



Assessment of genetic relationships among Mint species

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Abstract: This search aimed to determine the genetic relationship between two Mint species (*Mentha viridis*, *Mentha piperita*), and three wild species which had been collected from Damascus, Latakia and, Al-Swaida by ISSR molecular markers. In this study 46 ISSR primers were used, 38 of them gave polymorphic ISSR products with the studied samples. The studied samples were moderately close to each other, the relationship ranged from (0.07) and (0.53), amplified 130 clear and reproducible bands, of which 124 bands were polymorphic and the percentage of polymorphism was 94.123 %. The average of total bands 3.42 band/primer and the average of polymorphic bands 3.26. The average of Polymorphic information content (PIC) was 0.432. The Dendrogram of the studied samples separated into two main clusters, the first one contained only "*Mentha viridis*", which is cultivated, the other cluster separated into two sub-clusters, the first sub-cluster contained *Mentha piperita*, and the wild species collected from Latakia, and the other one contained the two wild species collected from Damascus, Al-Swaida which are geographically closed to each other. So ISSR markers could be realistically used to evaluate the genetic diversity and differentiation among *Mentha* species.

Keyword : *Mentha*, PIC, ISSR, varieties.

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