

ANTIOXIDANT ACTIVITY AND NUTRIENT COMPOSITION OF *SORGHUM BICOLOR L.* AND *SECALE CEREALE L.* IN ALGERIA

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ABSTRACT

Whole grain products are recommended for healthy diets as being recognized sources of dietary fibers. In the present study, two types of secondary cereals (rye and sorghum) which are adapted to the growth conditions of Algeria were evaluated for their composition in dietary fibers, sugars, proteins, total phenols and antioxidant properties. Antioxidant activity was evaluated by radical DPPH scavenging capacity, ferric reducing power assay (FRAP) and β carotene-linoleate bleaching assay. The adapted rye grains exhibited better nutritional quality compared to sorghum. Sorghum was exceptionally high in antioxidant activities followed by rye. The nutritional data obtained suggest that the selected grain, particularly sorghum, is promising as healthy food.

KEYWORDS: Rye, Sorghum, Whole Grain, Protein, Dietary Fiber, Total Phenols, Antioxidant Activity