

**RESEARCHES ON GENERAL AND SPECIFIC  
COMBINING ABILITY OF YIELD AND SOME TRAITS OF  
THE HYBRIDS OF SELECTED POPPY  
(*Papaver somniferum* L.) LINES**

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**ABSTRACT**

The aim of this study is to determine general and specific combining ability in comparison with some selected lines which was studied on domestic poppy materials of our country and their parents after they crossed each other. In conformity with this will be determined which parent or hybrid lines would cultivate widespread in whole country. Thus, it was thought that this variety could utilize in other poppy cultivating regions when in any region was breded a good performed variety.

Some obtained data in the end of the study were from general combining ability; the highest value of plant height with 1.83 by parent 1, the lowest value with -2.08 by parent 4; the highest value of the capsule number per plant with 0.27 by parent 7, the lowest value with -0.28 by parent 1; the highest value of the stigma number in the capsule with 0.21 by parent 33, the lowest value with -0.57 by parent 4; the highest value of the capsule yield per plant with 0.57 by parent 5, the lowest value with -0.73 by parent 1; the highest value of the seed yield per plant with 1.00 by parent 6, the lowest value with -1.08 by parent 2; the highest value of the capsule yield per decare with 6.62 by parent 5, the lowest value with -8.13 by parent 2; the highest value of the seed yield per decare with 8.09 by parent 4 and the lowest value with -10.16 by parent 2.

**Keywords:** *Poppy, Papaver somniferum, general combining ability, specific combining ability, yield, morphine ratio*