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 Biotechnology laboratory of agriculture researgh center in Hormozgan. Province in order do analysis the genetic diversity of 14 male and 26 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 10 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 0.63 forHQ542225 primer to 0.85 for HQ542208 primer with a mean vule of 0.77. Number of alleles varied between 5-9 and total of 76 alleles were identified with an average of 7.6 alleles per locus.Genetic relationships among cultivars were represented by a dendrogram based on the Nei's Genetic similarity coefficient and Neighbor' joining method which was considered for cluster analysis. cluster analysis divided the 40 Date palm cultivars in three major group,The cultivars were categorize classified into different groups by using geographical distribution. the highest similarity coefficient value was observed between Khanizi and Almehtary. The minim of similarity was obtained between Abonarenjaand other 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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Investigation of genetic diversity of date palm cultivars in Sistan and Baluchistan and Hormozgan provinces using SSR markers

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