ORGANIC WHEAT SEED QUALITY

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Abstract

The Council Regulation (EC) No. 834/2007, and the Commission Regulation (EC) No. 889/2008, are the most important European legislative instructions addressing organic farming. EU regulation lay down the law to solely use organic seeds in order to establish organic crop stands. The seed must originate from plants being grown in compliance with the organic farming rules for at least one generation. It is extremely difficult to get high-quality certified organic seeds. However, organic farmers are not allowed to use any other seeds than the certified organic seeds. Certified organic seeds are rare and organic farmers usually have to use conventional untreated seeds or farm seeds in order to establish their crop stands. For this reason, we evaluated health and biological characteristics of SW Kadrilj variety of bread wheat (*Triticum aestivum* L.) within the three-year trial (2010-2012). The experimental crop stands were established in three different localities within the Czech Republic. There were minimum differences (not statistically significant) in the level of seed contamination with colonies of the most frequent pathogens. There were also low differences in biological quality of seed only in case of some years there were small differences in energy of germination and laboratory germination. Results of the trials have shown the sufficient quality of all the tested seeds origin. However, they must come from the farms applying high-quality agrotechnologies.

Key words: seed quality, organic farming, bread wheat