## RESEARCH ON THE IMPACT OF VARIETY ON GRAIN YIELD OF TRITICALE IN THE SPECIFIC CONDITIONS OF THE CENTRAL MOLDAVIA REGION

Andreea-Sabina PINTILIE <sup>1,2</sup>, Alexandra LEONTE <sup>1</sup>, Georgiana AMARGHIOALEI <sup>1</sup>, Paula PINTILIE <sup>1</sup>, Tiberiu SÎRBU <sup>2</sup>, Teodor ROBU <sup>2</sup>

e-mail: andra29nt@yahoo.com

## **Abstract**

Choosing the right variety is one of the most critical factors in achieving successful agricultural yield. Varieties are selected according to several criteria, such as adaptability to climatic conditions, resistance to diseases and pests, yield, and product quality.

The paper presents the results of research to evaluate the impact of different triticale varieties on grain yield under the specific pedoclimatic conditions of the central region of Moldova. The study aimed to identify the most productive varieties, adapted to local conditions such as soil fertility, rainfall, and temperatures in this area. The research was conducted during 2023-2024, assessing indicators such as yield and resistance to biotic and abiotic stress factors.

During the analyzed period, the average grain yields for triticale ranged from 4767 kg  $\cdot$  ha<sup>-1</sup> (Negoiu) to 8390 kg  $\cdot$  ha<sup>-1</sup> (17241T1) in the fertilized system, and from 4592 kg  $\cdot$  ha<sup>-1</sup> (Negoiu) to 7358 kg  $\cdot$  ha<sup>-1</sup> (16026T1).

The results contribute to optimizing the selection of triticale varieties, providing valuable recommendations for increasing agricultural production efficiency in the central region of Moldova.

Keywords: triticale, grain yield, varietals impact