

## COMBINING ABILITY AND HETEROTIC EFFECTS IN SOME CHARACTERISTICS OF SECOND CROP MAIZE

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### ABSTRACT

Maize genotypes including five lines and three testers were crossed according to line x tester analysis method to select the suitable parents and promising hybrids under second crop conditions of Meander Valley (Büyük Menderes Havzası). In the population involving eight parents and fifteen hybrids, non-additive gene effects for ear length and number of rows on ear and additive gene effect for yield, thousand kernel weight, plant height, ear height and days to silking were estimated. It was found that two parents, A 632 and Pa870, had higher general combining ability values and three hybrids, B52 x FR 43, B 79 x Pa 870 and A 632 x FR 43 had higher specific combining ability values for yield. In addition, A 632 x A 634 and A 632 x Pa 870 were the highest yielding combinations .