

CORRELATION STUDIES BETWEEN LODGING AND YIELD OF DIFFERENT WHEAT VARIETIES AT VARIOUS LEVELS OF NITROGEN IN N.W.F.P

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ABSTRACTS

Correlation between lodging and grain yield of different wheat varieties at various levels of nitrogen was found out at Agricultural Research Station, Sarai Naurang, Bannu during 1979-80 and 1980-81. Five varieties were treated against six levels of nitrogen with 50 kg P₂O₅ as a basal doze for all the treatments. It was concluded that optimum nitrogen requirement of wheat crop was 75-100 kg/ha with 50 kg P₂O₅/ha. After this limit the crop may lodge resulting in reduced yield. Among varieties, WL 711 proved to be the best one for Bannu area followed by HD 2009.

INTRODUCTION

Yield of wheat is already lower in Pakistan as compared to other countries. Lodging is further aggravating the situation. The decrease in yield due to lodging may be 60-70% depending upon the degree of lodging, stage of development at which it occurs and the subsequent weather conditions. Lodging also has an adverse effect on the quality of the produce, however a great difficulty is experienced in harvesting the lodged crop.

Tahir [1] was first to take note of lodging in wheat. He attributed it to rich soil, abundant manuring, poor ploughing, thick sowing and some times to diseased condition. Hall [4] observed that lodging was associated with the presence of nitrates. Hamilton [8] reported that a heavy rates of seeding produced an inferior root type and thinner culms. Galjeko [9] observed that