

# THE CHARACTERISATION OF GRAPEVINE VARIETIES FOR WINES IN THE CONTEXT OF CLIMATE CHANGE IN THE VALEA CALUGAREASCA VITICULTURAL AREA

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## Abstract

Climate change is a reality today and a challenge because the effects need to be evaluated and identified over time. Although it was acclimatized over times in different viticultural climates, grapevine is a plant which has its optimal limits in physiological meaning. The researches were carried out in the Valea Călugărească viticultural center within seven viticultural plantations with the varieties Olivia, Negru aromat, Mamaia, Feteasca neagra 4 VI, Columna, Grasa de Cotnari 4 Pt. In the last 30 years, the climate has changed in the sense that the thermal regime has increased on the background of an unevenly distributed and deficient pluviometric regime, during the vegetation period of the vine. The vegetation period (April) begins with higher average temperatures than the multiannual average (12.6°C compared to 11.2°C) and a high-water regime (74.8 l/square meter compared to 52.0 l/square meter), compared to the multiannual averages. There were registered, also, years with hot summers which significantly influenced the grapevine. During hot summers, vine phenology has changed in that way in which the period between two phenophases was shortened greatly. Also, grapevine evolved under conditions of heat and hydric stress.

**Key words:** grapevine, climatic change, phenology, phenophases