

Abstract:

To investigate the genetic diversity among 21 rapeseed (*Brassica napus* L.) cultivars, semi-random ISJ molecular marker was used. Two different sets of semi-random primers, were used in which primers are designed based on intron - exon splice junction sequences. Ten semi-random primers produced a total number of 116 bands of which 107 (92%) bands were polymorphics. No significant difference were found between IT and ET primers with regard to polymorphic bands. ET15-35 and ISJ3 primers produced 16 and 5 polymorphic bands, respectively . Average numbers of polymorphic bands were 11/6 per primer. According to UPGMA cluster analysis and Dice similarity matrix, rapeseed cultivars were divided in 3 groups. Based on similarity matrix, KS-11 and Kiloz had the highest (0/86) and Licord, Option504 the lowest (0/37) similarity. Both Iranian and foreign cultivars were grouped together, indicating presumably they are of the same origin.

Keyword: Primer, Genetic, Diversity, Rapeseed, Molecular Marker ISJ



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**Assessment of genetic diversity of spring and winter rapeseed
(*Brassica napus* L.) genotypes, using ISJ marker**

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