VI SUMMARY

Two field experiments were carried out at Seds Agricultural Research Station, Beni - Suef, Agricultural Research Center, during 1977 and 1978 seasons to study the response of two soybean varieties to different rates of P and N fertilizers.

Each experiment included 32 treatments, which were the combination of two soybean varieties and four levels each of P and N fertilizer.

Varieties grown were Clark, an early maturing varriety and Lee a late maturing one.

P levels were 0,20,40 and 60 Kg P_2O_5 / fad. N levels were 0,15,30 and 45 Kg N / fad.

The soil of the experiment was cally loam with a pH value of 8 and 1.7 % organic matter content.

A split split - plot design was used with four replications.

Varieties were distributed in the main plots, P levels in the sub plots and N levels in the sub-sub plots. The sub-sub plot area was $10.5~\text{m}^2$.

Data on growth characters, flowering and maturity date, yield components, yield and chemical contents were recorded. Results could be summarized as followes: