

Effect of calcium and silicon fertilizers on quality change of sweet pepper during storage¹

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summary

The objectives of the experiments were to investigate the effects of calcium and silicon pretreatments on post- harvest physiology of sweet pepper. Treatments of calcium and silicon fertilizers increased the concentration calcium and phosphate in fruits. Calcium at the rate 2,3,4 kg/plot and silicon 2,4 kg/plot enhanced firmness and thickness of fruits. Fertilizer treatments also reduced chilling injury and cold sensitivity of fruits. Treatments of calcium and silicon fertilizers lowered the respiration rate and ethylene production , however, treatments of calcium and 2kg silicon improved fruits quality such as firmness, thickness and electrical conductivity.

(Key words: Sweet pepper, Fertilizer treatment, Calcium, Silicon, Chilling injury, Ripening)

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