Molecular Characterization of Genetic Diversity in Durum Wheat Landraces in Palestine

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Abstract:

Several landraces of wheat (*Triticum durum*, *Desf.*) are found in Palestine. Considerable genetic diversity is known to be present in durum wheat. Morphological variability exists among different landraces suggested that they are rich sources of genetic variation. Data based on using Random Amplified Polymorphic DNA (RAPD) revealed genetic diversity in wheat. This work assessed the genetic diversity among 10 durum wheat landraces and varieties in Palestine by application of RAPD technique. The mean similarity indices presented by the 10 landraces and varieties ranged from 0.05 to 0.68 with an average of 0.29. The result of this study confirms the high variability that can be found within these landraces, and therefore, underlining the significant values of these landraces as gene pool for durum wheat which is highly diversified and adapted genotypes.