

## **YIELD AND YIELD COMPONENTS AS AFFECTED BY ROW SPACING AND IRRIGATION IN CHICKPEA**

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### **ABSTRACT**

The experiment was conducted at two locations, Malakandher Farm of the NWFP, Agricultural University, Peshawar and Agricultural Research Station, Ratta Kulachi, D.I.Khan during the year 1981-82, to study the effect of three row spacings of 30, 35, and 40 cm and three irrigation levels of 0, 2 and 4 on the performance of improved gram varieties RC32 and C727. Presoaking irrigation was applied uniformly to all plots. Number of pods per plant and number of grains per pod increased linearly with increase in row spacing. Seed yield also increased significantly with increase in row spacing. However, row spacing had no significant effect on thousand seed weight. Two irrigations increased pods/plant, grains/pod, seed weight and seed yield increased at the two locations. Variety RC32 was found to be superior to C727 in yield and yield components.

### **INTRODUCTION**

Chickpea or gram (*Cicer arietinum* L.) is the most important winter pulse crop grown in Pakistan. It is a Rabi crop which requires cool weather for its growth and slightly high temperature for seed maturity. It is mostly cultivated under rainfed conditions on light soils.

Pulses (grain legumes) including gram are a major source of proteins both for human beings and animals and for this reason its production has been emphasized considerably. Due to its competition with wheat, it is not feasible to increase area under this crop, however, there is a tremendous scope to increase its per hectare yield with the use of better agronomic techniques.

Although gram is a crop of dry regions yet it can be successfully grown under irrigated conditions if its agronomic requirements are well determined a (1972) recommended 30-35 cm row spacing for Chickpes as optimum row spacing for obtaining good grain yield. Glenn 1970