#### JNU, NEW DELHI HA\$ UPLOADED THE JOURNAL IN UGC CARE. (RTI) Page 1 | http://www.epitomejournals.com Vol. 9, Issue 2, February 2023, ISSN: 2395-6968



# Epitome : International Journal of Multidisciplinary Research

## CALCIUM CHLORIDE PRIMING RECOVER SEED GERMINATION UNDER SALINITY STRESS BY INCREASING REDUCING SUGAR CONTENT



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#### ABSTRACT

Farmland salinization is a rapidly growing global problem that causes significant agricultural losses. Seeds of Vigna radiata were treated with different concentrations of NaCl (50, 100, 200, 300, 400 and 500 mM),  $CaCl_2 + 200mM$  NaCl and control (distilled water). Seed germination was not affected upto 100 mM NaCl treatment but at 200 mM and above concentrations seeds were unable to germinate. Seed germinated at 100 mM NaCl showed reduction in radical growth. As concentration of NaCl increases reducing sugar decreases in treated seeds compared to control seeds. Seed priming with CaCl<sub>2</sub> increased seed germination up to 86 % and reducing sugar content.

**KEYWORDS**: Vigna radiata, salinity, calcium chloride, seed priming, seed germination, reducing sugars, protein.