

MICRONUTRIENT STUDIES ON THE GRAIN AND STALK YIELD OF CORN AT RAWAT (RAWALPINDI DISTRICT)

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ABSTRACT

Field site was selected near Rawat (Rawalpindi District) for conducting micronutrient trial on maize with 9 treatments and 3 replications during kharif 1983. The treatments were (1) control (2) NPK (3) NPK + Micronutrients (B,Cu,Fe,Mn,Mo,Zn), (4) No. 3 minus B, (5) No.3 minus Cu, (6) No.3 minus Fe, (7) No.3 minus Mn, (8) No.3 minus Mo and (9) No.3 minus Zn. The crop (variety; changez) was grown under barani conditions. Grain yield was increased by 3 and 3.5 times with the application of NPK (2.05 tons/ha) and NPK + Micronutrients (2.33 tons/ha) respectively over control (0.66 tons/ha). Reduction in the yield was noticed when any of the micronutrient was not added except Mo, where a further increase of 14.59% was recorded over treatment No.3 (2.33 tons/ha). Reduction observed without the application of other micronutrients was in the order of 16.67, 11.19, 7.16 and 8.12% for B,Cu,Zn and Mn respectively as compared to treatment 3. No application of Fe had no change in this regard. NPK (T-2) application doubled the stalk yield (10 tons/ha) of corn. Reduction of 11.25 and 8.34% was estimated at T-3, T-5 or T-6 respectively as compared to NPK treatment. An increase of 25% and 8.33% in stalk yield was recorded in T-8, T-7 or T-9 respectively over T-2.

INTRODUCTION

Results of soil and plant samples analyses have revealed that deficiencies of different plant essential micronutrients are encountered in various areas of Pakistan. Intensive cultivation