

## ***Annotation***

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### ***The selection of active dry yeast race for production of apple unfortified wine materials***

*Apple wine consists of useful nutrients. Unfortified wine is superior in its quality to fortified, but difficult in production. It is needed the technology and yeast race. Recently the market is selling active dry yeast, but the information about which of the races can provide a good result of vinification is not enough.*

*The research was conducted in 2014-2016 in the laboratory of the Department of Storage Technology and Processing of Fruit and Vegetables of Uman National University of Horticulture. For this research Aidared and Spartan kinds of apples were used. Wort made from juice was pasteurized and fermented with active dry yeast (ASD): EC 1118 (control), ENSIS LE-CI, ENSIS LE-1, ENSIS LE-5, ENSIS LE-6.*

*Physicochemical and organoleptic quality indicators were determined by standard and conventional methods. The best race of yeast was determined by the technique, developed by the authors. Depending on races of yeast, the variants differed due to the duration of fermentation, the volume fraction of ethyl alcohol which was formed during the fermentation, the mass concentration of residual sugar, titrated and volatile acids, residual extract and organoleptic evaluation.*

*The average duration of fermentation of the wort from Aidared apples of the crop of 2014 was 74 days, Spartan apples – 70 days. The highest volume of ethyl alcohol in unfortified wine materials from Aidared apples was 15.5%, and from Spartan apples was 14.8%.*

*The average duration of fermentation of the wort from Aidared apples of the crop of 2015 was 100 days, Spartan apples – 64 days. The highest volume of ethyl alcohol in unfortified wine materials from Aidared apples was 14.8%, and from Spartan apples was 17.3%.*

*The technological assessment of ASD according to the main indicators (out of six possible scores) was 4.46 points for ES1118 race (control), ENSIS LE-CI – 3,41, ENSIS LE-1 – 3,50, ENSIS LE-5 – 5,15, ENSIS LE-6 – 4,79. The average organoleptic score was the highest for wine materials which were fermented by the race ENSIS LE-6 (8.05 points out of 10), the race ENSIS LE-5 – the average – 7.4 points.*

*So, for the fermentation of wort of apples to production unfortified wine materials it can be recommended ASD race ENSIS LE-5, ENSIS LE-6.*

***Key words:*** yeast, apples, wort, unfortified wine materials.