PATH ANALYSIS OF YIELD AND SOME YIELD-RELATED TRAITS OF DURUM WHEAT GENOTYPES GROWN IN RAINFED CONDITIONS OF MEDITERRANEAN REGION

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ABSTRACT

This research was carried out on 13 durum wheat genotypes in randomized complete block design with four replications between 1993-95 years, in Kahramanmaras-Turkey. The aim of this research was to determine direct and indirect effects of traits (vegetative period-VP, grain filling period-GFP, grain filling rate-GFR, flag leaf area-FLA and duration-FLAD, head number-HN, grain number per head-GN/H and 1000-grain weight-GW on grain yield-GY.

According to the correlation coefficients, GY was positively and significantly related with GN/H and GFP. Path coefficients indicated that GN/H, GFP, GFR and FLAD had positive and high direct effects, GW had moderate positive direct effect on GY, while FLA had negative and high direct effect on GY. Therefore, GFP, GFR, FLAD, GN/H and GW can be used as selection criteria in region to increase grain yield.

Keywords : Wheat; pathways: correlations: yield components; grain yield