



Evaluation of Some soft Wheat Accessions of AUT Collection Created in the Country, Based on Qualitative Indicators

Valentina Arapi^{1*}, Artiona Laze¹, Fetah Elezi², Vladimir Bano²

¹*Department of Chemistry and Biology, Faculty of Food and Biotechnology, Agricultural University of Tirana;*

²*Department of Plant Production, Faculty of Agriculture and Environment, Agricultural University of Tirana.*

Received October 28, 2013; Accepted December 14, 2013

Abstract: Creating new lines of domestic soft wheat with high quality indicators beside quantitative ones, remains major study object of scientific-research institutions in our country. In our study, were analyzed for quality indicators, 20 soft wheat accessions of the collection created in the country, of the Centre of Genetic Resources of the AUT. Genetic material was planted in experimental plots of the AUT, in the years 2010-2011. From the analysis of quality indicators of soft wheat accessions of the collection created in the country, resulted a high content of protein, wet gluten and sedimentation coefficient, with an average of 14.18%, 28.40% and 72.10%. The average value of gluten index is 49.10%, well in average value. While, the specific volume of sediment (ratio K-SDS \ protein), as an expression of the quality of this indicator per unit protein, results at good value, with an average of 5.10. Study of correlative relationships of qualitative indicators showed a strong connection type, among the indicators of protein and gluten ($r=0.765$). Whereas, the morpho-physiological parameters and productivity indices resulted in satisfactory values. From the evaluation of qualitative and quantitative indicators on soft wheat accessions of the collection created in the country, will be mentioned accessions 18,3,17,5,10,2,6,12,15,11,20, with optimal indicators of quality and quantity to become stored as genetic fund, and to be used as parental material in creating new lines of soft wheat.

Key words: *accession, protein, gluten, K-SDS, gluten index*

* Corresponding: E-Mail: valiarapi@hotmail.com; Tel: +2347032157045;