

Inheritance of Protein Content and Grain Yield in Half Diallel Maize (*Zea mays* L.) Populations

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Abstract : A half diallel crossing design was carried out during 2011 and 2012 growing seasons under Çanakkale-Turkey ecological conditions. In this research, 20 F1 maize hybrids obtained by 6x6 half diallel crossing were used. Gene action for protein content and grain yield traits were explored in half set involving six elite inbred lines. According to the results diallel analysis dominance and additive gene variances were determined for protein content. Variance/Co-variance graphs revealed for grain yield and protein content traits. In this study, inheritance of grain yield and protein content demonstrated over-dominance type of gene action.

Keywords : protein, maize, inheritance, gene action

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