

Quality Assessment in a Collection of Barley's Wild Relatives "*Hordeum Vulgare Subsp. Spontaneum*" from ICARDA's Genebank

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Barley is one of the oldest domesticated crop in the world, although barley food uses remains important only in some cultures particularly in Asia and northern Africa. Whereas recently the consumer has become aware of the interest of barley as a food grain because of his impressive health benefits, and as a major source of soluble and insoluble fibers, also his antioxidant activity. The objective of this study is to investigate the genetic variation in a population of barley's wild relatives. Thus, beta-glucan, and micronutrient concentration were determined. Accessions of wild relatives were grown under field conditions for multiplication within two years, and then characterized for beta-glucan, and micronutrient concentration. The population exhibited a wide range of variation for these traits, further some accessions had shown high levels of beta-glucan and micronutrient. This study demonstrates the variation of beta-glucan and micronutrient concentration in wild barley and the interest of genotyping to underline genes controlling these traits.

Biography:

Fadwa ELOUADI is a PhD student in genetics and biometrics laboratory at Ibn Tofail University, engineer in Food Industry from Hassan II Agronomic and Veterinary Institute. Actually working on her PhD project at the International Center for Agricultural Research in the Dry Areas (ICARDA) on the characterization of nutritional and technological quality of barley genetic resources and breeding germplasm to provide a scientific basis to promote the human consumption of barley in Morocco.