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Effect of different fertilization on spring cabbage (*Brassica oleracea L. var. capitata*) production and fertilizer use efficiencies

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ABSTRACT

Just after transplanting, the vegetable has difficulty in nutrients uptake. To explore the effect of different fertilization on spring cabbage (*Brassica oleracea L. var. capitata*) production and fertilizer use efficiencies, this experiment consisting of six treatments was implemented and divided into three groups: 1) no fertilizer (NF) and vegetable planting fertilizer (VPF); 2) conventional fertilizer (CF) and conventional fertilizer + vegetable planting fertilizer (CVPF); 3) reduced fertilizer application (RFA) and reduced fertilizer application + vegetable planting fertilizer (RVPF). The results of this experiment indicated that the yields of spring cabbage treated by VPF increased by 38.20% in VPF, 16.00% in CVPF and 20.40% in RVPF than their controls respectively. Additionally, the VPF helped improve the total and economic yields of the spring cabbage in all groups, and the economic benefits increased by 38.21% in VPF, 15.97% in CVPF and 20.42% in RVPF than their controls respectively. Finally, the VPF was of benefit to spring cabbage to exploit the soil nutrients and helped improve the chemical fertilizer use efficiencies. Therefore, it is an efficient, economical and ecological fertilization for vegetable production to apply chemical fertilizers in combination with VPF.

KEYWORDS

Spring Cabbage; Fertilizer Use Efficiency

Cite this paper

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