ISS Veggie Plant Growth System (Vegetable Production System)  
  
[Veggie Plant Growth System Activated on International Space Station - NASA](https://www.nasa.gov/missions/station/veggie-plant-growth-system-activated-on-international-space-station/?utm_source=chatgpt.com)  
Veggie Plant Growth System Activated on International Space Station — Description of the system's operation and the plants grown within the station.  
  
[Vegetable Production System - ISS National Lab](https://issnationallab.org/facilities/vegetable-production-system/)  
Vegetable Production System – ISS National Lab — System details, components, how it is managed, and objectives.  
  
[ntrs.nasa.gov/api/citations/20110011606/downloads/20110011606.pdf](https://ntrs.nasa.gov/api/citations/20110011606/downloads/20110011606.pdf)  
Concept for Sustained Plant Production on ISS Using VEGGIE (PDF) — A technical paper explaining the design and engineering principles of the Veggie system.  
  
[Veggie Will Expand Fresh Food Production on Space Station](https://www.youtube.com/watch?v=MRcmQO69DMg)  
Video: Veggie Will Expand Fresh Food Production on Space Station — A video demonstrating the system and how the plant grows.   
  
summary :  
The **Veggie** (Vegetable Production System) is a plant growth facility on ISS used to grow fresh vegetables (e.g. lettuce) under microgravity. It uses “plant pillows” containing seeds and nutrients, and provides water and light within a module mounted in an EXPRESS rack.   
Key features:

* LED lighting systems to supply appropriate wavelengths for plant growth.
* Nutrient delivery via systems like **PONDS** (Passive Nutrient Delivery System), which uses wicking between a nutrient reservoir and growth medium.
* Objectives include food production, scientific study of plant responses in microgravity, and providing psychological & nutritional benefits to the crew.