

# ECONOMICS OF PHOSPHOROUS APPLICATION FOR COTTON IN N.W.F.P.

MOHAMMAD BASHIR AHMAD\*, MOHAMMAD YOUNAS\*,  
NAJIB HUSSAIN SHAH\*, AND MOHAMMAD YAQOUB\*\*

Agricultural Research Institute, D.I.Khan,  
Agricultural Research Station, Serai Naurang, Bannu.

## ABSTRACT

An experiment was conducted at Agricultural Research Institute, D.I.Khan for two consecutive years (1986-87-88) in split plot design with three repeats, a net plot size 5x3 m in order to study the economics of 0, 30, 60 and 90 Kg P<sub>2</sub>O<sub>5</sub> application per hectare on the yield of two upland cotton cultivars viz. B-557 and Niab-78. The results showed that both the varieties performed similar in term of seed cotton production. However various phosphorous levels significantly affected the seed cotton yield in the Both years. The maximum seed cotton yield of variety B-557 was obtained 1.230 Kg/ha and 1.608 kg/ha in the year 1986-87 and 1987-88, table-II. the lowest seed cotton yield of 0.771 kg/ha and 0.658 kg/ha from B-557 and 0.995 and 1.040 was obtained from Niab-78 in the year 1986-87 and 1987-88 respective by the controlled treatment.

On the average basis of two years data, the cultivar B-557 produced maximum yield of seed cotton i.e. 1.419 t/ha than Niab-78 which inturn produced 1.346 t/ha when 60 Kg phosphorous was applied.

The Economic analysis of these studies showed Rs. 3.692/- the highest net return from B-557 with the application of 60 Kg P<sub>2</sub>O<sub>5</sub>/ha along with 100 Kg N/ha as basal dose. On the other hand highest net return of Rs. 1.676/- was obtained from Niab-78 variety following the same dose of N and P.

## INTRODUCTION

The supply and availability of nutrients in the soil play a vital role in the production of cotton. Since they are important constituents of chlorophyll and also necessary for growth reproduction and metabolic activities. Soils are especially deficient in phosphorus. Nitrogen application alone usually produce excellent results. However, the efficacy of phosphorous to cotton crop is yet disputed since there exist some controversy regarding its effects on the yield and quality of cotton. Anwar *et al.*, 1985; Khan and Mian 1979; and Mithiwala *et al.*, 1981, concluded that response due to phosphorous in cotton was not well marked. However, the results of other workers including Khan and