

Title Effect of preharvest calcium application on grey mould development and postharvest quality in strawberries

Authors M. Naradisorn, A. Klieber, M. Sedgley, E. Scott, A.J. Able

Citation ISHS Acta Horticulturae 708: 147-150. 2006.

Keywords *Fragaria* × *ananassa*; *Botrytis cinerea*; storage life; calcium sulphate

Abstract:

Strawberries (*Fragaria x ananassa* Duchesne) cv. 'Aromas' were grown in sand to which calcium sulphate was applied through a fertigation system at rates of 400, 1200 and 2000 ppm Ca. Plants were inoculated at flowering by dropping 100 µl of conidial suspension of *Botrytis cinerea* (10^6 conidia/ml) on each newly opened flower with a micropipette. Controls were untreated. There were no significant differences in the external appearance, pH, soluble solids content and titratable acidity of fruit of 'Aromas' among the various Ca concentrations; however, fruit was significantly firmer for plants that received 2000 ppm Ca than for those that received 400 ppm Ca. In preliminary studies of the effects of preharvest Ca application on storage life, fruit from plants that received 400, 1200 and 2000 ppm Ca remained firm for more than 10 days at 10°C and 90±5% relative humidity and showed no signs of grey mould.