عنوان مقاله:

Genetic diversity of promising lines of barley based on pheno-morphological traits in Ardabil area

محل انتشار:

مجله بین المللی تحقیقات پیشرفته زیست شناختی و زیست پزشکی, دوره 2, شماره 2 (سال: 1393)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

To evaluate the genetic diversity in twenty barley genotypes, an experiment based on randomized complete block design with three replications was done at Agriculture Researches Station of Ardabil, Iran in 2009-10. Investigated traits of this study was included days to flowering, plant height, 1000 seedweight, number of infertile tiller, number of seed per spike, harvest index, days to maturity, straw yield and grain yield. The comparison of means indicated that the genotypes 14, 19, 10, 20 and 16 were placed in the superior group from most traits points of views. It had been an indicator of high potential of thegenotypes from agronomy and morphological points of views. Therefore, considering the results of mean comparison of the traits, these genotypes can be introduced as the superior genotypes. Factor analysis based on principal component analysis method and varimax rotation indicate that three important factors accounted 87.55% of the total variation among traits. The second factor that accounted for 34.69% of the total variations had a positive relationship with the number of grain spike, grain yield, grain weight 1000 and harvest index. Therefore we introduced the second factor as an effective factor in increasing the grain yield.

کلمات کلیدی:

Barley, agronomic traits, yield components, varimax rotation, promising lines