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**A MOLECULAR-GENETIC POLYMORPHISM OF GRAPE CLONES
AND CULTIVARS**

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Grape is perennial, vegetatively-multiplied plant. Grape has many forms, which have been formed as a result of selection through the ages. Most of long vegetative cultivars have produced heterogeneous population. In this population there have to be separate clones, which are characterized by qualitative and quantitative signs. It explains changes in the genome of an individual. The method of PCR-analysis is used to find mutations in the genome, which allows to expose variation in a genotype clones from an initial cultivar effectively and quickly.

The main aim of this work was to research molecular-genetic polymorphism of microsatellite DNA-markers of grape genome by PCR-analysis. DNA was extracted from young leaves of grapevine. Plant material was obtained from the vineyards of National scientific centre "Institute of viticulture and wine making named after V. Ye. Tairov". In total 10 primer pairs were tested on grape DNA (VVS2, VrZag62, VrZag79, VVMD7, VVMD27, VVMD28, VVMD36, VVb66, VMC2b3, VMC2h4). The PCR reaction products were detected on 2 % agarose gels.

As a result of analysis genotypic variability from cultivar Cabernet Sauvignon by the loci VrZag79 i VVMD28, from cultivar Suholimanski Wight by the loci VMC2b3 i VMC2h4 and from cultivar Riparia×Rupestris 101-14 by the locus VVb66 was obtained. The rootstock cultivar Berlandieri×Riparia Kober 5BB was monomorphic by all researched loci.

The second part of analysis was studying Kober 5BB. Polymorphism in clon population of rootstock cultivars Riparia×Rupestris 101-14 and Berlandieri×Riparia Kober 5BB was studied. The results of researching Berlandieri×Riparia Kober 5BB showed that clon №1 is different by the locus