

## **DINAMICS OF SOME PHISIOLOGICAL PROCESSES DURING THE SHOOT'S DEVELOPMENT IN CERTAIN GRAPEVINE VARIETIES IN THE CONTEXT OF CLIMATIC CHANGES**

**Carmenica Doina JITĂREANU, Alina Elena MARTA, Cristina SLABU, Mirela RADU**

e-mail : [doinaj@uaiasi.ro](mailto:doinaj@uaiasi.ro)

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### **Abstract**

Climate changes and their impact on vineyards represent an extremely important issue for the researchers in various fields of activity. These changes are interesting for the specialists in the vine industry as the vineyards producing quality wines are extremely sensitive to any pedoclimatic changes. The general warming of the climate has disturbed the evolution of natural factors in the grapevine ecosystems: summers have become warmer and drier every year, autumns have become longer, winters shorter and rarely excessive, while drought periods have become more frequent and the damp ones excessively rainy. Global warming has severely disrupted the grapevine ecosystems, grapevine varieties being forced to modify their annual vegetation cycle, the consequences on the quality and the quantity of grape and wine production being most often negative. This paper consists in the study of the eco-physiological reaction of some grapevine varieties to the climatic conditions induced by global warming at Cotnary vineyard, the evaluation being based on the dynamics of foliar, photosynthetic and flavonoid pigments which were used as indicators for photosynthesis and stress resistance processes.

**Key words:** grapevine, eco-physiology, photo synthetic pigments