

عنوان مقاله:

Identification of microsatellite markers correlated with grain iron content in Iranian prevalent wheat genotypes

محل انتشار:

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خلاصه مقاله:

Iron is one of the most important nutrients in the human diet which according to the high consumption of staple foods such as wheat, its deficiency in these crops would lead to nutritional disorders and related complications. In the present study, 38 Iranian prevalent wheat genotypes have assessed using 30 pairs of microsatellite markers to identify microsatellite markers associated with wheat grain iron content. Results indicated that, grain iron content Ranged from 34-53mg/Kg and a significant difference was observed between grain iron content of studied genotypes. After analyzing the results of microsatellite amplification, the range of alleles per SSR locus was 2-9 with a mean of 4.5 and the mean of polymorphism information content (PIC) Was 0.55. The stepwise regression analysis has been used for estimation of the relationship between microsatellite markers and grain iron content. The results indicated that the three Xwmc617(4A,4B,4D), Xgwm160 (4A) and Xbarc146 (6D,6B,6A) were significantly correlated with wheat grain iron content.

کلمات کلیدی:

microsatellite marker, grain iron content, stepwise regression, wheat

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