Studies on the Evaluation of the Effect of Dust Pollution on Growth and Yield of Blackgram (*Phaseolus mungo* L.)

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ABSTRACT

Effect of dust (cement, stone crusher, and lime) pollution on black gram (*Phaseolus mungo* L.) was studied by comparing plants of polluted as well as from non-polluted (control). Cement dust accumulation on crop canopy of the plant, mainly affected the growth parameters *i.e.* decrease in plant height, number of branches per plant and number of leaves (@ 150 g m⁻² leads to 18.45, 33.72 and 31.10 per cent decreased when compared to control respectively), number of pods per plant, number of seeds per pod, 100 seed weight, seed yield ha⁻¹, harvest index (57.12, 33.33, 16.48, 76.09 and 68.42 per cent respectively), dry matter (leaves and stem) and total dry matter. Lesser values of CGR and RGR was recorded with cement dust @ 150 g m⁻² during 60-75 DAS (harvesting) *i.e.*, 2.76 and 1.18 folds lower than the control. The yield components and yield of blackgram were siginificanty decreased with cement dust followed by stone crusher and lime dusts.

Key words: Black gram (*Phaseolus mungo* L.), Cement, Lime dust, Stone crusher.