

عنوان مقاله:

Evaluation of Genotype×Environment Interaction in Barley (*Hordeum Vulgare* L.) Based on AMMI model Using Developed SAS Program

محل انتشار:

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خلاصه مقاله:

Understanding the implication of genotype-by-environment interaction (GEI) and improving stability of crop yield in a target production environment is important in plant breeding. In this research, we used the AMMI (Additive Main Effects and Multiplicative Interaction) model to identify the stable genotype(s) by predictive accuracy of yield data. Results of this study indicated that the FGH tests were useful to identify the best truncated AMMI model. In general, FGH₁ and FGH₂ tests had similar results. The findings of this study confirmed that the AMMI-۴ was the best truncated AMMI model to distinguish the general and specific stability of genotypes across environments for recommending them to farmers. Based on AMMI-۴ yield prediction, G_{۱۵} and G_{۱۷} were identified as useful genotypes for some environments, while G_{۱۴} was found as a stable genotype in all environments.

کلمات کلیدی:

F-test, stability, Truncated AMMI model, Yield prediction

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