

## **Abstract**

The paper deals with the possibilities of detection fungal disease resistance genes in the original European cereals, such as wheat, barley, rye and oats. It provides an overview of the most important resistance genes for breeding. The significance of the resistance genes is evaluated on the basis of the harmfulness of the individual cereal fungal diseases, as well as the importance of the individual cereal species. It describes the possibilities of detecting resistance genes using molecular markers and compares various types of molecular markers. It seeks answers to the question of where the breeding on resistance and therefore the use of molecular markers brings the greatest benefit.