SALT TOLERANCE IN GERMPLASM LINES OF BERSEEM (*TRIFOLIUM ALEXANDRIUM* L.)

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Abstract: A field investigation was conducted in *Rabi* crop season 2001-02 at Main Experiment Station of Narendra Deva University of Agriculture and Technology, Kumarganj, Faizabad. The soil of the experiment was sodic having pH 8.9 and 10.6, exchangeable sodium percentage 42.5 and 86.5 and silt loam in texture. Forty nine germplasm lines were sown at two sodicity levels viz pH 8.9 and 10.6 in the month of October. Each line was in 3m row length and seed was broadcasted in rows replicated thrice. None of the germplasm lines could survive at pH 10.6. At the pH 8.9, all the lines survived ranging between 3 to 60 percent survival. The maximum survival (60%) was found in JHB-98-2-1 and I-90-B_4 germplasm lines followed by 350/28/6-10, JHB-97-2 and 3-90K having 50% survival. The germplasm lines viz Saidi Berseem, 350/28/44-50; 3-90-K, 350/28/53-55 and IL-98-94 were found to be tolerant under salt-affected condition.

Keywords: *Salt tolerance, germplasm, Berseem, Sodicity*

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