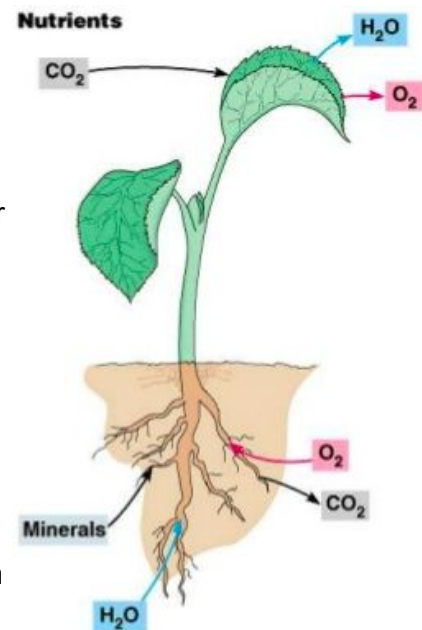


Technical intro to the Nextfood controlled environment farming solution

A plant is pre-programmed in its' DNA to react to influence from its environment in specific ways. Knowledge about how the plant reacts to its environment can be used to influence the plant to grow in specific ways and the plant can be measured to understand how it develops, and the environment can be adjusted accordingly. We use computer algorithms to automatically regulate the environment and the plants' development based on continuous sensor input. The goal is typically high yield, high nutritive value, certain taste, short production time etc. Control parameters include nutrients, CO₂, temperature, humidity, water, light wavelengths etc.



At this stage we are measuring and experimenting with

- temperature, humidity, PAR and light wavelengths in the canopy
- pH, EC, water temperature in the root zone
- tracking leaf size and NIR response on the plant itself

We are working at adding additional relevant measures.

The Nextfood controlled environment farming system consists of 1) a soilless farming technology stack based on aeroponics and LED light, 2) a sensor and actuator platform, 3) a cloud-based computer intelligence that controls the system and plant growth, and 4) a mobile app for user interaction.

The Cloud AI executes recipes that control how that plant develops and continuously evaluates sensory input to ensure everything develops as planned. If something develops unexpectedly the Cloud AI takes action accordingly.

