

## **STUDIES CONCERNING THE ALLERGENICITY OF DIFFERENT APPLE VARIETIES CULTIVATED IN REPUBLIC OF MOLDOVA**

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### **Abstract**

The allergenic properties of apple varieties are very different and mechanisms which ensure these difference are not fully elucidated. In this study was estimated transcriptional activity of four allergen genes (Mal d 1.01, Mal d 1.02, Mal d 1.03 and Mal d 1.04) in peel and pulp of seven apple varieties, widely presented in the market in Republic of Moldova. The maximum values of transcript accumulation were attested for Mal d 1.01 cluster. Mal d 1.03 and Mal d 1.02 had intermediate expression levels. Mal d 1.04 clusters had minimal transcriptional activity values, which in most cases were very low or undetectable. In base of obtained results, have been revealed the highly allergenic (Golden delicious, Florina and Mantuaner) and hypoallergenic (Richard (Gloster)) varieties.

**Key words:** apple, allergenicity, gene expression.