Study on the Effect of Application of Liquid Fertilizer with Beneficial Soil-microbe for the Growth of Leafy Lettuce

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Abstract

In the study, nitrogen, phosphorus, potassium content of nitrogen microbe liquid fertilizer and phosphorus and potassium microbe liquid fertilizer were 0.58、0.14、0.58% and 0.3、0.23、1.36%, respectively. The plant nutrient element analysis datas showed the leaf nitrogen content of plant grown with nitrogen microbe liquid fertilizer was the highest, and leaf phosphorus content of plant grown with phosphorus and potassium microbe liquid fertilizer was the highest among the treatments. The fresh weight of lettuce (*Lactuca sativa*, green coral) plant grown with nitrogen microbe liquid fertilizer was the highest and grown with the commercial liquid fertilizer was the lowest at 4 weeks after planting. The fresh weight (*Lactuca sativa*, chui-mei) plant grown with phosphorus and potassium microbe liquid fertilizer was the highest and the plant grown with commercial liquid fertilizer was the lowest. The plant culture experiment result showed microbe liquid fertilizer was helpful to the growth of plant growth, but it's effect was different between different varieties. At last, it is need to study the effect on other plant in the future.

Keywords: Beneficial soil microbes, Microbe liquid fertilizer, Nutrient element

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