

Application of Moso Bamboo Vinegar on the Cultivation of Cabbage (*Brassica rapa* L. *Chinensis* Group cv. Feng-Shan Pak-Choi)

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Summary

Bamboo vinegar was produced by three to five years old moso bamboo (*Phyllostachys pubescens*) from Jwu-Shan, the charcoalization temperatures each were 400°C , 600°C , and 800°C and the collected sample A, B, C were from 150°C which at least over six months stable sinking and distillation methods and the commercial product D, were prepared to analyze its valid components including the pH value , electric conductivity , and the element contents of phosphorus , potassium , calcium , and magnesium etc. in this experiment. The original vinegar which diluted with distilled water in the concentration of 100 , 300 , and 500 times were each foliar spray and direct irrigation treated in field and the commercial culture medium to investigate the effect of moso bamboo vinegar on pak-choi plant (*Brassica rapa* L. *Chinensis* Group cv. Feng-Shan Pak-Choi). Foliar spray test by bamboo vinegar solution diluted with distilled water 100 times in four seasons showed that vinegar A and B promoted plant weight of pak-choi each to 2.6 and 4 times increasing in summer period, each 1.68 and 1.61 times increasing in autumn and each 1.48 and 1.40 times increasing in winter, and then each 1.49 and 1.45 times increasing in spring period separately.

Key words: Moso bamboo vinegar , Feng-Shan Pak-Choi (*Brassica rapa* L. *Chinensis* Group cv. Feng-Shan Pak-Choi) , Charcoalization

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