EFFECT OF WASTE WATER IRRIGATION ON GROWTH, PHYSIOLOGY, AND YIELD OF MUSTARD

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ABSTRACT

In recent years water shortage and environmental hazards of wastewater have promoted the development of wastewater reuse in irrigation .An experiment was conducted at the Net house of Aligarh Muslim university to evaluate the effect of city wastewater with inorganic fertilizers on Photosynthetic rate, total chlorophyll content, carotenoids ,yield and yield components of *Brassica juncea* .wastewater under three different levels of nitrogen N_0,N_{80} and $N_{120kgha}^{-1}$ with a basal dose of phosphorus 20kgha^{-1} and potassium20kgha^{-1} was applied to the crop with ground water as control.Results indicated that wastewater application not onlyincreased leaf number, leaf area, plant dry matter, photosynthetic rate, total chlorophyll content ,1000 seed weight and seed yield by giving significantly higher values than ground water, but also saved the extra dose of fertilizers, thus serving the twin objectives of saving fresh water as well as saving the extra dose of fertilizers.

KEYWORDS: Wastewater, Mustard, Inorganic Fertilizers, Photosynthesis, Yield