

Effect of cyanobacterial extract on growth and some enzymatic activities of *Sorghum durra* and *Helianthus annus* seedling

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Application of cyanobacteria as biofertilizer has a beneficial effect on crop growth and productivity. The extracts of three cyanobacterial isolates (*Anabaena oryzae*, *Nostoc ellipsosporum* & *Synechococcus* sp.) were used to investigate their effect on the percent of seed germination and the seedling growth criteria of two crop plants (*Sorghum durra* and *Helianthus annus*). The application of various concentrations of the cyanobacterial extracts induced a highly significant stimulatory effect on the percentage of seed germination as well as seedling growth parameters of the tested plants. A clear enhancement in the activity of some antioxidant enzymes was recorded. The growth enhancement of the pretreated seeds was attributed to the presence of auxin and gibberellin in cyanobacterial extract.