

عنوان مقاله:

Assessment of genetic diversity in Iranian wheat (*Triticum aestivum* L.) cultivars and lines using microsatellite markers

محل انتشار:

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خلاصه مقاله:

In this study, genetic diversity of 20 wheat genotypes was evaluated using 126 simple sequence repeats (SSR) alleles, covering all three wheat genomes. A total of 1557 allelic variants were detected for 126 SSR loci. The number of alleles per locus ranged from 4 to 19 and the allelic polymorphism information content (PIC) varied from 0.66 (Xgwm429) to 0.94 (Xgwm212 and Xgwm515). The highest polymorphism was observed in Xgwm212 and Xgwm515 primers with 19 alleles, while the lowest polymorphism belonged to Xgwm429 with 4 alleles. The highest number of alleles per locus was detected in the genome A with 594, compared to 552 and 411 for B and D genomes, respectively. Dendrogram was constructed using Dice similarity coefficient and UPGMA algorithm by NTSYSpc2.0 software and genotypes were grouped into six clusters. The knowledge about the genetic relationships of genotypes provides useful information to address breeding programs and germplasm resource management. This study also confirms the usefulness of SSR markers to study wheat genetic diversity

کلمات کلیدی:

(Genetic diversity, Microsatellite markers, Polymorphism, Wheat (*Triticum aestivum* L

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