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Organic compounds alterations in coriander plants submitted to salinity

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Coriander (*Coriandrum sativum* L.) is widely distributed and mainly cultivated for the seeds because his popular spice in the world, mainly in Europe and Asia. In coriander seeds and leaves are related antioxidants compounds and oils more used in cosmetics and medicaments. In this study, two cultivates of coriander plants (Tabocas and Verdão) were submitted to salinity (0, 50 and 100 mmol.m^{-3} NaCl) with aim evaluates your biochemistry responses to this stress based in organic compound content (free proline, total soluble carbohydrates, total phenols, soluble proteins, sucrose and reduce sugars). Data obtained were statistically evaluated using the ASSISTAT program. Organic compounds concentrations increased with the salinity elevation in nutritive solution. Free proline, soluble protein, total phenols, total soluble carbohydrates and reduce sugars were increased comparing the 100 mmol.m^{-3} NaCl of salt treatment in nutritive solution to control of the both cultivates ($P>0.05$). 50 mmol.m^{-3} NaCl saline treatment was sufficient to elevate the sucrose level in 23% for cv. Tabocas while in cv. Verdão this parameter was elevate in 13%. Comparing the salt treatments (50 and 100 mmol.m^{-3} NaCl) only protein soluble did not exhibit significant differences in both cultivates Tabocas and Verdão in comparison to control. In general, salt stress caused negative effects in both cultivates, however the cv. Verdão it was the better grew in the salinity conditions imposed.

Keywords: solutes compatibles, *Coriandrum sativum* L., salt stress

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