

Yield and Fruit Quality of “Valencia Late” Orange in Response to Organic Fertilization

Intrigliolo, F.¹, Giuffrida, A.², Rapisarda, P.³, Roccuzzo, G.⁴, Torrisi, B.⁵, Tittarelli, F.⁶, & Canali, S.⁷

Keywords: citrus, plant nutrition, leaf analysis

Abstract

Results of the last five years of a field trial on the effects of different fertilization strategies in an organically grown citrus orchard are presented. In a factorial experimental design, the effects on leaf nutrient content, yield, and fruit quality of 4 fertilizer treatments and 2 nitrogen input levels were compared.

The application of a compost produced utilizing citrus industry by-products increased leaf content of P, K and Fe, Zn, Mn. Moreover, the improvement of ripening ratio and vitamin C content was noticed. The reduction in nutrient input caused a significant reduction in yield, without significant effects on leaf nutrient content and fruit quality parameters.

¹ Centro di Ricerca per l'Agricoltura e le Colture Mediterranee, CRA (CRA-ACM), corso Savoia 190, 95024 Acireale, Italy, e-mail: francesco.intrigliolo@entecra.it, Internet: www.agricoltura.it

² As above

³ As above

⁴ As above

⁵ As above

⁶ Centro di ricerca per lo studio delle relazioni tra Pianta e Suolo, CRA (CRA-RPS), via della Navicella 2, 00184 Roma, Italy, e-mail: fabio.tittarelli@entecra.it, Internet: www.isnp.it

⁷ As above