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PROMOÇÃO:



Partitioning of K⁺ in young *Jatropha curcas*L. plants under salinity

Cicera Raquel Fernandes Rodrigues¹, **Rachel Hellen Viera de Sousa¹**, Antônia Tathiana Batista Dutra¹, Cristina Silva de Lima¹, Ricardo Almeida Viégas², Joaquim Albenísio Gomes Silveira¹

¹Department of Biochemistry and Molecular Biology UFC, Campus do Pici, Bloco 907, Fortaleza, CE, Brazil, phone (85) 3366-9821, e-mail: rachel_hvs@hotmail.com ²University Federal de Campina Grande, Department of Forest Engineering of UFPB, CP 64, CEP 58700-970, Patos, Paraíba, Brazil.

High soil salinity can be associated with K⁺ deficiency enabling interactive stresses on plant nutrition that impairs crop production. Many studies report that ability to maintain a good K⁺ nutritional status in plant tissue is essential to salt resistance. In order to characterize some mechanisms involved with the partitioning of K⁺ and Na⁺ ions in plants exposed to salinity, experiments using *Jatropha curcas* L. seedlings as a model was realized. After germination, seedlings were transferred to pots and received 2 L of nutrient solution. Twenty two–days-old plants were separated into four treatments: Na₁K₀ (NaCl 50 mM/KCl 0 mM), Na₁K₁ (NaCl 50 mM/KCl 10 mM), Na₀K₀ (in absence of NaCl and KCl) and Na₀K₁=control (NaCl 0 mM/KCl 10 mM), in a randomized design. The plants remained for 8 days in each treatment. The Na₁K₀ induced greater accumulation of Na⁺ in leaves and petioles when compared to Na₁K₁ plants where as the potassium concentration in leaves and petioles was increased by treatments without NaCl. Conversely, the presence of Na⁺ contributed for reduction in K⁺ content in all studied tissues, especially in the leaves. In conclusion, an adequate K⁺ supply in the external medium is able to contribute for a lower Na⁺ accumulation and uptake in physics nuts tissues, contributing for reduction in the salt toxicity.

Keywords: *Jatropha curcas*L., salinity stress, effects of sodium, effects of potassium

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