Pak. J. Agri. Sci., Vol. 31, No. 1, 1994
PHYSICO-CHEMICAL AND FARINOGRAPHIC PROPERTIES OF
SOME NEW PAKISTANI WHEAT VARIETIES
Ijaz Ahmad, Fagir M. Anjum, Amjad Ali & M.S.Butt
Department of Food Technology,

University of Agriculture, Faisalabad

Six new Pakistani wheat vaneties namely Pak-81, Faisalabad-83, Punjab-85, Pasban-90, Rohtas-90 and Inqilab-9 | were tested for various physico-chemical and farinographic properties. The kernel weight, test weight and other chemical characteristics except moisture content differed significantly among wheat varietics. The moisture content ranged from 9.01 to 10.12%, ash content 1.43 to 1.94%. crude fiber 1.95 to 2.52% and crude fat 1.57 to 2.58% among the wheat varieties. The protein content showed significant variation from 11.94 to 13.24%. Both protein and dry gluten were found to be higher in Inqilab-91 and Rohtas-90. The significant variations in physico-chemical characteristics occurred duc to different wheat varieties.

: INTRODUCTION breeders in the country to boost up grain production. The aim of the present study is to charac-

Wheat is a staple food in Pakistan. Since terize and evaluate some new Pakistani wheat its inception there has been a significant achieve- varicties for their physico-chemical and ment in enhancing wheat production in Paki-_—'farinographic properties.

stan. The increase in production is partly attrib-

utable to the expansion in wheat area but the MATERIALS AND METHODS major contribution towards this increase has

been made by the development/introduction of Six wheal varieties namely Pak-81, semi-dwarf, high yielding and disease resistant Faisalabad-83, Punjab-85, Pasban-90, Rohtas-wheat varielies. 90 and Ingilab-91, grown under identical con-

The nutritive value of some Pakistani ditions at Wheat Research Institute, Faisalabad wheat varicties has been evaluated by Khan ef during the crop year 1990-91 were included in al. (1987). However, ihe detailed reviews by this study. The representative sample of each different workers (Pomeranz, 1968: Anjum et wheat variety was tested for thousand-kernel al, 1976: Paliwal and Singh, 1985: Finney ef weight. The test weight expressed in kilogram/ al, 1987) have indicated that various physico- hectoliter (kg/hl) of each wheat sample was chemical and functional properties of wheat recorded according to the method given in flour have been influenced either by genotypes AACC (1983).

and/or by other non-genetic factors. Since no The whole wheat flour was prepared on variety can stay for ever in the field due to Udy Cyclone Sample Mill and each sample was change in patterns of rust races, insect-pests, analyzed for moisture, crude protein. dry and etc. Therefore, the introduction of new wheat wet gluten, crude fiber, crude fat and ash content varieties for commercial exploitation remains by following their respective standard methods always in demand. Recently a good number of described in AACC (1983). The physical dough wheat varieties have been developed by plant properties of flour samples were cvaluated by 80.