## Restoring the traditional Mediterranean diet ( through the conservation of wild edible plants



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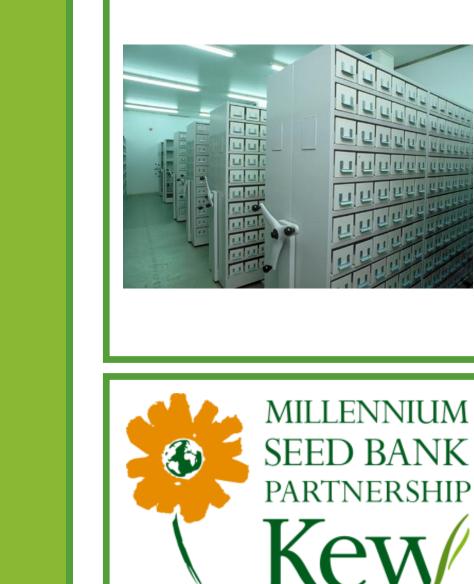
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## Kew's Millennium Seed Bank Partnership

> 39.000 wild species banked (> 2.2 billion seeds)









### Kew's Millennium Seed Bank Partnership - Jordan & Lebanon

- 1. Toward conserving Jordanian Flora Aim: To enhance ex situ conservation and sustainable utilization of plant species indigenous to Jordan
- 2. Conservation of Lebanese flora Aim: Complementing existing in situ conservation in Lebanon by supporting the collection, study and ex situ conservation of Lebanese flora.

#### 2,553 accessions (1,626 taxa) conserved

- Jordan: 662 taxa
- Lebanon: 964 taxa
- 40% wild edible plants



### Restoring the traditional Mediterranean diet through the conservation of wild edible plants

Aim: To promote the sustainable use of the traditional Eastern Mediterranean (EM) diet through the preservation of traditional knowledge and science-based conservation and cultivation activities of wild edible plants in Jordan and Lebanon.

Main Outputs:

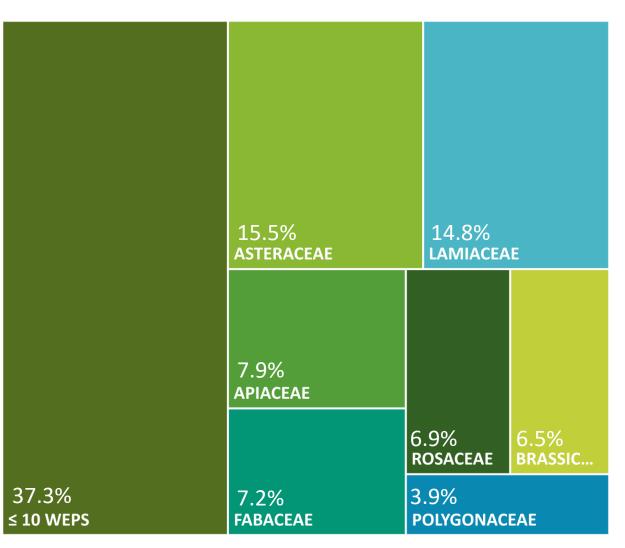
- 1. Preservation of the ethnobotanical knowledge on EM wild edible plants
- 2. Conservation of EM wild edible plants
- 3. Research to support the conservation and sustainable use of EM diet plants
- 4. Value adding and promotion of sustainably sourced plant food products of the EM diet



## **Preliminary Results**

# **Total Wild Edible Plants: 277 species** X2 **Edible only** 40% Edible & Medicinal 60%

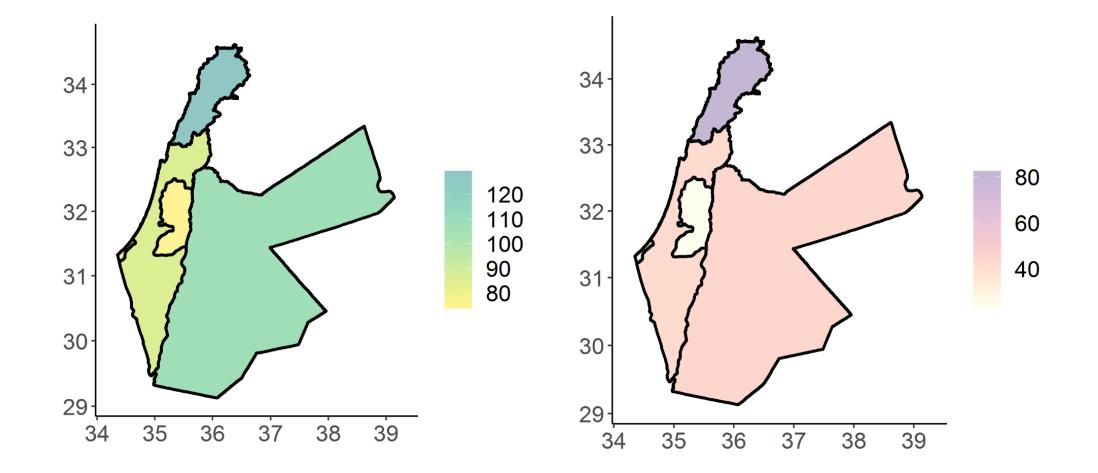
#### **Families Distribution**



## **Preliminary Results**

**Total Wild Edible Plants: 277 species** 

Found in only one country



#### Gundelia tournefortii

#### Salvia hierosolymitana











### Sustainable Use

Surveying and collecting plants of *G. tournefortii* across populations in Jordan in March 2019 for chemical and genetical analysis



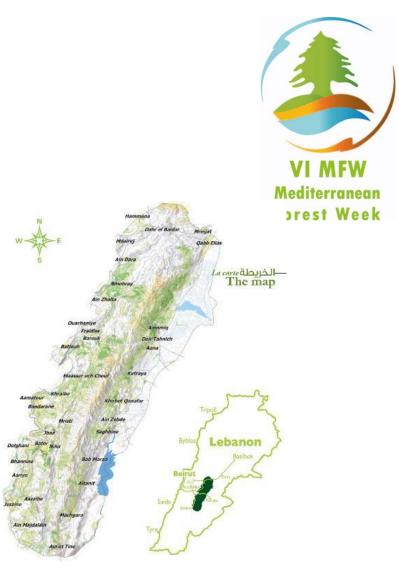
# **Shouf Biosphere Reserve**

•Established in 1996 and Green listed in 2018

•50,000 hectares of surface, which make SBR one of the largest protected areas in the Middle East and the East Mediterranean (covers 5% of the Lebanese territory)

•Designated as a UNESCO Man and Biosphere Reserve in 2005

•SBR is managed by MOE / Local committee / Management team





## **Income Generation**

- •Eco-tourism activities
- •Rural products (handicraft & processing food)
- •Compost
- •Briquettes











1950 m

1500 m

1200 m

1000m

800m

1- Top of the Mountain 1800-1950 m

> 2- Cedar Forests 1200-1800 m

3- Pine and Oak Forests 900 -1200 m

4- Range /Grazing Land 800 – 1300 m

5- Agriculture / Terraces 900 – 1100 m

> 6- Villages / Water 800 -1200 m



Forest Landscape Restoration

2

3

6

5







SHOUF BIOSPHERE RESERVE محمية الشوف المحيط الحيوي

### Terraces

- •Restoration of Historical Agricultural Terraces - Assessment, Cost-Benefit Analysis and Marketing in Shouf Biosphere Reserve and Qadisha Valley
- •Stonewall Terrace Restoration Guidelines
- •Road Map towards Sustainable Agriculture
- •Market Analysis / Value chain

200 hectares to be restored

27 hectares on going, using native species with high economic value







## Terraces



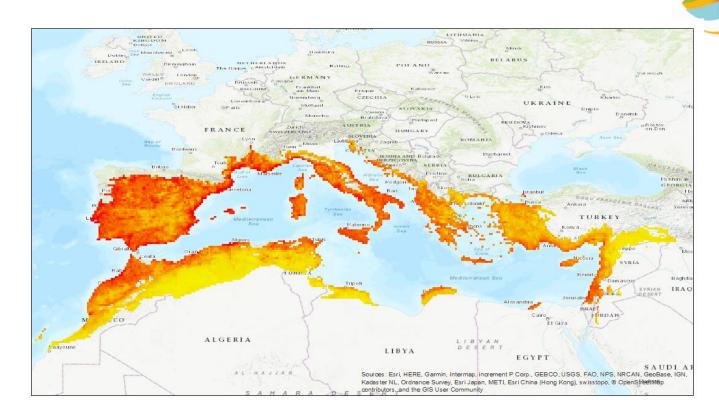
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#### 200 hectares to be restored

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### Next Steps

- Surveying and collecting plants of *G. tournefortii* across populations in Lebanon for chemical and genetical analysis
- Seed collecting and conservation in Jordan and Lebanon
  - Research on seed biology and ecology vs climate change
- Expanding work to the Mediterranean basin
- Fundraising



Estimated species richness of edible plants





### THANK YOU

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