CALCIUM INTERACTION WITH $CdCl_2$ INDUCED EFFECTS ON SEEDLING GROWTH AND METABOLISM OF *VIGNA MUNGO* L. AND *SOLANUM MELONGENA* L.

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Abstract: In the present research work surface sterilized seeds of *Vigna mungo.* L. and *Solanum. melongena* L. were raised to analyzed changes in germination, seedling growth, chlorophyll contents, nitrate and nitrite reductase activity under $CdCl_2$, $CaCO_3$ stress singly and in combination 10^{-2} M+200 ppm, 10^{-4} M +100 ppm 10^{-5} M+50 ppm, 10^{-8} M+25 ppm and control were investigated. Observations were recorded at 3, 5, 7, 10, 30, 45 and 60th day of sowing displayed significant decrease in all the attributes of both crop plants on $CdCl_2$ application However, activity of nitrate and nitrite reductase, seedling growth, and chlorophyll contents were enhanced in lower Cd stress 10^{-8} M. Application of $CaCO_3$ shows the more elevations than $CdCl_2$ singly while combined effect of Cd+Ca is more pronounced in comparison to their individual effects.

Keywords: $CaCO_3$, NR activity, Chlorophyll contents**,** *Vigna mungo.* L. and *Solanum. melongena* L.

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