet (MDS) will be prepared to be used by future growers to sell the goods to industry.

1+2. In the future, the TDS and the SOPs can be combined with a premise, and a small photographic atlas, in a basic manual for the production of MAPs in the northern part of Cyprus



A close-up photograph of a person's hand holding two small rosemary seedlings. The seedlings have green, needle-like leaves and are still in their original soil plugs. The soil is dark brown and moist. The background is a blurred outdoor setting with green grass and trees. A blue plastic tray containing more seedlings is visible in the bottom right corner.

Thank you