

Table 4 Component of variation with standard errors in F₁ generation for oil content in sesame

Sl. No.	Component of variation	Estimated value ±S.E
1.	D = Variance due to additive effect	8.90±1.95
2.	H ₁ = The component of variation due to dominance effect	19.34±3.90
3.	H ₂ = The component of variation due to dominance effect (where, H ₂ =H ₁ [1-(u-v) ²]) where, u and v are freq. of increasing and decreasing alleles	16.02±3.24
4.	h ² = Dominance effect (as the algebraic sum over all the loci in heterozygous phase in all crosses).	0.81±0.17
5.	F = Mean of the covariances of additive and dominance effects over the arrays	3.72±0.42
6.	E = he expected environmental component of variation	0.89±0.054
7.	Other parameters:	
a)	Mean degree of dominance {(H ₁ / D) ½}	1.470
b)	b= Regression of Covariance(Wr) on the variance(Vr)	0.1709+ 0.1712
c)	Proportion of genes with +ve and -ve effects in the parents (H ₂ /4H ₁)	0.210
d)	Proportion of dominant and recessive genes in parents ={(4DH ₁)1/2+ F / (4DH ₁)1/2 - F}	1.330
e)	r = Co-efficient of correlation between parental order of 0.440(NS) dominance (Wr + Vr) and parental measurement (Yr)	
f)	r ² =Prediction for measurement of completely dominant and recessive parents	0.194
g)	h ² /H ₂ = No. of groups of genes that exhibit dominance	0.050
h)	Narrow sense heritability (Hns)	31.703%
i)	Broad sense heritability(Hb)	84.00%