

## RESEARCHES REGARDING THE CULTIVARS INFLUENCE ON WHEAT YIELD IN THE NORTH-WESTERN ROMANIA CONDITIONS

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**Abstract.** *The paper based on the researches carried out during 2009-2011 on the preluvosoil from Agricultural and Development Research Station Oradea. 5 Romanian wheat cultivars were used: Dropia, Crișana, Arieșan, Alex, Ardeal. In comparison with the Dropia there are insignificant difference statistically in Crișana, Alex and Ardeal and negative distinguish significant in Arieșan. The wet gluten and the dry gluten of the cultivars Crișana and Arieșan had not the differences statistically assured in comparison with Dropia cultivar; in Alex and Ardeal, very significant and distinguish significant differences were registered. Falling number was improve very significant statistically in comparison with Dropia in Crișana (64.3%) and Alex (20,0%) but the values are included in the class with bad falling number; in Arieșan the difference is insignificant statistically and in Ardeal the difference is negative distinguish significant. All 5 cultivars had very good values of the deformation index; the best value was obtained in Alex (4 mm) and Crișana (5 mm).***Key words:** stress, stressor, adaptation, emergency

**Key words:** wheat,cultivar: Dropia, Crișana, Alex, drought, yield

### 1. Introduction

The wheat yield quality is influenced by the world area where is cropped and the crop technology, alone or in interaction: cultivar [9] crop rotation [1,2,8], fertilization system [4], irrigation [8].

After the year 1990, the panification quality of the Romanian wheat cultivar had an unjustified appreciation. Many government factors appreciated the Romanian cultivars for fodders, only for the wheat import justification. There was a completely false appreciation because the research programmes of the National Institute for Agricultural Research and Development Fundulea and of the researches stations from Lovrin, Turda, Oradea, Suceava, Șimnic, Teleorman, had the objective to realize the cultivars with high capacity of yield, good and very good quality for panification, high degree of adaptability to the environment tolerance and adaptability to drought and frost – high tolerance and adaptability to diseases [9].

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