

Effect of 24-epibrassinolide on the morphological and biochemical constitutions in uv-b (285-325nm) radiation stressed *Vigna mungo* (l.) Seedlings

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The effect of UV-B enhanced radiation and 24-Epibrassinolide (eBR) treatments on the vegetative growth, photosynthetic and non-photosynthetic pigment composition, anti-oxidative enzyme activity and biochemical constituents was studied in the seedlings of *Vigna mungo* (L.). The 10 and 15 days old seedlings treated with 24-Epibrassinolide and further exposed to $4.5 \text{ kJ.m}^{-2}.\text{d}^{-1}$ of UV-B (285-325nm) radiation. The eBR sprayed (control) *Vigna* seedlings were healthy and showed an increase in morphological parameters like plant height, leaf area and fresh mass. In the case UV-B irradiated seedlings, a 10-15% decrease in all parameters were noticed. Pretreatment with eBR was found to impose tolerance to UV-B stress as evident from morphological and biochemical changes. Thus, a UV-B tolerance mechanism was found to exist in seedlings which have received a foliar spray of eBR.

KEY WORDS:

UV-B Radiation stress, Morphological- biochemical changes, seedlings, *Vigna mungo*.