



PHYSICO-MECHANICAL PROPERTIES OF PURPLE WHEAT IN HUNGARY

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ABSTRACT

Wheat is a nutritionally important cereal that contributes significantly to meeting our protein, carbohydrate and dietary fibre nutrient needs.

The different coloured varieties of *Triticum aestivum* wheat have become familiar to consumers in recent decades. There are purple, blue and black varieties, which are rich in anthocyanins, which act as antioxidants. These are natural plant pigments found in the skin of the fruit. Pigmented wheat varieties are grown in small quantities. They are promising raw materials because of their phytochemical composition and their characteristic colour.

In our work, two common and two purple wheat genotypes of two vintages (2022 and 2023) were analysed using Perten Single Kernel Characterisation System (SKCS) 4100 (Perten Instruments) equipment. We compared the seasonal effect taking into account kernel weights, kernel sizes, hardness and moisture.

Overall, hardness and moisture content decreased in 2022 compared to 2023 for the genotypes tested.

Keywords: purple wheat, hardness, moisture