

عنوان مقاله:

Nutritional quality in rice grain and their relations to grain morphological traits

محل انتشار:

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نویسندگان: Ravieh Heydari - Department plant breeding, Sari Agricultural and Natural Resources University, Sari, Iran.

.Nadali Bagheri - Department plant breeding, Sari Agricultural and Natural Resources University, Sari, Iran

.Nadali Babaeian Jelodar - Department plant breeding, Sari Agricultural and Natural Resources University, Sari, Iran

.Hamid Najafi Zarrini - Department plant breeding, Sari Agricultural and Natural Resources University, Sari, Iran

خلاصه مقاله:

Cereal grains are considered by consumers due to effect on health because of their antioxidant capacity, phenolic content and other phytochemicals. For this purpose, an experiment was conducted to evaluate of morphological and nutritional traits on 10 rice genotypes. Analysis of variance showed a significant different among the genotypes for all traits. Onda, Gharib, Fajr and L2 genotypes had the highest ranks for nutritional quality. Also, the results showed that positive correlation between antioxidant capacity, phenolic content, soluble carbohydrate and Zn content, while there was the negative correlation between grain length and grain length to width ratio with above traits. Thus, the nutritional quality could be indirectly selected based on grain length. PCA analysis resulted five components that determined 89.22% of the total variation, so that scatter plot based on the two first components, the genotypes of Onda, Fair, Gharib and L2 which have smaller grain length, have better nutritional guality. Therefore, these genotypes .can be used in breeding programs

کلمات کلیدی: Rice, Antioxidant, Phenolic content, Fe and Zn content, principal component

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