

Water circulation in plant cultivation system of the Closed Ecology Experiment Facilities

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It is necessary to apply a nutrient solution circulation system to a plant-based food production system to establish water circulation in the Closed Ecology Experiment Facilities (CEEF). To obtain precise data on carbon transfer using the CEEF, it is necessary to establish a steady food production system based on plant cultivation. The objective of this study is to apply a modified circulation system of nutrient solution to plant cultivation. So, this study compared plant production of soybean using circulation system with plant production of it using non-circulation system. Result of this study showed that circulation of nutrient solution does not decrease soybean production compared to that by cultivation without circulation of a nutrient solution.