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RESEARCH ARTICLE:

Studies on molecular divergence in egg plant (Solanum melongena L.) using SSR markers

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SUMMARY: In total, thirty alleles were detected using twenty two SSR primer pairs and Polymorphic Information Content (PIC) values ranged from 0.1491 (155) to 0.5293 (117). UPGMA analysis grouped the accessions into two main clusters *viz.*, cluster I (eighty two accessions) and cluster II (two accessions). Among the commercial check varieties, Bhagyamati, Shyamala and Gulabi were included in one cluster while Arka Kesav was included in another cluster. The exotic collections *viz.*, EC386589, EC316280, EC384565, EC385380, EC329327 and EC316226 were included separately in different clusters along with other indigenous collections. The SSRs were able to differentiate exotic collections and commercially grown check varieties into different groups to some extent, indicating that SSRs is a more accurate and reliable method than RAPD to study the genetic diversity in brinjal.

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KEY WORDS: SSR marker, Primers, Cluster, Genetic diversity, Accessions

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