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AGRONOMIC PERFORMANCES OF TALL AND SEMIDWARF GENOTYPES OF DURUM WHEAT

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ABSTRACT

A total of 69 durum wheat genotypes were grown at Bornova in the 1996-97 and the 1997-98 growing seasons according to Randomized Completed Block Design with two replications. Plant height, spike length, heading date, plot yield, thousand kernel weight, biomass and harvest index were measured. They were also classified into two groups as semidwarfs(GA-insensitive) and the talls (GA-sensitive) based on GA tests conducted in the laboratory. Semidwarf genotypes had relatively lower plant height and days to heading than the tall wheats. As expected, semidwarfs had higher harvest index than the tall wheats. Both semidwarf and tall genotypes had significant interactions with year for plant height, spike length and biomass. The semidwarf genotypes responded differently to the years than the tall wheats for spike length, heading date, plot yield and harvest index. Harvest index was found to be significantly different among all genotypes even though there were no significant yield differences between the semidwarfs and the talls. It was also noticed that the semidwarfs had lower biomass production than the talls and they gave relatively higher or similar yields in comparision to tall wheats.