

Dogan R (2010) Evaluation of the agronomical and biochemical characteristics of new lines of bread wheat in Turkey. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* 38(3)135-139.

Abstract

Sixteen new lines of bread wheat obtained from the CIMMYT/ICARDA and a standard cultivar were evaluated during three successive years (2003, 2004 and 2005). The experiments were conducted at the experimental farm of the Faculty of Agriculture of the Uludağ University in Bursa. The lines and the standard cultivar showed significant differences in plant height, number of seeds/spike, seed weight/spike, seed yield and a 1000-kernel weight. The lines numbered 4, 6, 7, 9, 11, 14 and 15 produced significantly higher seed yields than the standard cultivar. Therefore, they formed the highest group (a) of seed yield. Similarly, these lines had a higher number of seeds/spike value than the standard cultivar. However, lines 6 and 11 produced higher seed yields than lines 4, 7, 9, 14 and 15. In particular, the gluten composition and the zeleny sedimentation test values of whole flours revealed that lines 6 and 11 could be suitable for high-quality pasta production with good sensory characteristics. To summarize, there were significant differences between the lines with respect to agronomic and biochemical characteristics. In particular, lines 6 and 11 had better performance than both the other lines and the standard cultivar because of their seed yield and quality.