SELECTION OF ISOLATED YEAST Saccharomyces cerevisiae FROM DIFFERENT SORTS OF GRAPE MUST AFTER FERMENTATION AND PERSPECTIVE FOR BIOTECHNOLOGY USE

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Biotechnology of wine yeast accompanied with different complex biochemical processes of dextrose transformation into ethanol. This process is launched by yeast present on the skin of ripe grape. Enzymes which contain grape must also participate in the process of degradation of dextrose into ethanol and carbonic gas during anaerobic cultivation of yeast.

Application of pure yeast cultures steady to external conditions such as: ethanol, low parameters of pH, sulfites, give possibilities for must fermentation even in extremal conditions for yeast.

The aim of our research is isolation of grape yeast cultures from different varieties their cultivation on specific selective nutritient medias, definition of specific belonging, physiologic and biochemical properties. Each isolated yeast strain was deposited at NRRL Culture Collection, US.

We chose and selected yeast cultures which are acceptable for industrial biotechnological processes of receiving yeast biomass, yeast cultures which don't have industrial properties were recommended to be used in scientific research projects as type culture and test culture.

During our research we ascertained the yeast cultures with practical properties which were deposited at NRRL: Wine varieties of grape: Aligote USRCB Y-3362; Cabernet Y-3362; Merlo Y-3364; Riesling rheinian Y-3365; Rkatsiteli Y-3366 ; Sauvignon Y-3367; Chardonnay Y-3368. Table varieties of grape: Kesha Y-3423; Kishmish white Y-3424; Karaburnu Y-3393; Lidia Y-3399; Odessa`s souvenir Y-3375; Dnestrovskiy pink Y-3396; Original Y3406; Muscat white Y-3372; Isabella Y-3429; Crimean black Y-3373; Moldova Y-3391; Doina Y-3398; The queen of vineyards Y-3425; Arcadia Y-3402; Bako Y-3397; Suruchenskiy white Y3400.

Cross-bred varieties of grape: Black Novak Y-3374; One thousand first hybride Y-3403; Twenty Eighth hybride Y-3405; Saibel black Y-3426; Saibel white Y-3427; Curly white (kudrik) Y-3395.