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**Genetic divergence studies for fibre yield traits in roselle**

**(*Hibiscus sabdariffa l.)* In terai zone of West Bengal**

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**ABSTRACT**

*Sixty genotypes of roselle (Hibiscus sabdariffa L.) were evaluated for fibre yield and its contributing characters during Kharif, 2013 for eleven characters and genotypes were grouped into seven clusters. Grouping of genotypes into different clusters was not*

*related to their geographic origin. The genotypes from different geographic locations were grouped into one cluster while genotypes of the same geographic origin showed genetic diversity. Cluster I was the largest containing 34 genotypes followed by Cluster II (fifteen), Cluster III (four), Cluster IV, V and VI with two genotypes each and mono-genotype Cluster VII. The highest inter cluster distance was observed between Cluster VI and VII followed by Cluster VI and IV and Cluster VI and I. Fibre yield per plant (42.54%) followed by dry stick weight per plant (22.48%) and petiole length (9.21%) have contributed maximum percent of contribution towards divergence. Cluster VII which consists of a single genotype has high cluster mean values for most of the characters while Cluster VI has lowest cluster mean values for most of the characters. Based on per se performance of genetic diversity and cluster means, genotypes belonging to Cluster I, IV, VI and VII may be chosen for crossing programme for roselle crop improvement.*

***Keywords*:** Cluster distance, D2 analysis, genetic diversity, roselle