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The effect of different chemical treatments and salt stresson the germination potential of tavernieracuneifolia (roth) ali seeds

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Abstract

Tavernieracuneifoliais an ethnobotanically important traditional medicinal plant of Semi-Arid region of India belonging to the family of Fabaceae. As the plant is ecologically identified as glycophyte the seeds were treated with various salts. Effect of various salts (KCl, MgCl2, NaCl, Na2CO3, MgSO4,) on the germination of T. cuneifolia seed was studied. Germination decreased with increase in salinity. The inhibition of germination by salt solution was in the order of NaCl> MgCl2> MgSO4>KCl. Non-germinated seeds under various salt treatments when transferred to distilled water recovered completely, indicating little ionic effect of salinity on seed germination and viability. Germination rate was highest in those seeds which were treated with concentrated sulphuric acid with the germination percentage to be 80

Keywords: Tavernieracuneifoliais; ethnobotanically; Fabaceae; glycophyte; cuneifolia; NaCl ; sulphuric