Characterization of Guava genotypes using SSR markers
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A total of 33 genotypes including six species and 28 genotypes of Psidium guajava were characterized using 39 SSR markers. Out of 39 primers 26 were reproducible. A total of 64 alleles were produced by 26 primers and number of alleles per locus varied from 1 (mPgCIR01, mPgCIR18 and mPgCIR19) to 5 (mPgCIR256) with mean value of 2.34. The value of gene diversity ranged from 0.0377 to 0.6681 with a mean value of 0.2766. Highest gene diversity was observed for primer mPgCIR256 (0.6681) and lowest for primer mPgCIR24 (0.0377). The most informative SSR primer in the present study was mPgCIR256 which showed high rate of polymorphism. Genetic distance and the dissimilarity matrix showed three major clusters on the basis of genetic similarity. Cluster ‘A’ represented two sub-cluster having Red type and Shweta grouped in A1 sub cluster and Punjab Pink, L-49, Arka Kiran, Black Guava, Thai guava and Thai Variant-2 grouped in A2 sub-cluster. Cluster ‘B’ represents Thai Variant-1, Pusa Srijan, P. guienensis, P. cattleianum, P. quadrangularis, P. pumilum, Arka Amulya. In cluster ‘C’, three sub-clusters were observed. Cluster ‘C’ represents Sasni selection, Lalit, Hissar Safeda, Hafsi Red, Yellow type, Allahabad Safeda, P. friedrichsthalianum, Sasri collection. Genetic diversity analysis among Psidium species showed that P. guajava had more similarity with P. guienensis compared to other species. Present study showed substantial diversity among the guava genotypes which can be utilized for future guava improvement programs.

Biography
Shaili Kumari has completed her Bachelor’s degree from Dr. Y.S.R Horticulture University Andhra Pradesh, 2013 and Master’s degree from IARI during 2015. She is currently pursuing her PhD in Fruit Science from IARI or IIHR. She has qualified All India Entrance Examination for admission to under graduate course (2009). She has got Junior Research Fellowship for her Master’s degree (2013-15) and Senior Research Fellowship for PhD Program (2015-2018).

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