

Poster



Effects of changes in the fertigation on the quality of strawberry (*Fragaria x ananassa* Duch.) fruits and possible effect on the mortality of plants

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Keywords: Strawberry, fertirrigation, quality, yield, plant mortality

ABSTRACT

Motivation: Strawberry fruits are considered as healthy fruits. In fruit production, the major emphasis is being given to improve the quality of product along with higher production (Pandey et al., 2015). The strawberry (*Fragaria x ananassa* Duch.) is considered to be a crop that is very sensitive to salinity (Barroso et al., 1997). Furthermore, when strawberry crop is under salinity stress, an increase in fruit quality, mainly sugar and phenolic compounds, is observed (Medrano et al., 2012). Strawberry has low tolerance to high concentrations of chlorine and sodium, which produce burns in the marginal area of the leaves. Generally, salinity reduces both, fruit size and yield. In this sense strawberry balanced fertilisation is essential for high quality and production (Aguado et al., 2017). This work aimed to distinguish if changes of conductivity in the fertirrigation affect the quality of the strawberry (mainly brix degrees), yield and plant mortality.

Methods and results: A field trial was conducted on a strawberry production field located in Moguer (Huelva). Two strawberry cultivars ('Primoris' and 'Florida-Fortuna') and eight fertirrigation treatments were applied in a split-plot design. Irrigation water samples were monthly analysed, from February to May, fruit samples were taken and quality parameters were measured. Accumulated yield and percentage of plant mortality were registered.

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