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"Gheorghe Asachi" Technical University of Iasi, Romania

FRUIT QUALITY RESPONSE OF STRAWBERRY CV 'ANTILLA' AFTER APPLICATION OF CALCIUM

Pedro Palencia[1*], Maribela Pestana[2], Teresa Saavedra[2], Florinda Gama[3,4], Pedro José Correia[2]

[1]University of Oviedo, C/ Gonzalo Gutiérrez Quirós s/n., 33600, Mieres (Asturias) (UNIOVI), España.
[2]MED-Instituto Mediterrâneo para a Agricultura, Ambiente e Desenvolvimento & CHANGE–Instituto para as Alterações Globais e Sustentabilidade, Universidade do Algarve, Faculdade de Ciências e Tecnologia, Edifício 8, Campus de Gambelas, 8005-139 Faro, Portugal
[3]GreenCoLab - Associação Oceano Verde, Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Portugal
[4]CCMAR, Centro de Ciências do Mar, Universidade do Algarve, 8005-139 Faro, Portugal

Abstract

As an important economically and nutritionally valuable fruit, strawberry has been planted everywhere worldwide, which, due to the shortage of arable land, has created an obstacle to successional farming. The study investigates the effect of calcium application in strawberry fruit quality, including fruit firmness and Brix. Strawberries (*Fragaria* × *ananassa* Duch. 'Antilla') grown in a soilless system in a greenhouse were exposed to different calcium (Ca) concentrations and application interval during the production cycle of strawberry plants added as $Ca(NO_3)_2$. The control only has the Ca contained in the irrigation water. The S treatment added Ca to the substrate, FS and FQ treatments added Ca by foliar spray weekly or biweekly, respectively. Fruit fresh weight, firmness, pH, titratable acidity and ºBrix value were studied. Compared to other treatments, softer fruits were obtained in the control group. The reduction of fruit firmness in the control treatment coincides with a lower average pH, which can cause fruit softening and damage during storage. In addition, pH plays an important role in strawberry flavour. Foliar application of Ca showed strawberries with higher firmness, irrespective of the application interval weekly or biweekly.

Key words: foliar application, *Fragaria* x *ananassa* Duch., irrigation water, pH, firmness, yield;

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[*] Author to whom all correspondence should be addressed: e-mail: palencia@uniovi.es