

Molecular Genetic Diversity Analysis of Quality Protein Maize lines using SSR markers

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ABSTRACT

Genetic diversity and relationships among QPM (quality protein maize) lines would help and broaden the genetic base of crops in national improvement programmes. In this study, we report the analysis of 18 QPM germplasm lines were arranged using microsatellite markers or Simple Sequence Repeats (SSR). Genetic variability among eighteen QPM genotypes were assessed employing 34 primers spread over the whole genome. The polymorphism information content (PIC) values for SSR markers were ranged from 0.50-0.95 and the genotypes were grouped into different clusters using NTSYSpc2.1 programme. The PIC value was found to be highest for the primer *bnlg 1401*(0.95) followed by *bnlg1043*, *bnlg1194* and *Umc1005* (0.94) while the lowest value was recorded for the primer *bnlg1506* (0.50) with the mean value of 0.83.

Key words : Dendrogram, Quality Protein Maize, Simple Sequence Repeats.