**Abstract**

High Molecular Weight (Hmw) Glutenin Subunits And Baking Quality-Related Traits Were Studied In 50 Indian Wheat Landraces. Scoring Of Germplasm Based On Electrophoresis Patterns Using The Payne Method Showed That The Quality Scores Varied From 4 To 8. Based On This Scoring, 13 Cultivars Were Ranked As Superior. Cluster Analysis Based On Electrophoresis Patterns And Jaccard Similarity Criteria Divided The Cultivars Into Five Groups, With 13 Cultivars In The First Cluster. There Was No Similarity Between The Grouping Pattern Based On Hmw Glutenin Sub-Units And Quality-Related Traits. In The Present Study, The Quality Of The Flour Of Six Wheat Varieties Was Weak, So These Varieties Were Only Suitable For Biscuit Making. The Flour Of 31 Wheat Varieties Showed Medium Strength. The Remaining 13 Wheat Varieties Had Strong Flour. Considering The Great Variation Observed For Quality-Related Traits And Hmw Glutenin Sub-Units, It Can Be Concluded That These Cultivars Are Potential Sources Of Desirable Quality Traits For Use In Bread Wheat Breeding Programmes To Improve Bread-Making Quality