

Abstract

Cadmium, a heavy metal pollutant of growing global concern was investigated for its effect on grain seeds viability using *Vigna unguiculata*. The cowpea seeds were germinated after treatment in solution containing varying concentration of cadmium chloride monohydrate ($\text{CdCl}_2\text{H}_2\text{O}$). The concentrations of cadmium (Cd) in solution used for treatment were 0.00ppm, 0.80ppm, 8.00ppm, 40.00ppm, 100.00ppm and 180.00ppm. The percentage germination at 120 hours germination time and rate of increment in shoot height between 120 and 168 hours were determined. Results shows that the percentage germination and rate of increment in shoot height decreased as cadmium level in the treatment solution increased. There were however no growth at 100 and 120 ppm. The lethal concentration of cadmium for 50% of the viable seeds (LC_{50}) in the treatment solution appears to be at about 40 ppm.

Keyword: Cadmium, cowpea, viability, germination.