Gomal.Univ.J.Res.
Vol. 7. No. 1&2 pp 5-8 (1987)

Printed in Pakistan

PHOSPHORUS UTILIZATION EFFICIENCY IN WHEAT CROP APPLIED AT VARIOUS STAGES OF ITS GROWTH

MUHAMMAD AYYAZ KHAN
Faculty of Agriculture, Gomal University, D.I.Khan.

MUHAMMAD ALI GILL
Department of Agronomy, University of Agriculture, Faisalabad.

Received 1-2-87.
Accepted 16-2-87.

ABSTRACT

A field experiment was conducted to investigate the utilization efficiency of phosphorus in wheat variety LU 26 at the Agronomic research Area, University of Agriculture, Faisalabad during the year 1977-78. The phosphorus rate of 22.68 kilograms was split into equal subrates for comparison with control. The statistical analysis of the experimental results revealed that application of phosphorus at different growth stages significantly increased the grain yield under sandy loam soil condition.

INTRODUCTION

Wheat is the main food grain crop of Pakistan. The statistics show that the average wheat grain yield per acre in Pakistan is low as compared to the other agricultural countries of the world. The main factors affecting per acre yield are cultivation of improved varieties, judicial application of fertilizers, irrigation and improved agrotechniques. Out of these factors the yield appears to be affected to a greater extent by the fertility status of the soil which, however, can be maintained by supplementing with chemical fertilizer application. It has been observed that due to constant cropping, our soils are gradually running short of natural phosphorus reserves and the required quantities of this element must be added to soils to replenish their fertility status.

Adequate available phosphorus in the soil favours rapid plant growth and development, hastens maturity and improves the grain yield and quality. The native phosphorus in the soil is largely fixed in un-available forms and hence very little amount is available to the crop plants. Therefore, for obtaining better plant growth and development, phosphorus fertilization seems