Annotation

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Evaluation of resistance created samples of winter soft wheat to diseases in terms of Right-Bank Forest-steppe of Ukraine

Breeding and genetically improving of winter soft wheat is one of the most effective methods to increase yield, resistance against biotic and abiotic environmental factors and economic feasibility of crop growing. Using diseaseresistant varieties is one of the economically most efficient and environmentally safe methods of plants protection.

Plant resistance is provided by existing plants group of resistance genes that are specific and act first, determinant phase interactions and plant pathogen. In wheat breeding greatest value are genes that provide stable varieties resistant to disease regardless of genetic diversity of pathogens and weather growing conditions. These genes are often dominant mono- and olihogenes.

The aim of our study was the identification and selection of resistant to major diseases of samples of winter soft wheat created by hybridization of geographically distant forms for use in the selection process as donors of steady.

Four samples of winter soft wheat 4075, 6151, 3872 and 6254 with the combined resistance against diseases culture (sustainability score 8-9) in the result of research was created. Created materials showed a significant advantage for resistance to powdery mildew, fusarium and septoria compared to standard grade Favoritka. Selected samples can be used as donors of resistance genes in the selection process of creating high-performance varieties of wheat.

Key words*: winter soft wheat, resistance, genetic control characteristics, source material, donor of genes, intensity of the lesion disease.*