

Manuscript Number: 2835 NAAS Rating: 4.96

## Clonal Variability in Mango (*Mangifera indica* L.) Orchards cv. Dashehari

## S. Kishor, D.H. Dwivedi, S. Maji, N. Singh and M. Gond

Department of Horticulture, Babasaheb Bhimrao Ambedkar University, Lucknow- 226 025, India E-mail: sachin10kishor@gmail.com

**Abstract:** The present study was aimed to assess the intra-varietal variability of 45 Dashehari morphotypes of mango (*Mangifera indica* L.).A significant intra-varietal variability was observed for trunk girth, number of secondary branches and similarly for fruit morpho-chemical characters like fruit width, fruit length, fruit weight and peel thickness, pH of the juice, ascorbic acid, TSS and TSS:acid ratio. The highest PCV (22.46) for number of secondary branches indicating more environmental effect. Maximum heritability (98.40) and genetic advance (43.83) was for trunk girth followed by total soluble solids (TSS), TSS:acid ratio and ascorbic acid content resulting establishment of intra-varietal variability among different morphotypes of existing Dashehari orchards at mango export zone of Uttar Pradesh. High heritability and moderate to high genetic advance and narrow difference between GCV and PCV were found in trunk girth, number of secondary branches, ascorbic acid, TSS:acid ratio and total soluble solids which indicated predominance of additive gene action for these characters and these characters may be considered in heritability study for intra-varietal analysis of Dashehari mango for further crop improvement.

Keywords: Clones, Dashehari, Heritability, Morphotypes, Variability