

**VARIANCE COMPONENTS AND HERITABILITIES FOR SEED
YIELD AND RELATED CHARACTERS IN DETERMINATE TYPES
OF SESAME**

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ABSTRACT

Eight determinate types of sesame were grown in 1998, 1999, and 2000 growing seasons at Antalya province in order to estimate the broad-sense heritabilities for seed yield and related characters by using variance components. Due to the non-availability of a determinate ideotype in sesame, all heritability studies reported to date were based on the traditional indeterminate ideotypes. Since there is no detailed information available on the heritabilities of the agronomically important characters including determinate ideotypes, this study aimed to obtain information on variance components and heritabilities of seed yield and related traits in a population of determinate genotypes of sesame. Heritabilities estimated were found to be higher than the previous reports for the characters under study due to the fact that the genetic material used was completely different ideotype from the traditional indeterminate ideotypes of sesame. This indicated that the novel ideotype generated distinct variability for agronomic characters, which are less vulnerable to environmental fluctuations, and thus causing higher heritabilities.

Key words; Sesame, Sesamum indicum L., Determinate growth habit, Variance components, Heritability