



فکورپیوندآریا

FAKOUR PEYVAND ARIA

# Plant Factory for Grafted Vegetable Seedlings

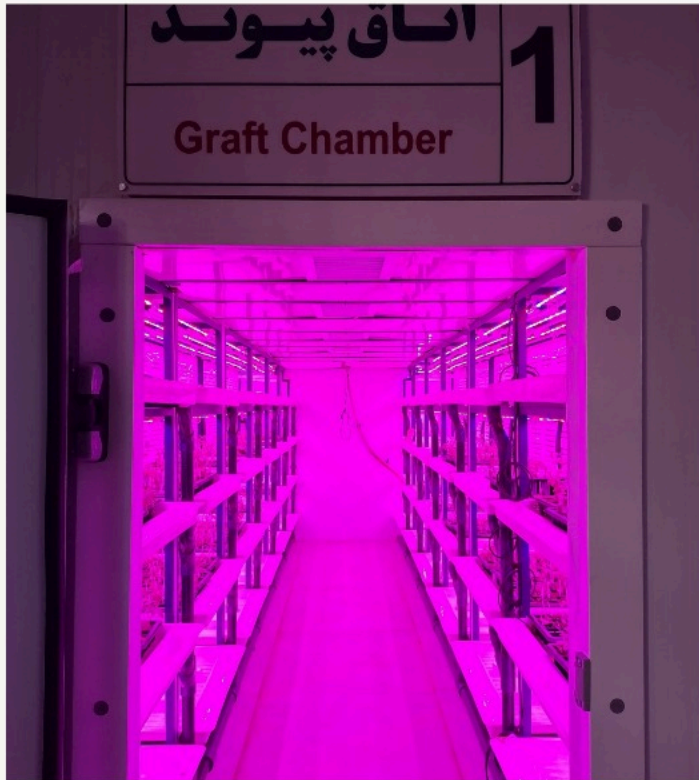
Precision grafting, controlled healing  
and acclimation

FACILITY CATALOGUE / FPA



# Facility Overview

Designed and built within a 150 m<sup>2</sup> industrial hall · Two 3 × 6 m graft chambers



**Graft Chamber 1 · Four tiers**



**Graft Chamber 2 · Seven tiers**



**Grafting Room · 10 operators**

## Training unit for 25 participants

Supporting areas: seed sowing; irrigation and nutrient-solution preparation; systems control; storage; staff dining and rest.

# From Seed to Dispatch

All production stages and support activities take place within the plant factory

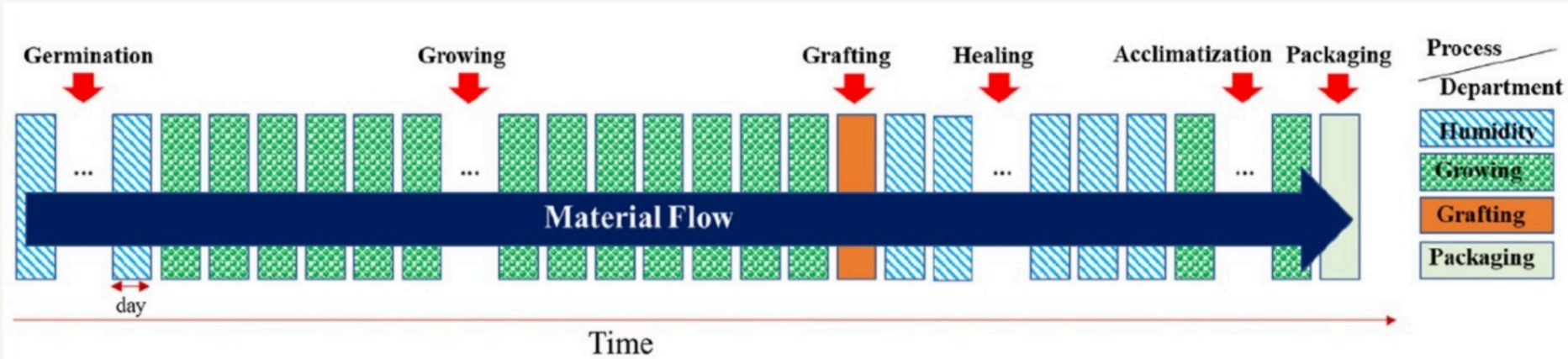


Fig. 2. Material flow and processes of the system.

## ON SITE

Packaging and loading complete the workflow.



Seed sowing



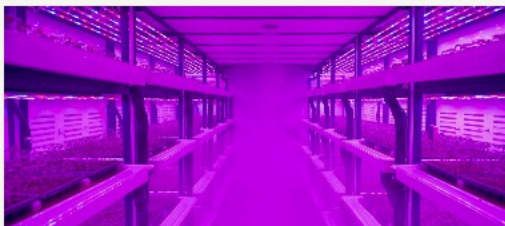
Seedling growth



Tray preparation



Grafting operations



Healing chambers



Controlled recovery



Nutrient solution



Finished seedling trays

# Inside the Graft Chambers

Integrated systems for each tier of the grafted-seedling production chambers

## LIGHT & CLIMATE

Tailored LED spectrum and intensity;  
per-tier airflow; ultrasonic  
humidification; refrigeration cooling.

## IRRIGATION & NUTRIENTS

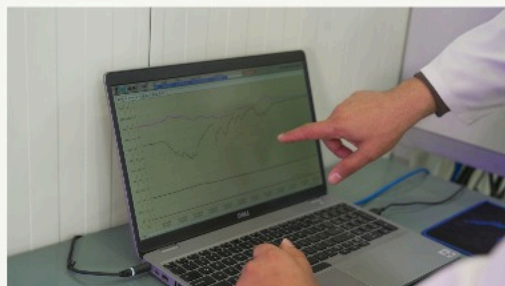
Custom bottom-irrigation basins;  
precision weighing to guide timing;  
nutrient recirculation piping; UV  
disinfection.

## MONITORING & CONTROL

Precision climate sensors; PLC with  
dedicated software; electrical control  
panels.



Temperature check



Climate data



Sensor and irrigation tray



Sub-irrigation detail



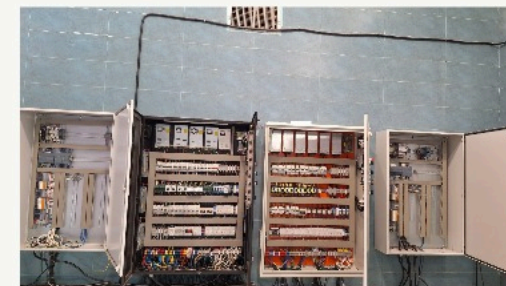
Temperature / RH reference



Light measurement



Seedling inspection



Electrical control panels



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## Let's grow together

Grafted seedling production · Plant-factory and chamber design  
· Turnkey implementation · Training and technical collaboration

### CONTACT

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FPA / GRAFTED SEEDLING PLANT FACTORY