学　位　論　文　要　旨					
学位論文等提出者	専 攻	生物生産環境		領 域	環境生態科学
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学位論文等題目	Interactions of salinity stress and fruit thinning on tomato growth, fruit quality and water use efficiency under hydroponics system				
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The effects of fruit thinning and salinity stress on tomato growth, fruit quality and water use efficiency were investigated in hydroponic cultivation of tomatoes. Tomato 'momotaro' were grown under three EC levels: 0.8, 3 and 4.5 dS m^{-1}, each level with a practice of fruit thinning to three per truss and no fruit thinning. The result shows that both fruit thinning and salinity stress increased tomato fruit quality by increasing sugar content, acidity content and taste, but salinity stress showed a stronger effect. Fruit number, fruit set, biomass, shoot dry weight, total yield, marketable yield and water use efficiency all decreased under salinity stress. Fruit thinning decreased total yield and marketable yield but increased water use efficiency for biomass. Fruit cracking ratio was decreased under salinity stress, but it was increased with fruit thinning under EC of 0.8 dS m^{-1} and 3 dS m^{-1}. Interactive effects between EC and fruit thinning was found for tomato plant growth, fruit quality and water use efficiency in hydroponics tomatoes.

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