

Our water-saving mist cultivation system grows lettuce with 70% less water

- Crops can be grown with 70% less water than hydroponic system.
- Fertilizer requirement can be lowered.
- Low environmental impact

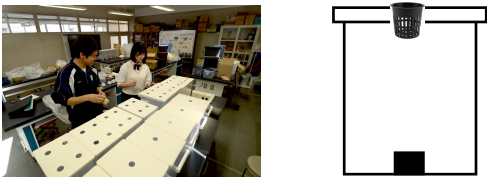


1 Material preparation



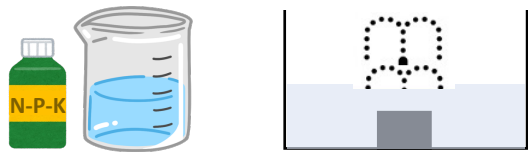
Airtight containers with a depth of around 40cm are recommended. The best way to generate mist is to use an ultrasonic generator.

2 Equipment manufacture



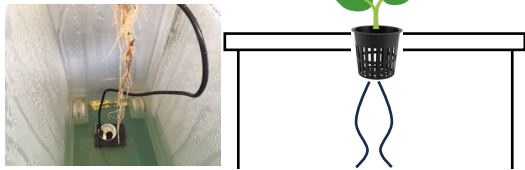
Drill holes in the lid of container and attach a planting basket. Place the mist generator on the bottom.

3 Nutrient solution



Dilute liquid fertilizer to a concentration suitable for hydroponic cultivation. Pour the solution up to about 2 cm above the mist generator.

4 Planting



Plant vegetable about 10cm in size in baskets. Before planting, wash out the soil thoroughly.

5 Water supply management



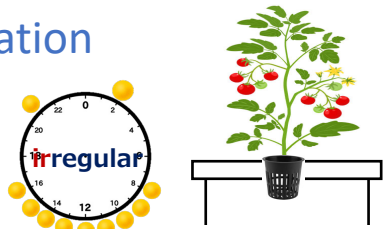
A timer is used to spray nutrient solutions with the determined frequency. The standards are 48 times a day for lettuce and 24 times for kidney beans.

6 Control



Regularly check plant conditions and the level of nutrient solutions (replenish if insufficient).

7 Application



Tomatoes are sweeter when they are sprayed irregularly, more often during the day and less during the night. Let's give it a try.

8 Tips for success



A week after planting, especially when temperature is high, increase spray frequency to prevent wilting.

Contact Info: Flora Hunters

Aomori Prefectural Nakui Agricultural High School, Aomori, Japan

Email: florahunters.aqua@gmail.com