

## Assessment of Genetic Diversity of Iranian Purslane (*Portulaca Oleracea* L.) Accessions Using ISSR Markers

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**Abstract :** Diversity analysis at the molecular level using PCR-based markers is the efficient and rapid method of identifying the relationships and differences among the genotypes. In the present study, genetic diversity and relationships among 20 collected purslane accessions were evaluated using ISSR markers. The genotyping data were used to understand the relationships among the collected accessions and identify genetically diverse purslane accessions. The 25 primers gave a total of 92 bands, of which 62 were polymorphic (67.4%). The genetic diversity as estimated by Shannon's information index was 0.55, revealing a quite high level of genetic diversity in the germplasm. The average number of an observed allele, effective allele, polymorphic information content (PIC) and Nei's index were 2, 1.65, 0.37 and 0.37, respectively.

**Keywords :** *Portulaca oleracea* L., genetic diversity, ISSR, germplasm

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