

Assessment of genetic diversity among bottle gourd [*Lagenaria siceraria* (Mol.) Standl.] genotypes using microsatellite markers

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ABSTRACT : Twenty two polymorphic SSR markers were used to assess the polymorphism in ten bottle gourd [*Lagenaria siceraria* (Mol.) Standl.] genotypes. These primers produced total 135 amplified bands. The PIC value ranged from 0.27 to 0.61. The dendrogram formed divided the genotypes into two divergent clusters. Cluster A comprises of seven genotypes while cluster B comprises 3 genotypes. The result depicts that genotypes with high molecular diversity could be used in breeding methodologies and development of gene pools with broad genetic base. The genotype specific bands developed by the SSR primers could also be used for cultivar identification.

Key Words : *Lagenaria siceraria*, DNA isolation, fingerprinting, genetic diversity, SSR markers.