INVESTIGATION OF SOME COMMON WHEAT GENOTYPES BY YIELD-RELATED TRAITS FOR KAHRAMANMARAŞ LOCATION IN TURKEY

Tevrican DOKUYUCU¹ Aydın AKKAYA¹ Mevlut AKÇURA²

¹Kahramanmaraş Sütçü İmam University, Faculty of Agriculture, Department of Field

Crops, Kahramanmaraş, Turkey

²Bahri Dağdaş İnternational Winter Cereal Research Centre, Konya, Turkey.

ABSTRACT

This research was carried out to investigate some common wheat genotypes by yield-related traits, from 1997 to 2000, for three years, in Kahramanmaras, located in East-Mediterranean region. In research, 299 common wheat (*Triticum aestivum L.*) genotypes were evaluated for head length (HL), spikelet number per head (SN/H), grain number per head (GN/H), grain weight per head (GW/H) and 1000-grain weight (1000-GW) using statistical parameters. Genotypes were distributed in to five groups for each trait.

According to results, ranges were changed 5.4 cm and 14.5 cm for HL, 9.0 and 25.0 spikelets for SN/H, 8.0 and 69.4 grains for GN/H, 0.17 g and 2.48 g for GW/H, 12.0 g and 56.4 g for 1000-GW. Standard deviations were high for GN/H and 1000-GW, and were low for GW/H, HL and SN/H. Means were also 8.4 cm for HL, 17.0 spikelets for SN/H, 35.6 grains for GN/H, 1.26 g for GW/H, 35.3 g for 1000-GW. Coefficients of variation were only high for GW/H in the second year and it was in the confidence limits for other trits in the experiement years. Distribution of genotypes was also different due to traits and there were more genotypes in-group 3 for HL, SN/H and GN/H, in group 4 for GW/H and group 2 for 1000-GW. GN/H and 1000-GW with higher SD and CV values in confidence limits were hopeful traits for a selection work in the region.

Key words: Wheat, genotypes, evaluation, yield-related traits.