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Effect of salinity on seed germination, seedling growth, nodulation and leghaemoglobin content in three cultivators of *Macrotyloma uniflorum* (Lam.)VERDC

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ABSTRACT

The objective of this study was to investigate the effect of sodium chloride on seed germination, seedling growth, nodulation and leghaemoglobin content in three cultivars of *M. uniflorum*. Salinity decreased the percentage of seed germination, root and shoot length, number of nodules, size of nodules, fresh weight of the nodules and also leghaemoglobin content. The highest percentage of germination was obtained at control and at 10mM salt concentration. Germination percentage was of a higher magnitude in cultivar-1 at all the salt concentrations tested. Number and size of the nodules, fresh and dry weight of the nodules was high in non-saline control. Leghaemoglobin content was also high in control plants inoculated with all the five salt tolerant rhizobia.

Key words : Salinity, Salt tolerant rhizobia, Nodulation, Leghaemoglobin

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