GENOTYPE X ENVIRONMENT INTERACTION AND STABILITY ANALYSIS OF POD YIELD AND SEED WEIGHT IN VIRGINIA TYPE GROUNDNUT

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ABSTRACT

Eight Virginia type groundnut (Arachis hypogeae L. subs. hypogaea var. hypogaea) genotypes (Çom, NC-7, Adana, 75/1073, PI 269084, PI 315633, PI 355276 and PI 346385) were tested for pod yield and 100-seed weight over eight years period between 1991 and 1999 (except in 1997) in Adana in the East Mediterranean Region of Turkey. The genotypes differed in adaptability and stability in respect to both traits. The genotypes 75/1073, PI 355276, PI 315633 and PI 346385 considered as having high adaptability to all environments in respect to pod yield with regression coefficients close to 1.0 and yield values above general mean. The genotypes NC-7 and 75/1073 had 100-seed weight values above general mean regression coefficients of 0.964 and 1.023, respectively, indicating their best adaptations to all environments.

Key words: Finlay-Wilkinson, regression coefficient, Arachis hypogeae L.