AGRONOMIC CHARACTERISTICS AND BAKING QUALITY OF *TRITICUM SPELTA* L.

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Abstract

As the winter forms of spelt wheat are more frequent than the spring forms, our experiment focused on the spring spelt wheat forms, and we studied and evaluated characteristics and qualities of genetic resources of the spring spelt wheat forms (*Triticum spelta* L.). Seven varieties belonging to genetic resources collections of the Gene bank in Prague-Ruzyně were included in the experiment and studied. SW Kadrilj, a spring wheat variety was chosen as a control variety. The crops were sown in two different localities in the Czech Republic and Austria and they were grown from 2010 to 2012. The organic farming principles were applied by the researchers. Particular significant agrotechnological characteristics were studied and evaluated in the growing season. After harvesting the crops, we analysed their baking quality-we applied standard methods there. Results of our research showed that the spring spelt wheat forms are suitable for low-input farming systems. They also confirmed the suitability of spelt wheat for the low-input farming systems-it has less strict requirements for land conditions and it is able to absorb nutrients from lower soil layers. It is quite resistant to common wheat diseases and competitive to weeds, which are two significant advantages of spelt wheat. On the other hand, it is characterised by lower spike productivity and yield rate, than modern wheat varieties are. However, spelt wheat compensates the lower yield rate by better quality parametres. High proportion of proteins in grain is one of spelt wheat significant advantages-it was equal to 16% (more or less) in the experiment samples. Spelt wheat growing enhances the agrobiodiversity on arable land and helps to diversify the range of spelt wheat use by the food industry.

Key words: spelt, growing, quality