

THE IMPACT OF CLIMATE CHANGES ON GRAPEVINE

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Abstract

The viticultural climate of terroir influences the physiology of grapevine and the ripening of the grapes. The researches performed at the IC-DVV Valea Calugareasca have shown that over the past 32 years, the climate has changed in the meaning that heating resources increased and the rainfall resources decreased. It has registered, also, years with hot summers which significantly influenced the grapevine. 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. The changes in the viticultural climate determined a delayed development of the vegetative phenophases, especially of the ripening and the maturation of the grapes phenophases (by approximately 1-5 days), which especially influenced the quality of the grape production. The grape production obtained was in accordance with the productivity of the vine stumps, the highest productions being obtained in the case of the varieties Feteasca neagra 4 VI (2.088 kg / but), Mamaia (2.244 kg / but) and only 1.558 kg / but at Columna variety.

Key words: viticultural climate, climate change, quantitative and qualitative potential