

## RESPONSE OF MAIZE AND WHEAT CROPS TO FERTILIZERS IN AN ERODED SOIL

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### ABSTRACT

*A pot experiment was conducted to observe the response of maize and wheat crops to inorganic fertilizers and organic manure application on an eroded soil. Four treatments (Control, N P, FYM, and N P + FYM) were applied. Maize and wheat crops were sown during kharif 1997 and rabi 1997-98 respectively. The soils which did not receive farm yard manure (FYM), delayed germination, decreased crop growth due to poor soil physical conditions but later inorganic fertilizer application performed slightly better than the organic manure alone. Maximum increase in plant growth parameters, was also recorded in pots receiving both organic and inorganic fertilizers in case of both crops e.g. in NP+ FYM treatment, the wheat yield was 4408.3 kg ha<sup>-1</sup> as compared to 3350.0 kg ha<sup>-1</sup> for control. Incorporation of FYM alone and along with chemical fertilizers also improved the physical characteristics of eroded soil besides increasing organic matter and nutrient contents.*