THE EVOLUTION OF THE MICROBIAN LOAD OF GRAPES AND MUSTS THAT RESULTED AT THE WINE-MAKING PROCESS OF SOME WHITE SPECIES FROM SEGARCEA VINEYARD

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SUMMARY

One of the means, through which can be interfered upon the fragrance and bouquet of the wine, is the selection of the microorganisms, that lead to fermentation. Taking into account the importance of the levure conveer that is present in a wine – growing habitat, for the realization of the processes of biochemical nature during wine elaboration, we find it necessary that in the period 2005-2007 to study which is the microbial load from the spontaneous flora, presented in grapes and must. Researches were realized over three types of white grapes from Wine-growing center.

In what concerns the microbial load of grapes of the types taken into study – White Feteasca, Sauvignon and Italian Riesling, it can be observed that grapes situated in the superior third of the wine presents a microbial load smaller than the ones situated in the inferior third of the wine, where the number of microorganisms is 4-6 times higher, in the case of Yeasts, and 8-10 times higher than in the case of the of moulds. The second aspect surprised will be referred to the distribution of the microorganisms on the grapes beans, depending on their health status, that is healthy beans/ beans with cracked peel. The differences existent between the number of microorganisms (Yeasts and moulds) on each category of beans are greater than the ones met in the case of the number of the microorganisms on grapes from the superior and inferior wine of the wine. This way, in case of cracked beans, the number of the microorganisms is of some tenth up to thousands (in case of Yeasts) much higher than on beans with intact peel.

Regarding the evolution of the microbial load and the main constituents of musts, for the three types of grapes taken into consideration, will be observed that while we alienate from the moment of full maturity, it will be registered an increase of the content in sugars and nitrate substances and a diminishing of the total acidity. The total number of germs increases once with the evolution in time, towards the moment of full maturity, on the account of increasing the concentration of sugars and nitrate substances. The acidity of the must does not influence directly the activity of Yeasts. The present acids that are present in the must of grapes do not have an inhibitor effect on the Yeasts, some Yeasts being able to use as sources of carbon, as it is the case of Yeasts which realizes alcoholic fermentation. In exchange, the acidity of the must, that is the value of pH has an important activity on the activity of the bacteria, beneficial aspect for the elaboration of wines.