

## Estimation of genetic variability parameters in sesame (*Sesamum indicum* L.)

■ R.S. JADHAV AND M.N. MOHRIR

### SUMMARY

Thirty-one germplasm lines of sesame (*Sesamum indicum* L.) were evaluated at Department of Botany, Pratishtan Mahavidyalaya Paithan, for genetic variability, heritability and genetic advance as per cent of mean for seventeen quantitative traits. Analysis of variance revealed significant differences for all characters except days to flower initiation. Character seed yield per plant, capsules per plant, capsules on main stem and plant height for first capsule, were shown high GCV and PCV values indicating that improvement through selection may be possible for these characters. High heritability and high genetic advance as per cent of mean were observed for seed yield per plant, capsules on main stem and capsules per plant, indicating that characters were governed predominantly by additive gene action and selection could be effective. High values for GCV and heritability coupled with high genetic advance as per cent of mean were observed for characters *viz.*, seed yield per plant, capsules on main stem, capsules per plant, nodes on main stem and plant height for first capsule indicating that these characters were governed by additive gene action and selection could be effective for improvement of these characters.

**Key Words :** GCV, Genetic advance, Heritability, PCV, Sesame

**How to cite this article :** Jadhav, R.S. and Mohrir, M.N. (2013). Estimation of genetic variability parameters in sesame (*Sesamum indicum* L.). *Internat. J. Plant Sci.*, **8** (2) : 280-283.

**Article chronicle :** Received : 26.10.2012; Revised : 20.02.2013; Accepted : 22.04.2013

### MEMBERS OF THE RESEARCH FORUM

**Author to be contacted :**

**R.S. JADHAV**, Department of Botany, Pratishtan Mahavidyalaya,  
Paithan, AURANGABAD (M.S.) INDIA  
Email: msrama\_res@yahoo.com

**Address of the Co-authors:**

**M.N. MOHRIR**, Department of Botany, Pratishtan Mahavidyalaya,  
Paithan, AURANGABAD (M.S.) INDIA  
Email: mnmohrir@gmail.com