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Effect of heavy metals (Ni, Cr, Cd, Pb and Zn) on nitrogen content, chlorophyll, leghaemoglobin and seed yield in chickpea plants in India

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The present research had been conducted to study nitrogen content, chlorophyll, leghaemoglobin and seed yield in chickpea plants. All the plants of chickpea were grown in three pots while were as at and for each treatment, there were 3 replicates were removed 60, 90 and 135 DAS after seeding of chickpea respectively. Chromium was found to be the least phytotoxic and significantly at ($P \leq 0.05$ and 0.01) among all the single metal treatments increased the percentage of nitrogen of root and shoot and chlorophyll, leghaemoglobin and seed yield at all the three concentration among all dose. Among all the combination of metal treatments, Ni⁺, Cr⁺, Cd⁺, Pb⁺, Zn was found to be the most phytotoxic and significantly ($P \leq 0.05$ and 0.01) reduced the percent of nitrogen content, chlorophyll, leghaemoglobin and seed yield in of chickpea. Plant materials were analyzed for different parameters along with the determination of heavy metal accumulation by the collected samples of *Cicer arietinum* L. The data revealed that after 60, 90 and 135 DAS maximum nitrogen content, maximum chlorophyll, leghaemoglobin and seed yield was recorded by chickpea as compare to control.

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