

FERTILIZER EFFECT ON GROWTH AND YIELD OF CHICKPEA UNDER ARID CONDITION

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ABSTRACT

Chickpea (gram) Varieties (local and CM-72) under four (4) fertility levels at two different locations viz-a-viz farmer's land and AZRSS Farm under rainfed condition during 1987-88 were tested. The soil of the former site (farmer's land) was clay-loam in texture with pH 7.8 and organic matter content of 1.20% while the later site (AZRSS Farm) was loamy clay in texture with pH 8.2 and organic matter content of 0.69%. The performance of both varieties was better at the farmer's field (Rod-Kohi area) than at the AZRSS Farm. The variety CM-72 gave significantly higher grain yield under fertilizer level of 20-50-0 kg/ha. Both N and P increased the yield significantly but response to P application alone was significantly higher than N application alone.

INTRODUCTION

Chickpea or gram (*Cicer arietinum* L.) is one of the important Rabi crops of Pakistan grown mainly under rainfed condition. On the basis of cultivated area under chickpea Pakistan stands second in the world. In Pakistan it is grown on more than 1.01 m ha with an annual production of 4.49 m tons. (Malik and Bashir 1984).

It has been confirmed by many research workers that application of nitrogen alongwith phosphorus incveased chickpea yield significantly even under drought conditions. Shukla (1964) studied the effect of various combinations of nitrogen and phosphorus