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EFFECT OF NITROGEN AND PHOSPHORUS LEVELS ON THE YIELD OF CHICKPEA (*Cicer arietinum* L.)

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ABSTRA[illegible]

[illegible]ment in randomized complete block design having five replication with [illegible]ot size of 1.80x5 m was conducted at Faculty of Agriculture, Gomal [illegible]sity, D.I.Khan in the year 1984 to study the effect of nitrogen and [illegible]horus combination levels (0-0, 0-30, 30-0, 30-30, 30-45, 30-60, 40-75, 40-[illegible]nd 50-105 kg NP/ha) on the growth and yield of chickpea variety C.M-72.

[illegible]he nitrogen and phosphorus levels significantly increased average plant height, number of branches and number of pods per plant over control; but dry matter weight, seed weight per plant, number of seeds per pod, 1000-seed weight per plot,dry matter yield and seed yield were non significantly improved by different nitrogen and phosphorus levels. The maximum grains yield 1037.97 kg per hectare was obtained under 30-60 kg NP/ha.

INTRODUCTION

Chickpea (*Cicer arietinum* L.) is an important grain legume grown in Pakistan and accounts for 10 percent of the world's produce (Auckland and Vander Maesen, 1980). It occupies an important place in barani areas and comes next to wheat in Pakistan's agriculture.

Chickpea adds organic matter to the soil by the fall of its leaves. Being rich in protein, it plays remarkable role in the diet of human being and as animal feed. Inspite of all efforts made in the past to increase chickpea production, its per hectare yield is still low. There is need to apply an adequate amount of plant nutrients (NPK) to chickpea because in the early stages nitrogen fixing bacteria depends on the plant for their nutrition and the relation is entirely parasitic. Therefore, shortly after emergence, growth of the [illegible]dling is often slow and the plants have a yellow appearance. Chickpea is usually cultivated [illegible]oil of low fertility level where fertilizer application gives fruitful results and increases the crop yield.