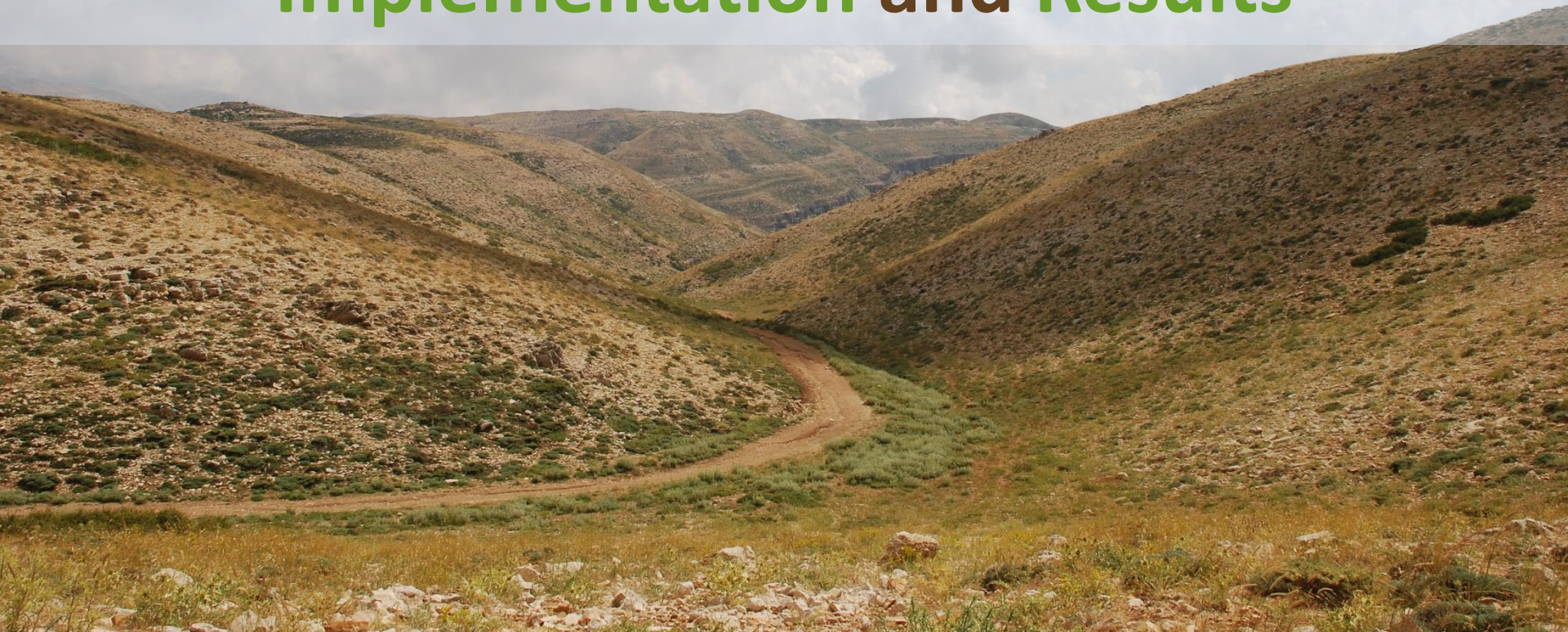


# ECOPLANTMED pilot site in Lebanon: Implementation and Results





Pilot site: Kfardebian Mount-  
Lebanon

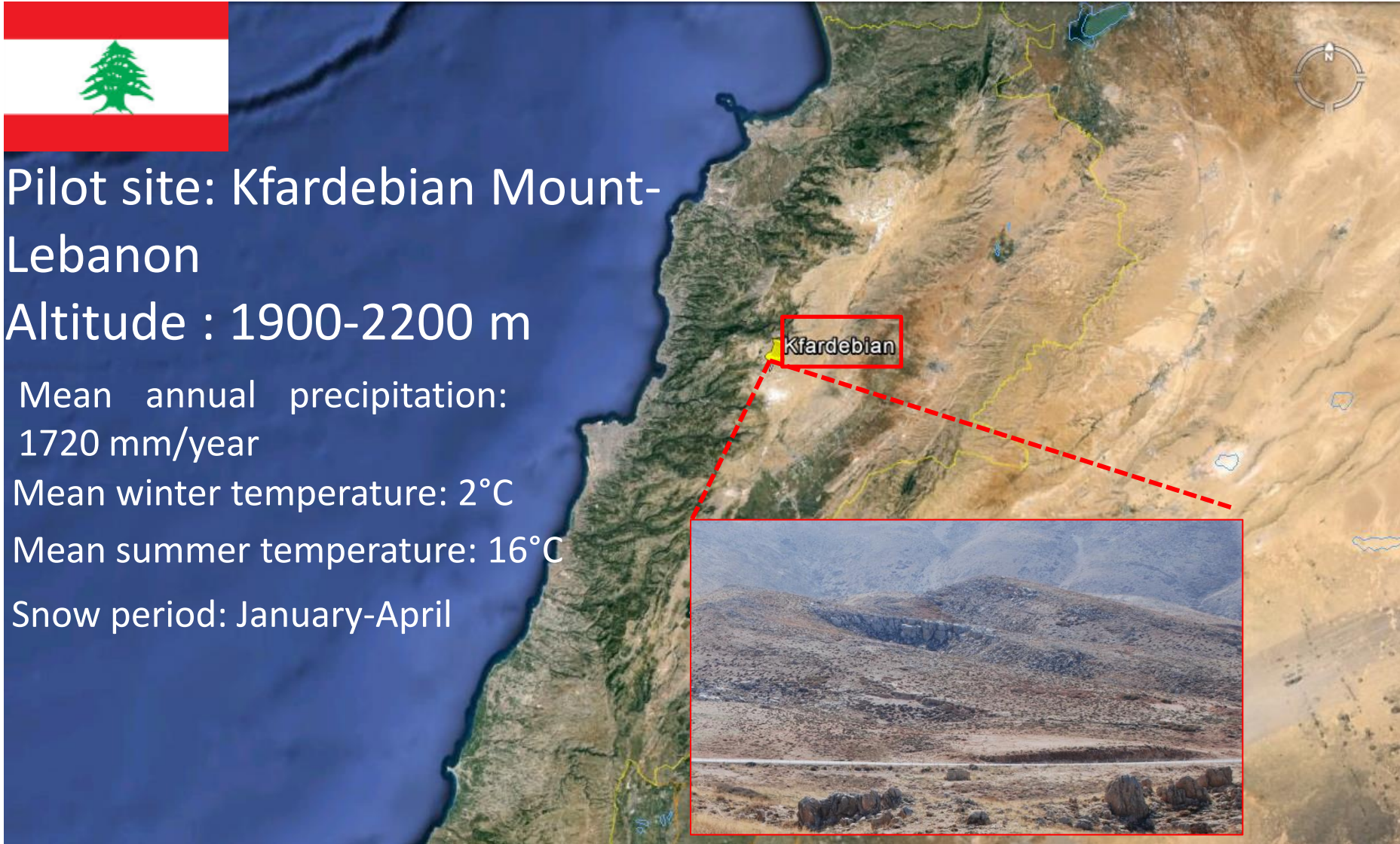
Altitude : 1900-2200 m

Mean annual precipitation:  
1720 mm/year

Mean winter temperature: 2°C

Mean summer temperature: 16°C

Snow period: January-April





## Restoration of the original ecosystem

## Optimize economically and technically the restoration methodologies





➔ The wood cuttings



# Degradation factors



➔ The wood cuttings

➔ Overgrazing

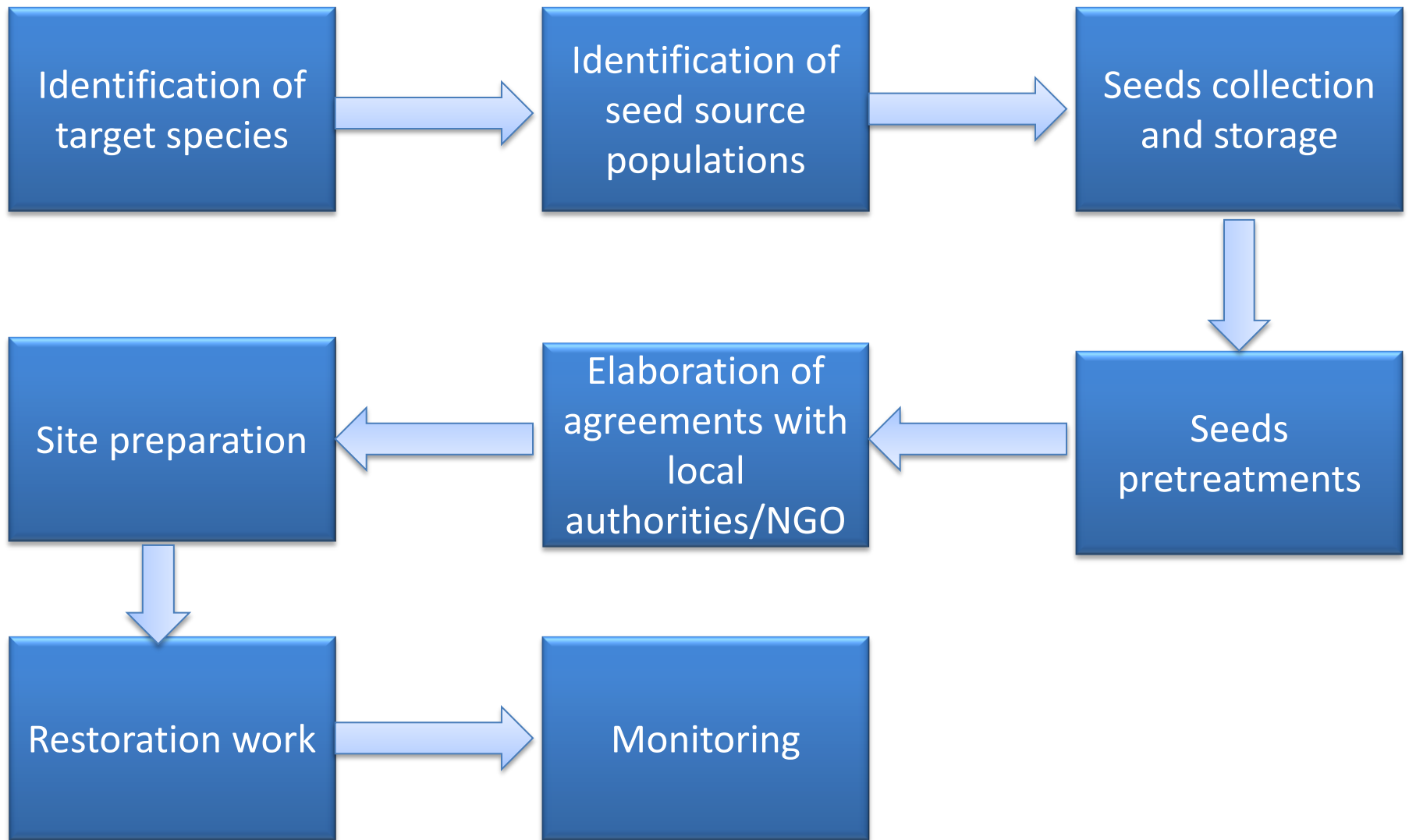




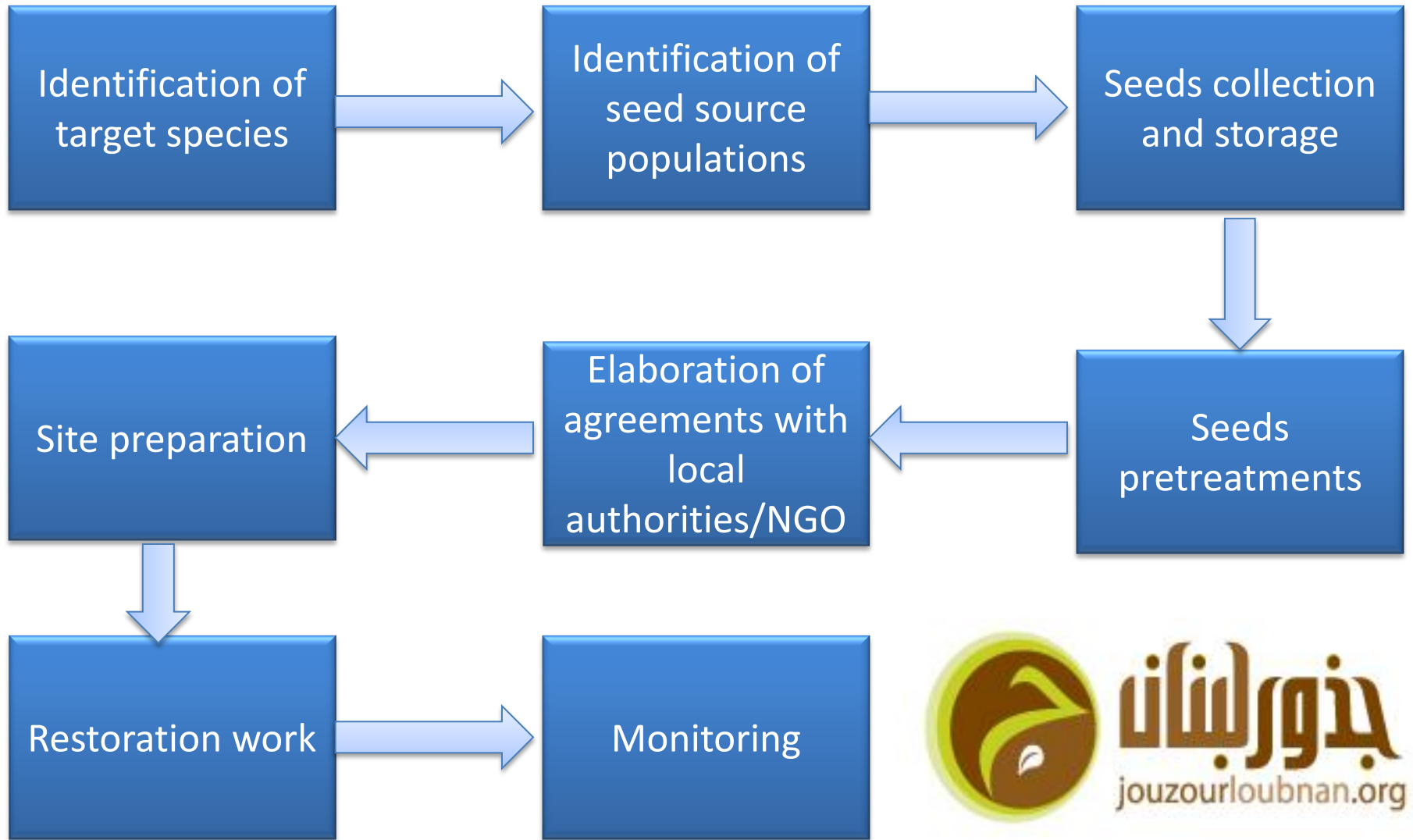
# How we can restore this land??!!

Passive restoration

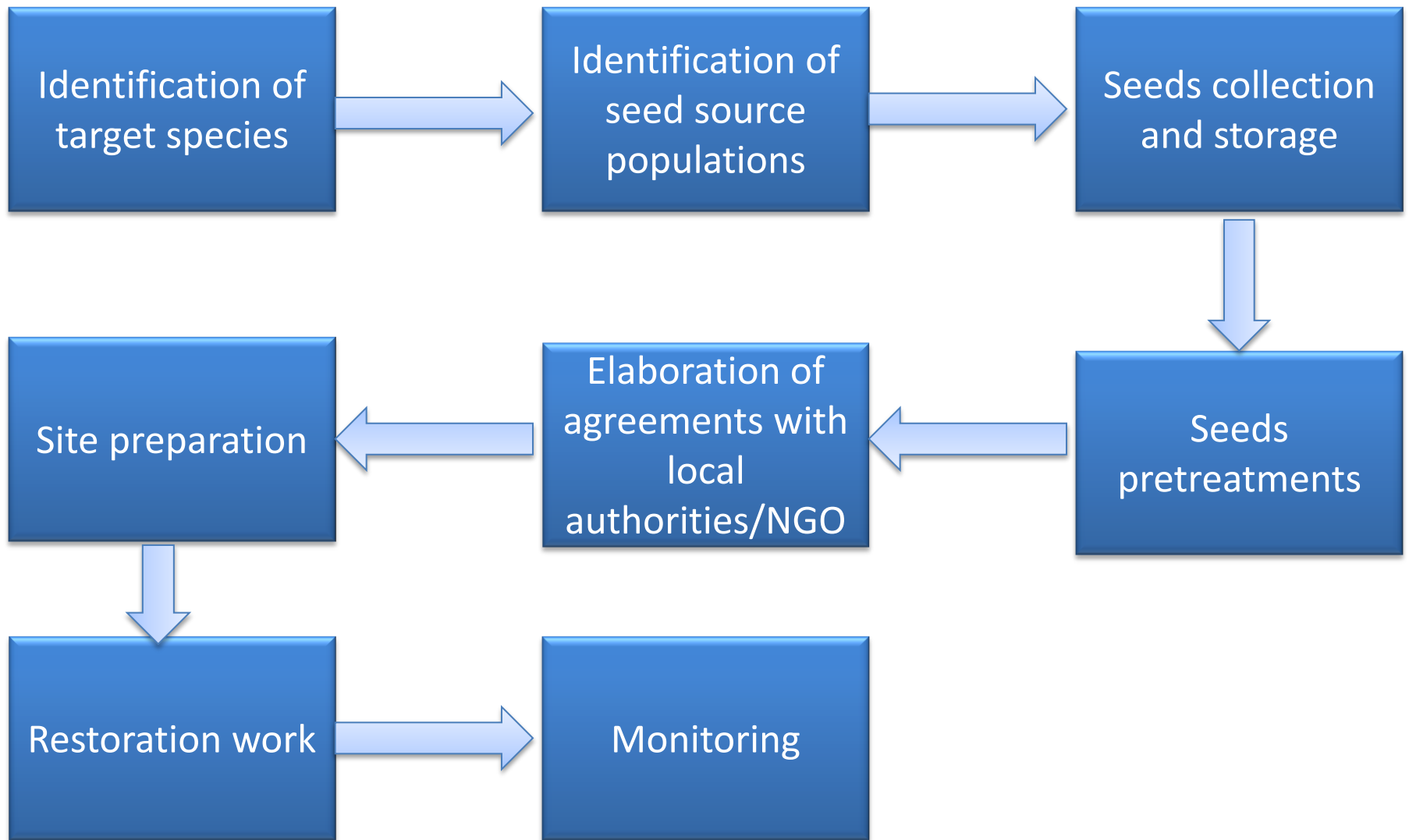
Active restoration













# Plots distribution



East-Facing plot with seedlings



West-Facing plot with seedlings



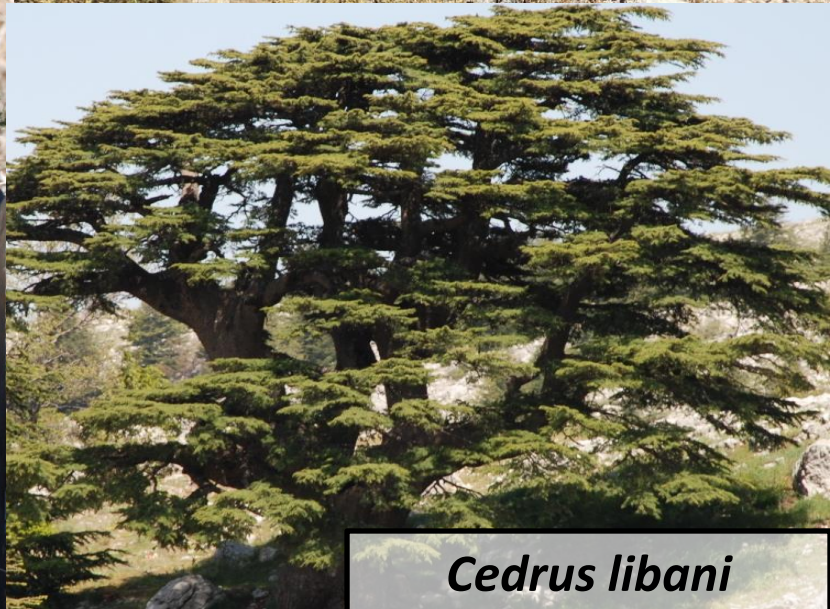
Plot with native seeds



2400 seedlings



*Juniperus excelsa*

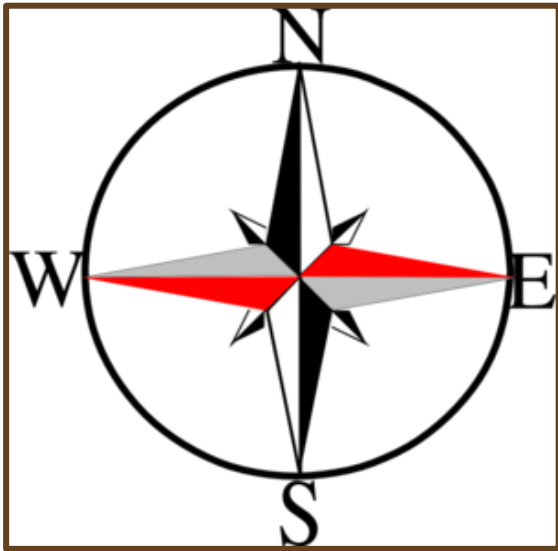


*Cedrus libani*



# Ecological Parameters tested

**Exposition**



**Irrigation**



**Nurse Plant**





1200 Cedar seedlings



East 600

West 600



150

150



150

150



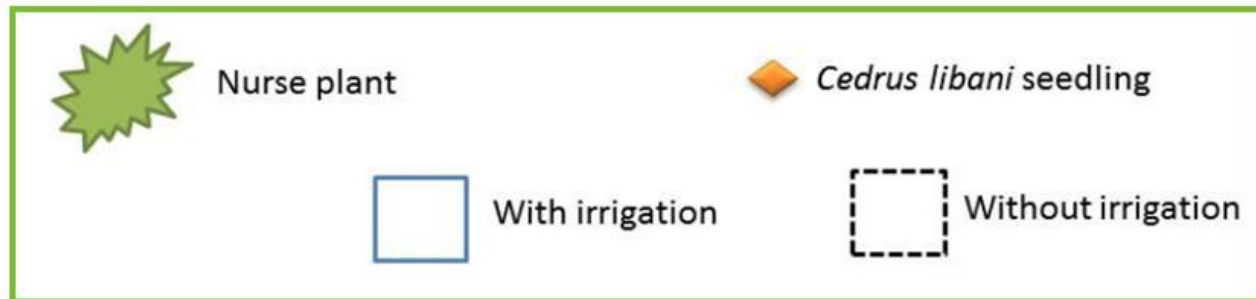
150

150



150

150





*J. excelsa* with irrigation  
without nurse plant



*C. Libani* with irrigation  
without nurse plant



*J. excelsa* without irrigation  
without nurse plant





## Plots distribution



East-Facing plot with seedlings

West-Facing plot with seedlings

Plot with native seeds



3330 seeds



*Cedrus libani*



*Juniperus excelsa*



*Rosa canina*



*Cotoneaster nummularia*



*Crataegus monogyna*



# Ecological Parameter tested

## Nurse Plant

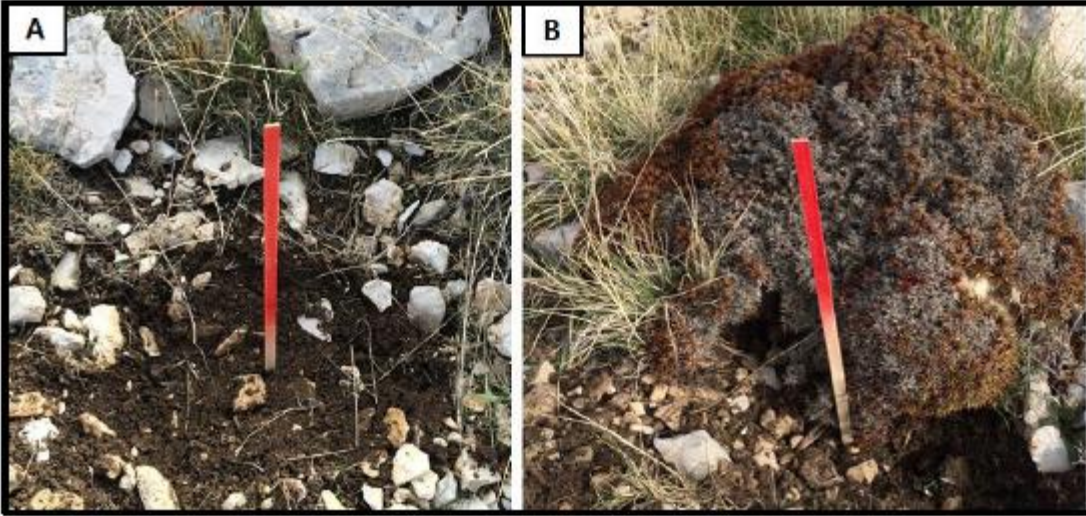


*Astragalus echinus*

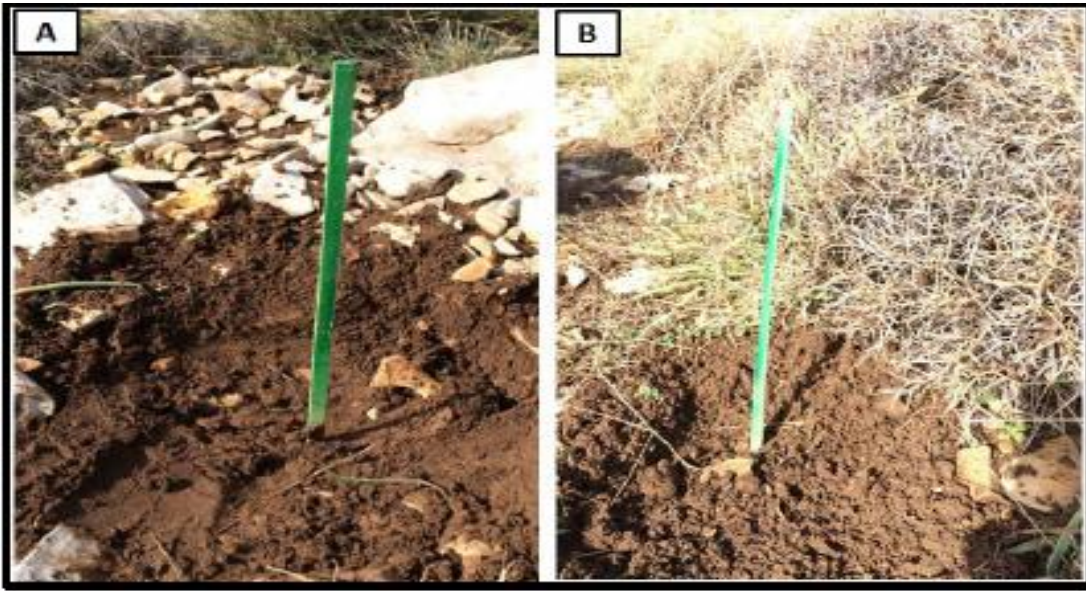


*Astragalus cruentiflorus*

# Seed germination test



*Cedrus libani*



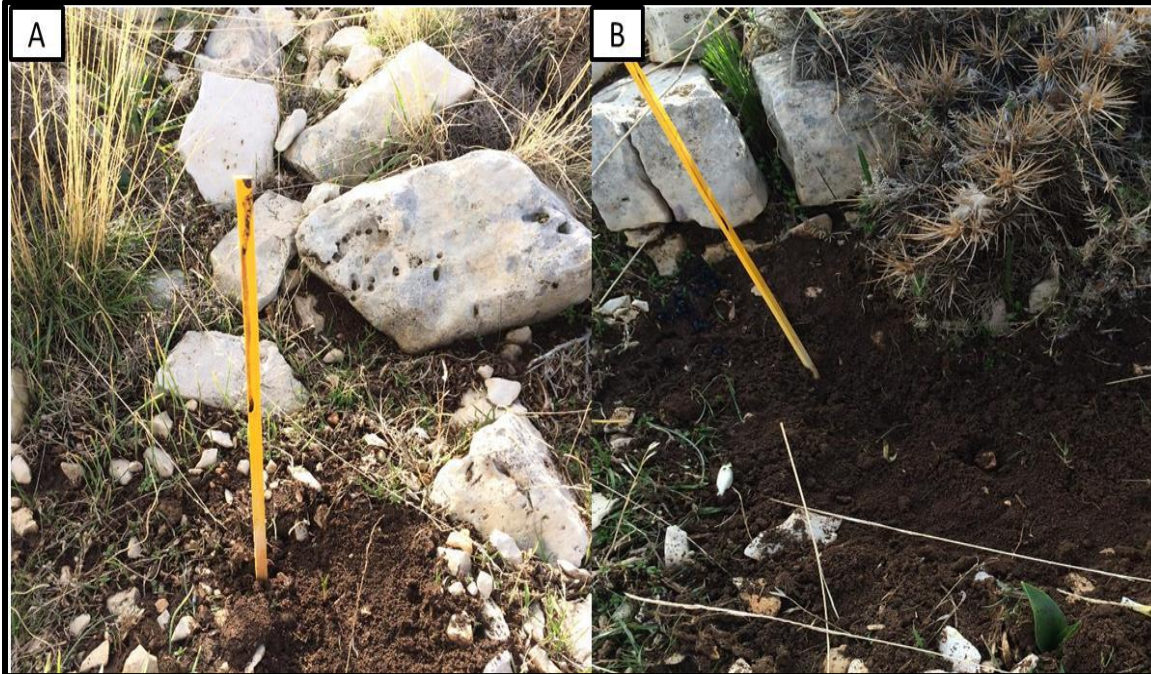
*Rosa canina*



*Juniperus excelsa*



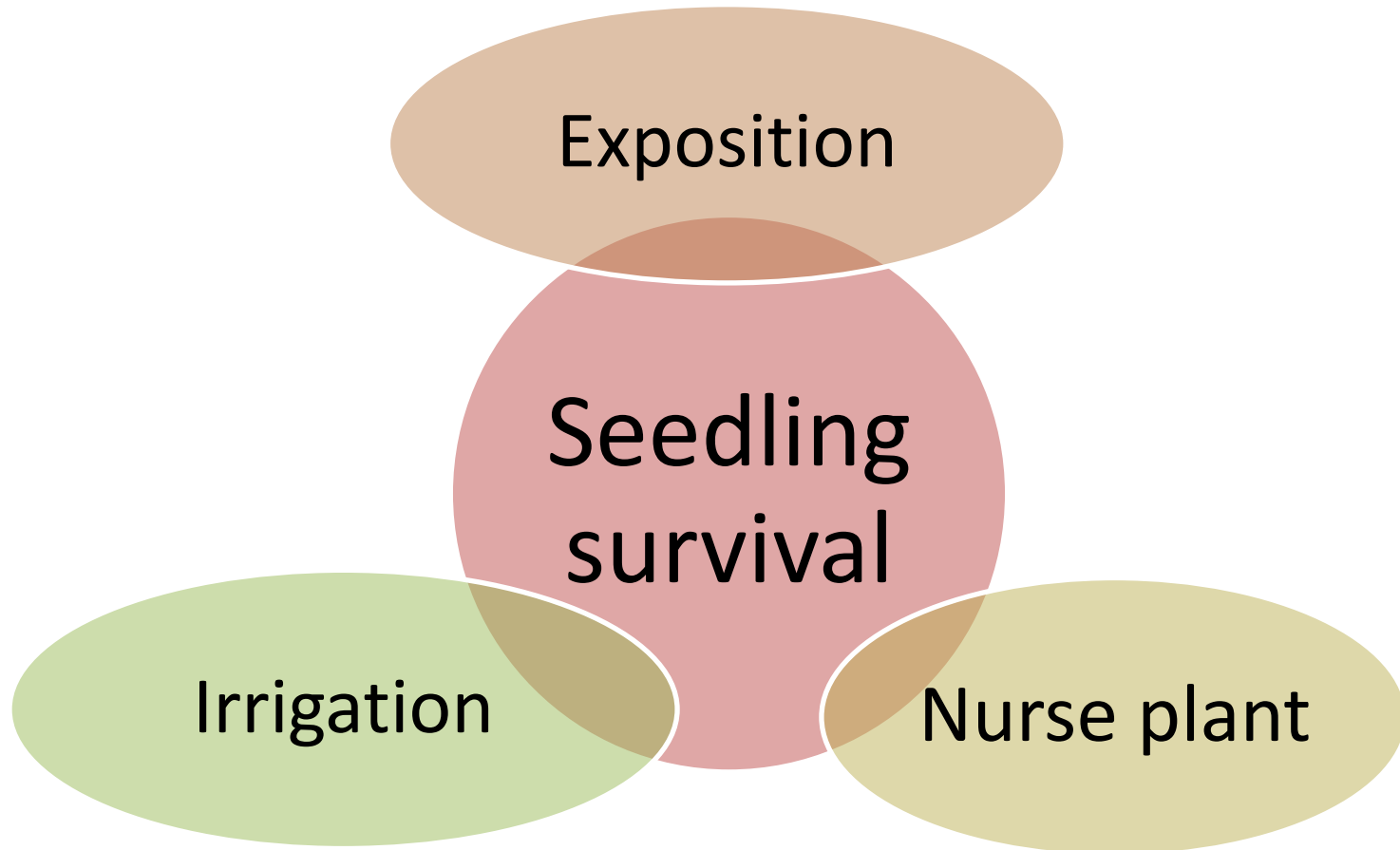
*Cotoneaster nummularia*



*Crataegus monogyna*

# Results

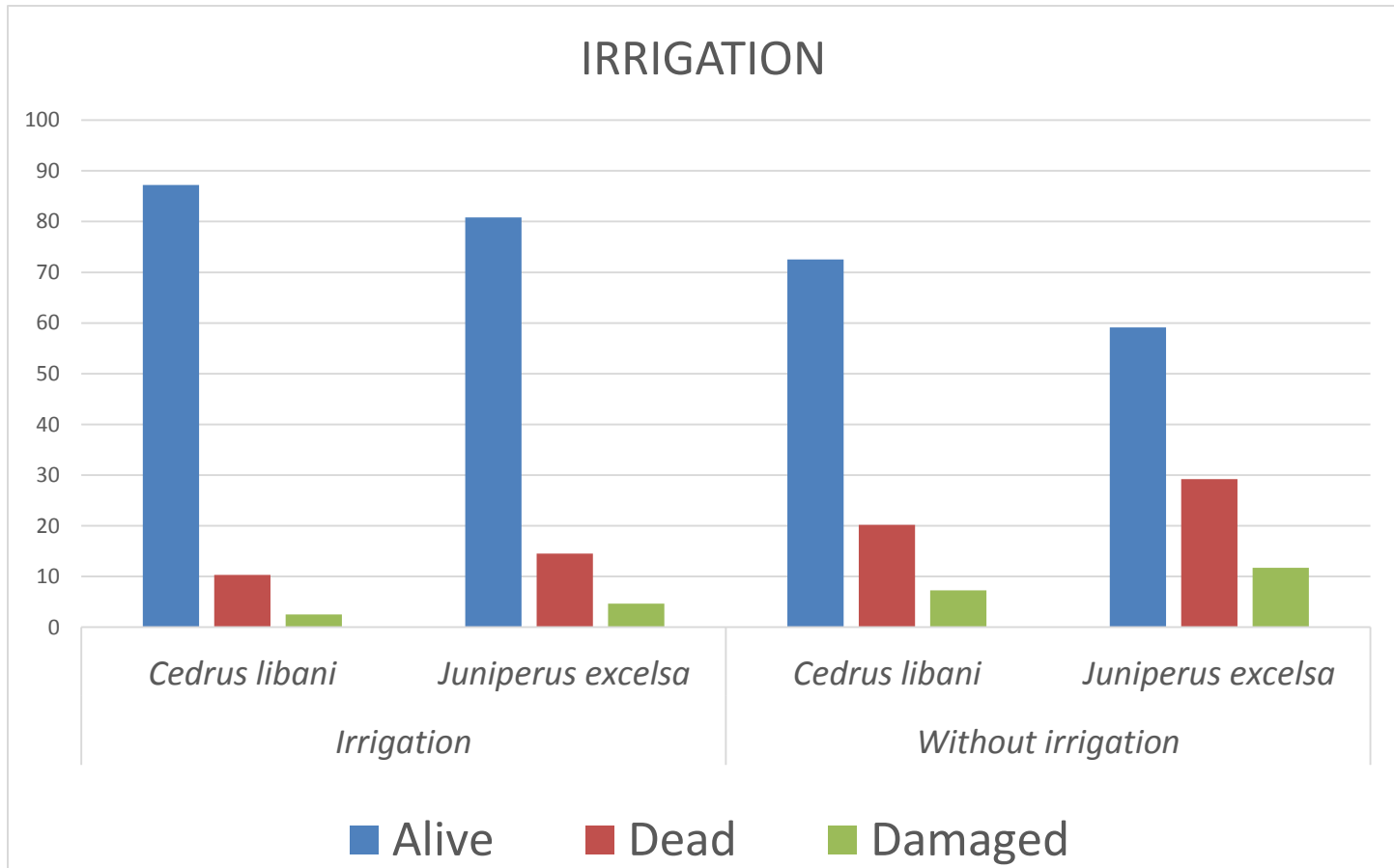






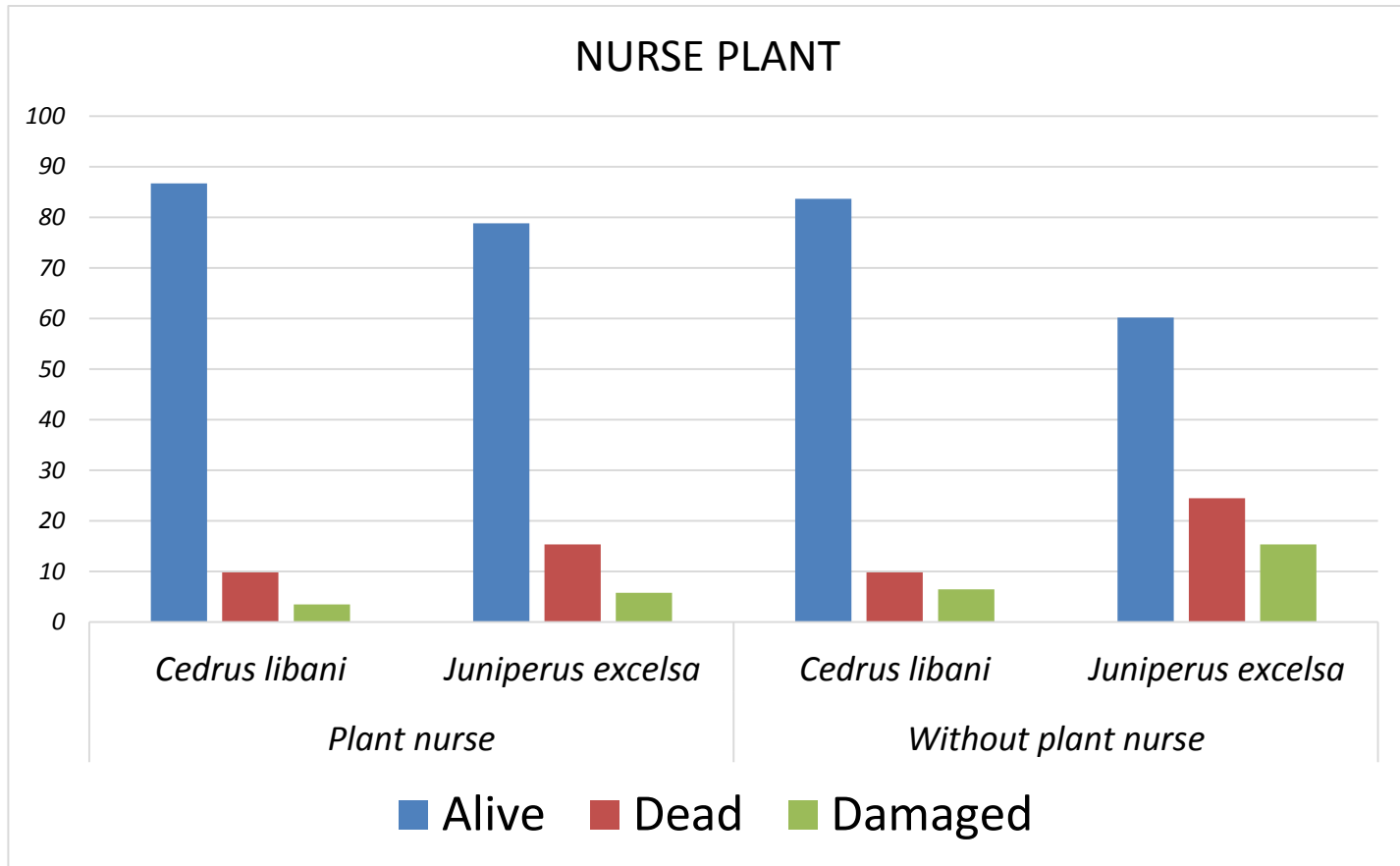


## Irrigation



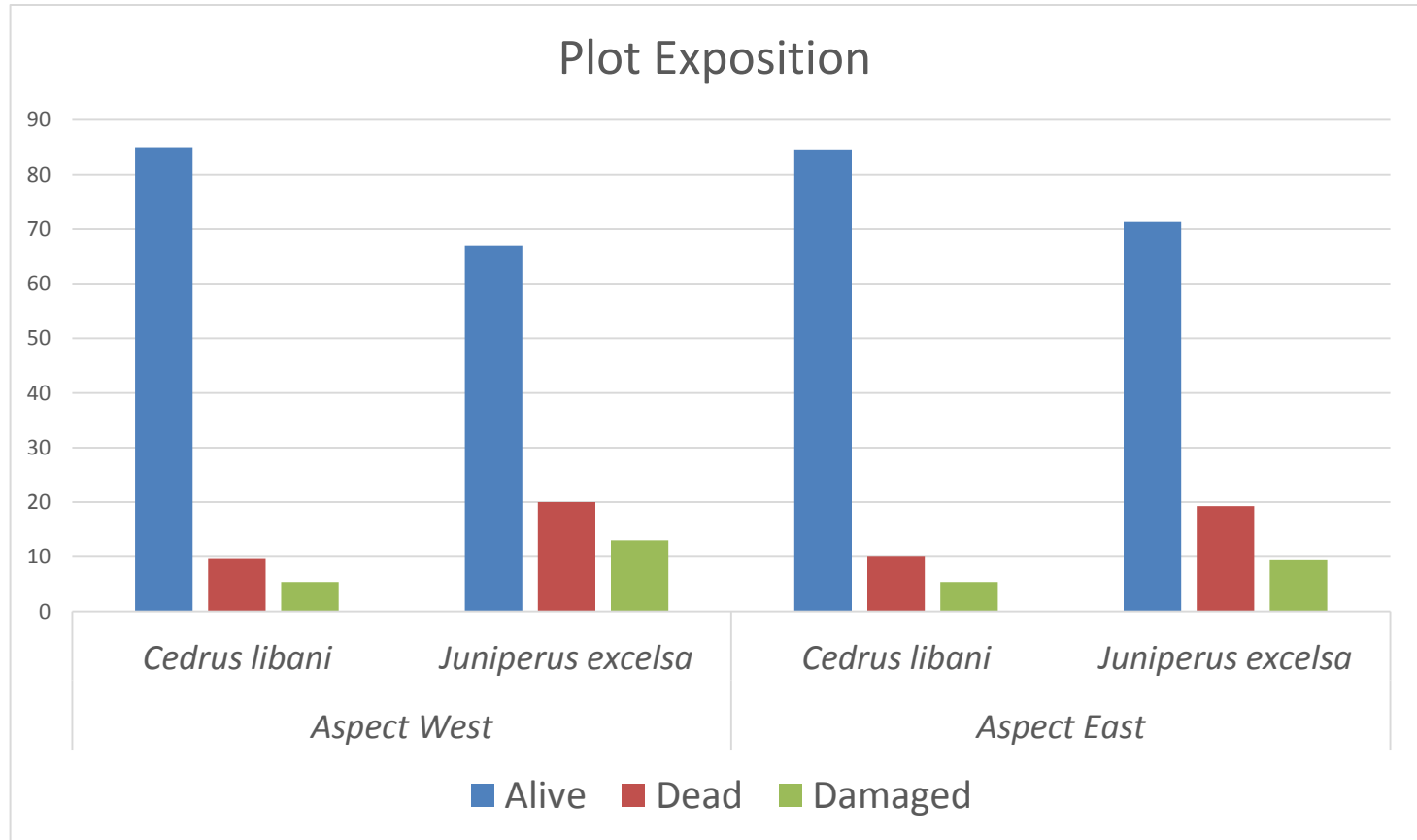


## Nurse Plant



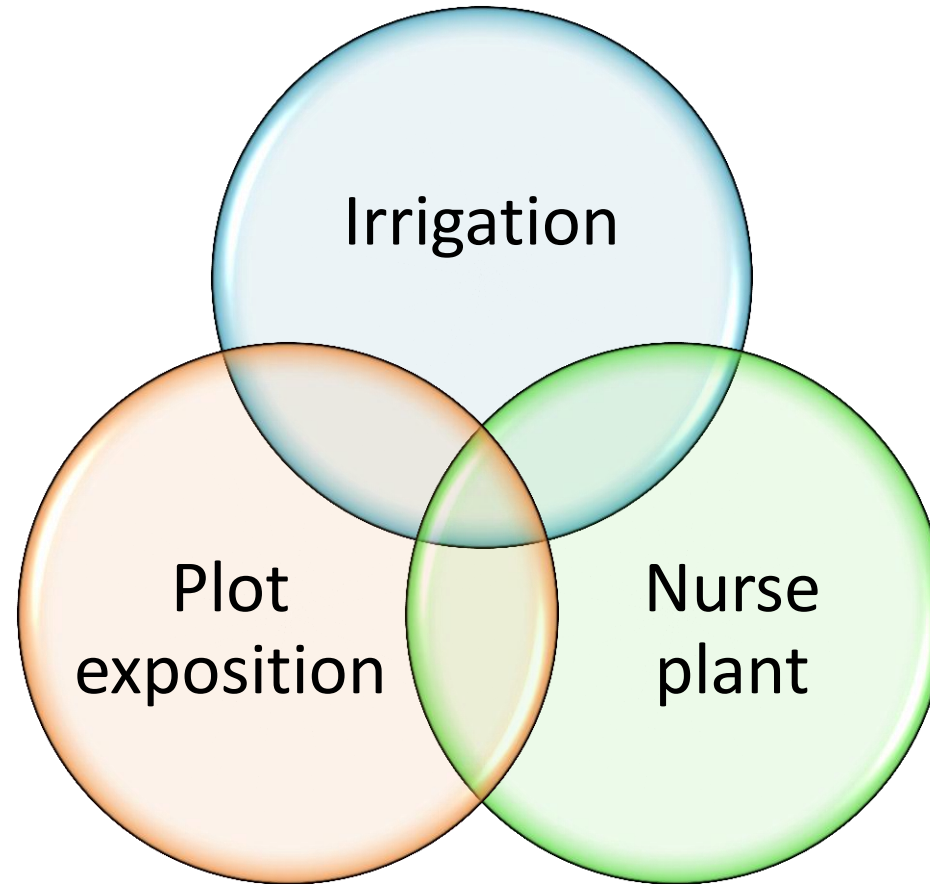


## Exposition





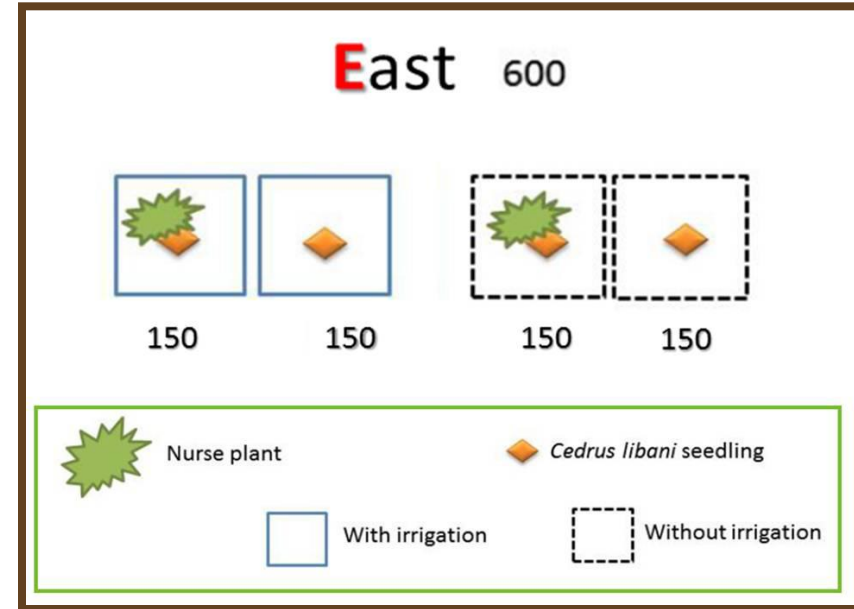
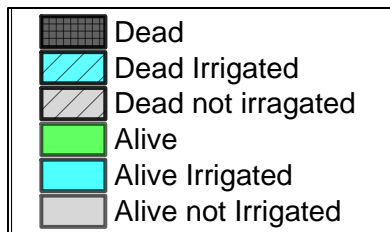
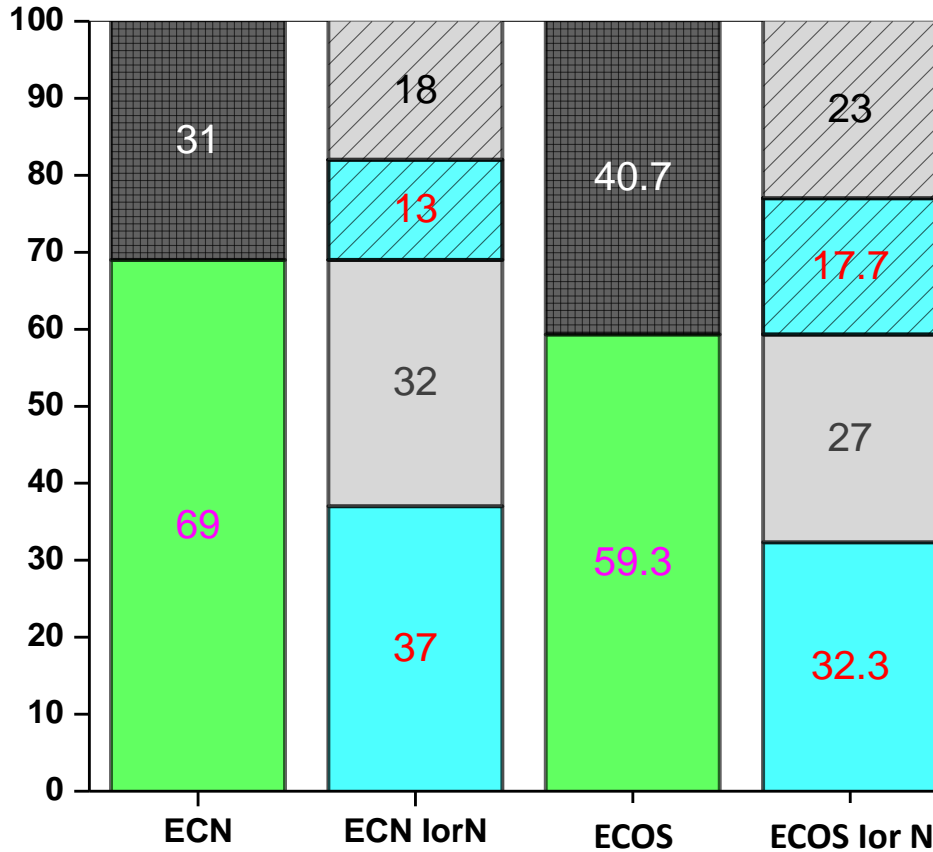
# Combined tested parameters



# Seedling test results



## 1200 Cedar seedlings



**ECN:** *Cedrus libani* planted in the **East** plot under plant **Nurse**

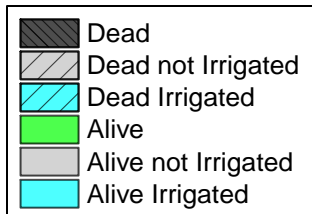
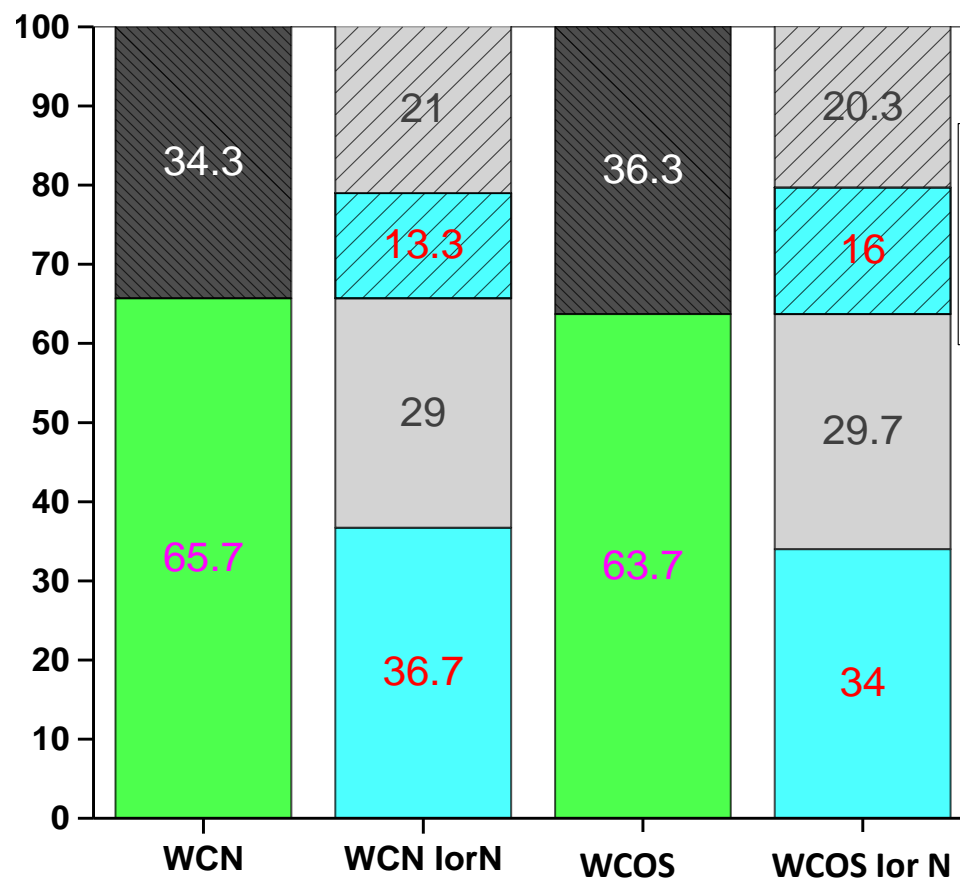
**ECOS:** *Cedrus libani* planted in the **East** plot on **Open Space**

**I or N:** with **Irrigation** or **No irrigation**

# Seedling test results



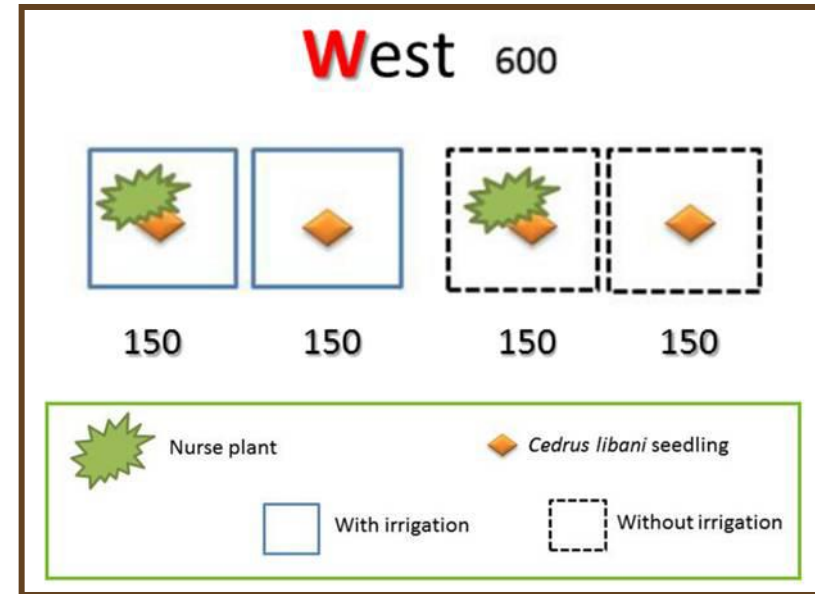
## 1200 Cedar seedlings

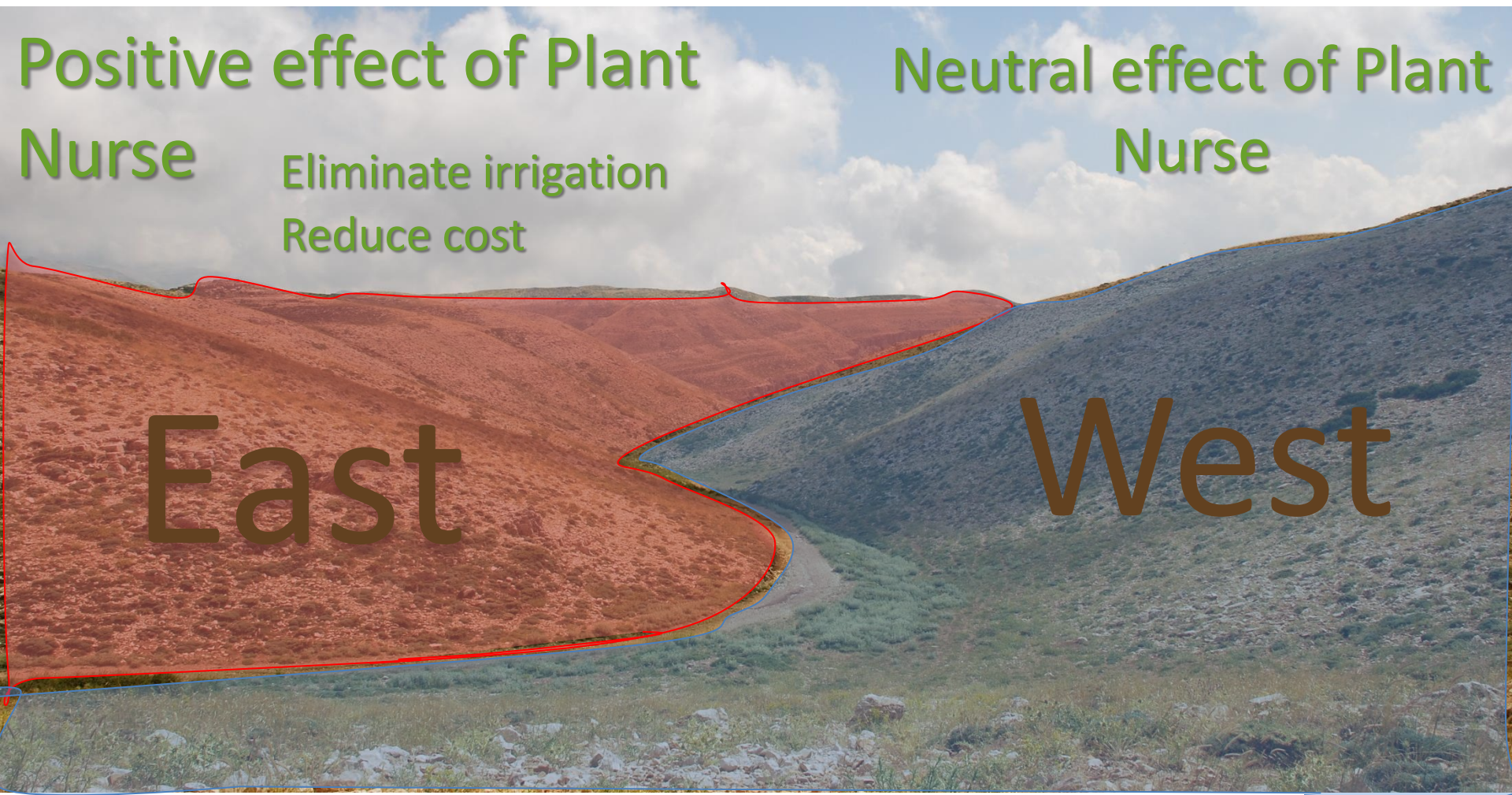


**WCN:** *Cedrus libani* planted in the **West** plot under plant **Nurse**

**WCNC:** *Cedrus libani* planted in the **West** plot on **Open Space**

**I or N:** with **Irrigation** or **No irrigation**





**Positive effect of Plant Nurse**  
Eliminate irrigation  
Reduce cost

**Neutral effect of Plant Nurse**

East

West



Monitoring will be performed once per month for at least two years after the end of the project by the NGO “Jouzour Loubnan”





# Thank You For Your Attention

Perla FARHAT

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