



# THE 貨櫃植物農場 CONTAINER PLANT FARM

- 365 Days**  
No Weather Impact
- 300kg up**  
Ultra-High Productivity
- LOW**  
Labor Requirement
- Harvest in 15-20 Days**
- 95%**  
Water Savings
- 6.6 kw/Day**  
Maximum Energy Efficiency
- Pest-Free & Pesticide-Free**  
Completely pest free growing system

The Container Plant Farm is founded on the principles of non-toxic cultivation, high yield, and eco-friendly agriculture. It integrates expertise from multiple fields, including phytology, plant pathology, entomology (pest management), fluid mechanics, optical physics, organic and inorganic nutrient solution management, and IoT environmental monitoring.

Through extensive research, testing, and big-data analysis, the team successfully developed a new agricultural model that is truly non-toxic, healthy, water-saving, energy-efficient, highly productive per unit area, and unaffected by weather conditions.

This innovation has earned multiple invention and utility model patents across China, Taiwan, Thailand, Korea, Japan, Singapore, Malaysia, Indonesia, and the United Arab Emirates.

貨櫃植物農場以無毒、高產、友善農業為宗旨，整合「植生學、植物病理學、昆蟲(蟲害管理)學、流體力學、物理光學、有機無機養液應用管理、IoT物聯網監控」等多領域，經團隊研究、測試及大資料分析，成功創新研發設計真無毒、健康、省水節能、高單位面積產能並且不受天候影響的新型農業模式。

榮獲中國、臺灣、泰國、韓國、日本、新加坡、馬來西亞、印尼、阿拉伯聯合大公國等多項發明與新型專利。

A new benchmark for agricultural transformation.

# CHIIKAE

Specializing in thermoforming solution

精益求精、永續經營、追求品質、服務客戶

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# THE 貨櫃植物農場 CONTAINER PLANT FARM

- 365 Days**  
No Weather Impact
- Harvest in 15-20 Days**
- 300kg up**  
Ultra-High Productivity

CHIIKAE Container Farming introduces a future-ready model for agricultural production. Through high-efficiency systems and versatile cultivation adjustments, crops are maintained at optimal growing conditions at all times.

Combining low cost, premium quality, and high yield, it enables 365-day continuous production—setting a new benchmark for agricultural transformation.

## Product advantages 技術核心



### 垂直循環專利 #空間極大化

運用貨櫃有限的空間，由鏈條垂直上下迴轉的專利設計，空間利用最大化、適應多樣化的植栽生長空間，並提高單位超高產能

Maximizing limited container space with a patented vertical chain circulation system, this design optimizes spatial utilization, accommodates diverse plant growth requirements, and significantly boosts high-density yield per unit area.



### 彈性設計 #高度間距自由調整

可調式栽種槽、成長空間舒適、細根部打結交纏、可依照作物特性彈性調整間距

Adjustable planting trays ensure comfortable growth space, prevent fine root entanglement, and allow flexible spacing based on crop characteristics.



### 多光譜技術 #適應多元作物

靈活切換種植模式，適應多元作物

Flexibly switch cultivation modes to accommodate diverse crops.



### 遠端監控 #即時雲端管理

隨時透過監控系統掌控追蹤貨櫃農場動態

Monitor and track container farm operations in real time through an integrated monitoring system.



### 均勻光照 #作物成長一致

可調式均勻日照系統設計，依作物大小調整高度滿足更多種植物成長需求、種植不受限，確保品質一致

An adjustable, uniform lighting system allows height customization based on crop size, supports a wider range of plant growth needs, and ensures consistent quality.



### 智慧感測 #即時掌控水質

透過感測器即時監測水質狀態，並藉由專利水位自動栽種槽與自動循環抽換技術確保植物處在最佳狀態

Real-time water quality is monitored through sensors, while a patented automatic water-level planting tray and circulation exchange system ensure plants remain in optimal condition.

## Cultivation Method Comparison

### 形式比較

	貨櫃植物農場 The Container Plant Farm	溫室大棚深液流式DFT Deep Flow Technique (DFT)	溫室大棚養液薄膜NFT Nutrient Film Technique (NFT)	傳統植物工廠深液流式 Traditional Soil Cultivation
單位面積產能 Yield per Unit Area	★★★★	★	★	★★
成長速度 Growth Rate	★★	★★	★	★★
用水量 Water Usage	1	4	3	4
肥料用量 Fertilizer Usage	1	4	3	4
溶氧量 Dissolved Oxygen	超高 Very High	中低 Medium-Low	中低 Medium-Low	中 Medium
蔬菜口感 Vegetable Taste	清脆鮮嫩 Fresh and Tender	鮮嫩-不脆、太軟 Tender but Less Firm	鮮嫩-不脆、太軟 Tender but Less Firm	鮮嫩-不脆、太軟 Tender but Less Firm
抗天候能力 Climate Resistance	不受天候影響 Not affected by weather	陰、雨、熱天不利生長 Growth affected by rain, heat, and weather conditions	陰、雨、熱天不利生長 Growth affected by rain, heat, and weather conditions	不受天候影響 Not affected by weather
抗病蟲害 Pest & Disease Resistance	零寄生蟲與病蟲害 Zero pests and diseases	無法達到無蟲與蟲卵 Cannot completely eliminate pests and eggs	無法達到無蟲與蟲卵 Cannot completely eliminate pests and eggs	零寄生蟲與病蟲害 Zero pests and diseases
可量產作物 Crop Variety	中小型作物、草莓等高經濟作物皆可量產 Suitable for small to medium crops with stable production	僅限短期作物 否則易爛根量產困難 Limited to short-term crops; root crop production is difficult	僅限短期作物 否則易爛根量產困難 Limited to short-term crops; root crop production is difficult	僅限短期作物 否則易爛根量產困難 Limited to short-term crops; root crop production is difficult
耕作方式 Farming Method	無需進入 避免細菌感染 No human entry required; avoids bacterial contamination	需進入 有細菌感染之風險 Human entry required; risk of bacterial contamination	需進入 有細菌感染之風險 Human entry required; risk of bacterial contamination	需進入 有細菌感染之風險 Human entry required; risk of bacterial contamination

透過與多種栽培方式的比較分析，充分展現貨櫃式植物農場在經濟效益上的優勢，成為現代化農業量產的最佳解決方案

Through comparative analysis of various cultivation methods, container-based plant farms clearly demonstrate superior economic efficiency, positioning them as the optimal solution for modern agricultural mass production.

## Plant Farm Equipment Overview

### 植物農場設備



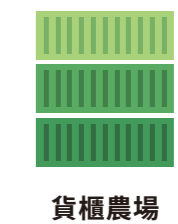
呈現方式:以40呎貨櫃體積呈現  
採收週期:預估15-20天  
耗電量:耗電量6.6kw/天  
耗水量:一期約1噸水  
產能:週期性依照植物種類大小數量而定  
例:以生菜類舉例一期約250-300公斤

Based on a 40-foot container unit  
• No land restriction – connect water and electricity to begin cultivation.  
• Harvest cycle: 15-20 days (depending on crop).  
• Power consumption: 6.6 kW/day.  
• Water usage: approx. 1 ton per cycle.  
• Production capacity varies by crop size and type.  
Example: Lettuce yields approx. 250-300 kg per cycle.

### 產地直送 縮短供應鏈

收穫的作物將直接透過貨櫃農場產地直送，讓新鮮農作在最佳狀態前往指定通路，保持新鮮度的同時縮短供應鏈，並降低碳足跡與物流耗損

Harvested crops are delivered directly from container farms to designated channels, ensuring optimal freshness upon arrival. This approach preserves quality while shortening the supply chain, reducing carbon footprint, and minimizing logistics losses.



貨櫃農場

餐廳/超市