

## Assessment of Genetic Divergence in Foxtail Millet Genotypes

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### ABSTRACT

The experimental material comprised of 134 foxtail millet genotypes representing collections from different parts of India. All the genotypes were characterized for seven traits at the Agricultural Research Station, Vizianagaram during *kharif*, 2019 and were grouped into 16 clusters based on  $D^2$  statistic. Cluster I WAS the largest group with maximum number of genotypes (66) followed by Cluster & II, VII, IV, XVI & XIV with 21, 19, 11, 4 and 3 genotypes respectively. The remaining clusters were solitary. Inter cluster distance was the highest between the clusters XIV and XVI followed by clusters IX and XVI, VII and XVI and VI and XVI. Among the seven quantitative traits studied, the most important trait contributing to the divergence was days to 50% flowering followed by plant height, number of productive tillers and panicle length. Based on mean values and inter cluster distances, the genotypes, FT 3593, SHEIKHOM-53, RFM 67, ESD 90 and L- 273 can be opted for crossing programme for obtaining desirable segregants.

**Keywords:** *Cluster,  $D^2$  statistic, Foxtail millet, Genetic diversity.*