

COTNARI VINEYARD - A GIFT OF HYDRAULIC FOEHN?

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Abstract

Cotnari vineyard is the northernmost wine-growing vineyard of our country, located close enough to the northern limit of the expanding region of the grape vine. Within this study, we analyse one of the climatic factors that, in our view, contributes to the climatic favorability of this region for the vine plantations: the foehn. More precisely, the hydraulic foehn, which is not mentioned in the Romanian climatology literature, although the mechanism associated with the development of this type of foehn wind, is described for more than 40 years in the international climatological literature. We bring arguments for the manifestation of the hydraulic foehn during winter 2013-2014 in the related region of Cotnari vineyard on the basis of measurements accomplished at Pașcani climatologic station and at other 11 points of hourly monitoring temperature of Dealu Mare-Hârlău region. Additionally, radio-sounding data, synoptic maps and other synoptic data of some of the meteorological indicators of foehn development are used. Local generating mechanism, periods of occurrence, synoptic conditions associated to its generation, the intensity of temperature difference recorded within the region and the possible effect of its development in the increase of the region's favourability for the vine-growing, are analysed in our study.

Key words: Vineyard Cotnari, hidraulic foehn, climate favorability.