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WHEAT RESPONSE TO DIFFERENT LEVELS OF PHOSPHORUS AFTER A WELL ESTABLISHED MEDIC-PASTURE AT EL-MARJ-LIBYA

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ABSTRACT

Phosphorus use efficiency by Wheat was evaluated in field experiments for two consecutive years under rainfed condition by supplying different doses of 20% super phosphates (5, 10, 15, and 20 kg/ha). A control treatment was also included in the trial without any phosphorus application. Results of both the years indicated that highest dose (20 kg/ha) of phosphorus significantly out yielded other treatments.

INTRODUCTION

In Libya Wheat ranks first in position next to barley. According to Cimmyt report (1977) the total area sown to wheat was 252,500 ha, out of which only 18500 ha was irrigated and rest of the area 234,000 ha depended on annual precipitation. The average wheat yield local farm under continuous cropping and lower fe . ty was ranging from 600-800 kg/ha while the Australian Farm average yield under c tinuous application of fertilizer and medic/wheat rotation was 1500 kg/ha, (ur y ..phic, 1980).

The application of chemical fertilizer like ther inputs (improved variety, plant protection measures and weed control) has a quired fundamental role in the production requisted of modern agriculture. Speciali sphc s uptake is a continuous process during the life time of crops/plants. Is plays a impo role in crop yield and its quality improvement. It has been reported by Rehman (1984), that the contribution of fertilizers towards increased yield varied from 30 to 47%.

Aston and Khan (1979) reported that pplication of 110 and 134 P_2O_5 kg/ha increased the yield significantly over control after medic-pasture inn high and low fertility areas, while Ohborane (1977), concluded that 125 to 250 kg/ha super phosphate was required to achieve maximum wheat yield when N fertilizer was applied, but only 125 kg war required in its absence in a field received 718-3343 kg/ha super phosphate during a