Abstract
Date Palm (*Phoenix dactulifera* L.) is monocotyledone, diociouse and long life which could be high economic important. assigning the granule giver and the genetic distance between the male and female cultivars are the most important goal of this research. this research was carried out at the Ramin central laboratory of natural resources university in Khozestan. Province in order do analysis the genetic diversity of 23 male and 23 female cultivars of Date palm by using the indicators of microsatellite. DNA extracted of young leaves via Sambrock CTAB procedure (1998) with little modification and DNA amplification was carried out using 11 microsatellite primer pairs.PCR products were separated on a 8% undenaturated acrylamide gel containing 7M Urea and were stained by silver staining method. Gels were then scored based on ether the presence or absence of the bands polymorphism information content(PIC) for each SSR marker was determined. PIC was 0.61 to 0.83 with a mean vule of 0.76. the highest PIC was0.83 and related to mpdCIR044. Number of alleles varied between 3-9 and total of 77 alleles were identified with an average of 7.09 alleles per locus. Genetic relationships among cultivars were represented by a dendrogram based on the Nei's Genetic similarity coefficient and Word method which was considered for cluster analysis. cluster analysis divided the 46 Date palm cultivars in four major group**,** The cultivars were categorize classified into different groups by using geographical distribution. the highest similarity coefficient value was observed between Istamran and Barhi which are the results of Tissue culture wich indicate a complete similarity. The minim of similarity was obtained between Deglet-Nour and Almehtary cultivars. Result show that SSR marker are useful tools genetic diversity finger printing Date palm.

Key words: SSR markers, male and female cultivars, date palm , genetic diversity

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Evaluation of genetic diversity within and between male and female date palm cultivars using microsatellite markers

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Octobr 2013