

## **Nemo's Garden June 2023 Update:**

We're thrilled to announce that all 9 biospheres are fully operational, nurturing a total of 786 plants in various growth stages. Our extensive range includes intensive production of thyme, lemon balm, woolly mint, basil, and verbena. Additionally, we're conducting limited sample productions featuring tobacco, aloe, dill, coriander, edible flowers, okra, and dragon tongue.

To ensure optimal conditions, we're experimenting with two separate environmental analysis systems in Biosphere #3. We closely monitor air temperature, humidity, circulating water temperature, oxygen levels, CO<sub>2</sub>, and lux levels for precise control.

Our hydroponic systems employ water film technology, specifically the NFT system in 7 out of 9 biospheres, while Biospheres #3 and #6 embrace the immersive floating system.

Each biosphere is equipped with WiFi, HD color cameras, efficient lighting, and a closed air circulation system, fostering an ideal environment for plant growth.

Exciting developments are on the horizon as we plan to install a new DDC system (Desalination, Dehumidification, Condensation) to produce irrigation water sustainably.

Next Friday, we commence the procedure to obtain GlobalGap certification, showcasing our commitment to quality production standards.

As part of our ongoing research, we've installed an artificial barrier comprising 36 perforated plates, weighing a total of 1800 kg. This barrier, measuring 6 meters in length, 1.2 meters in height, and 1.2 meters in width, enables us to study water currents and flows induced by wave motion.

From July 15th to 31st, we'll install a water velocity detection system near the submerged barrier, exploring the possibility of harnessing environmental energy to achieve complete energy autonomy for our pilot project.

For sustainability, 4 operational solar panels are utilized to power the system's functionality.

Join us on this innovative journey as we push the boundaries of underwater agriculture and transform the way we grow food sustainably.