

Last Century we have destroyed 1.5 bn hectares of Nature's Infrastructure.

Ecosystem Services, Climate Self-Regulation & Buffer for Extreme Events



"\$150 bn per year Natural Disasters Globally"
"Projected costs of inaction could reach 7% of EU GDP."







## **Problem - Traditional Methods**



HARD, DANGEROUS & SLOW

HARSH ENVIRONMENTAL CONDITIONS

RISKS MITIGATION Lack of Labour Heavy-Duty Machinery High Costs

Degraded Soil
Decreased Water Retention
Lack of Biodiversity

Growth Monitoring Pests & Diseases Wildfires

**Low Reforestation Success Rates** *Mediterranean* 

### **Precision Reforestation Drone & Seedpods**





Planned Fleet 10 Drones & Team of 10 Precision Sowing 200.000 Trees per Day



>200 Tree Planters



Remote & Inaccessible Areas



**Pre-Planned Geolocation** 



**Healthier Root System & Growth** 



MVP - 4.500 Trees per Day

25 X

**50%** Cheaner

80%



## **Survival Rates & Micro Ecosystems**



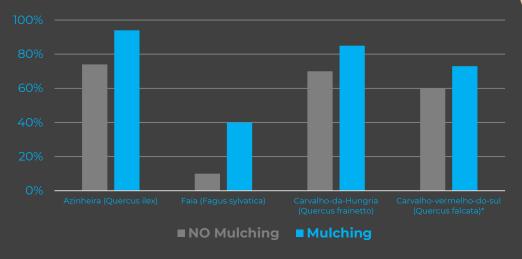
Reforestation in the Mediterranean region presents unique challenges due to its distinct climatic conditions, characterized by hot, dry summers and mild, wet winters.

### **MULCHING**

### + 23% Survival Rate

100 ha Project = €30k Saved

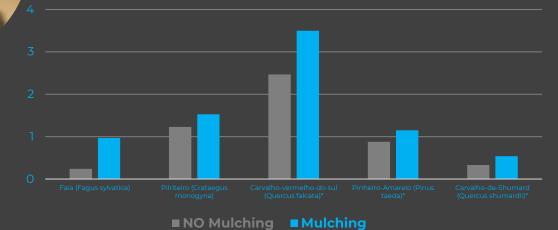
#### **SURVIVAL RATE**



### + 25% Tree Growth

+150k Additional Revenue (15yr)

#### TREE HEIGHT



# **Postfire Mulching**



# POSTWILDFIRE EMERGENCY SOIL STABILIZATION

- -85% reduction soil erosion
- -50% water runoff and flash floods
- +30% increase in natural regeneration

https://www.unccd.int/best-practice/mulching-after-forest-fires

"Martin (USGS) called the rise in erosion part of an "unvirtuous cycle" of more fires, more eroded soil, which leads to more infrastructure failures and, ultimately, less water."

Source: Los Angeles Times - Aug. 31, 202-

# No (Cost-Efficient) Competition

## **Drone Mulching**







**AI Generated Images** 

# Swarm Fleet of 10 Drones can Deliver >20 ton/day

Combining cutting-edge drone mulching with drone precision reforestation we created a game-changing approach.

#### **LIFE - TERRAFARMERS**





LIFE-TERRAFARMERS: Enhancing Post-Fire Recovery and Climate Resilient Ecosystems Through AI-Powered Aerial Seeding for Holistic Afforestation and Habitat Restoration.

Pilot Project 1: 60ha Leiria. Portugal



Pilot Project 2: 30ha CIM RC Coimbra, Portugal

COMUNIDADE INTERMUNICIPAL REGIÃO DE COIMBRA

Pilot Project 3: 50ha Madeira Island, Portugal



Pilot Project 4: 30ha Castilla La Mancha. Spain



Pilot Project 5: 30ha Aquitaine, Office National des Forêts France

### **Summary:**

4 Years

**Terrafarmers Budget - €1.3 Mn** 

5 Pilot Projects – 200 ha

#### **FLEET of 6 Drones**

Post Wildfire Restoration:

**Woodchip Mulching Living Mulch** Reforestation

**Consorcium:** 



#### **Associated Patrtners:**











### The Team







Co-Founder + COO

Teresa Fidalgo PhD Co-Founder + CSO











#### We are TERRAFARMERS

Regenerating Nature & Empowering Communities

Combining science and engineering we develop the most effective technologies and solutions to regenerate ecosystems and habitats.

### **DISRUPTING AGRICULTURE & NATURE RESTORATION**

