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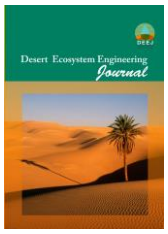

Effects of priming and sodium chloride on the germination and seedling growth of *Zygophyllum atriplicoides*

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Abstract

Seed priming is a common way to increase the speed and uniformity of germination under Under stress and non-stress conditions. The aim of this study was to investigate the effects of different levels of gibberellic , salicylic and ascorbic acid on improvement of germination indices of *Zygophyllum atriplicoides* under salt stress in laboratory Chemical stimulators used in this study include: 3 levels of gibberellic acid (125, 250 and 500 ppm), 3 levels of salicylic acid (100, 200 and 300 mg/l), 3 levels of salicylic acid (100, 200 and 300 mg/l) and 5 levels of salinity treatment (0, 0.2, 0.4, 0.8, 1.2, 1.6 m/l). Factorial test in the completely randomized design with four treatments was used to analyse data. Results indicated that salt strees had inhibitive effect on germination and early seedling growth of *Zygophyllum atriplicoides*. Early seedling growth of Z. atriplicoides increased by pretreatment of seeds in chemical stimulators. Also tested the interaction of treatment showed that salinity levels and the greatest impact on increasing concentrations of gibberellic acid ppm250 germination characteristics of this plant. It can be concluded that seed priming seeds by gibberellic acid can cause resistance to the stage germination *Z. atriplicoides* salinity prone areas.

Keywords: *Zygophyllum atriplicoides*, priming, germination, salinity, stress.

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