

THE STUDY OF EFFECT OF YEASTS ON QUALITATIVE CHARACTERISTICS OF CIDER

Burak P. S., Rezvan O. I., Khomenko N. V., Ivakhnenko O. L., Strelnikov L. S.
National University of Pharmacy, Kharkiv, Ukraine
nfau.pavel.av@mail.ru

Introduction. Apple cider – low alcohol drink which is obtained by fermentation of apple juice. A drink known from times of the Middle Ages and since then its popularity has not faded, conversely, eventually production technologies were improved and scaled, a new varieties of apple have improved and were deduced. here are other ways of making cider which can replace the long processes of cultivation and preparation of apples for processing against the backdrop of modern methods and technologies of preparation of cider. One of such methods is the preparation of cider from apple juice with the addition of cider yeast.

Results and discussion. At the Department of Biotechnology of the National University of Pharmacy works on the development of composition and technology of apple cider, which is produced by the fermentation of apple juice by various yeast species are carried. In the first stage of experimental studies a few samples of the fermented beverage have been prepared. Apple juice of trademarks “Sadochok” and “Nash sik” were used as raw materials, in which the organoleptic indexes, and active and titrated acidity were pre-determined. The inoculums was added to each sample, 1% for each 1 liter. Alcohol and cider yeasts were used as the inoculums. They were pre-prepared(aged in the thermostat TSO-80 at 30 °C for 30 minutes). The samples were dispensed into 4 previously sterilized containers and yeasts were added in. Then hydraulic locks were installed, for anaerobic fermentation, for 6 days at a temperature of (18-20) °C. After finishing the fermentation process in the samples obtained fermented beverage active and titrated acidity, as well as sensory properties were determined. The results of study showed that the titrated acidity of almost all samples grew by (16-18) T of other than drink juice-based brand "Sadochok" and alcohol yeasts - to 28 °T. This active acidity has not changed much for beverages based juice "Nash sik" and for drinks on the basis of the trade mark "Sadochok" – increased by 0.07-0.09 units.

Conclusions. The study of the organoleptic properties of all the intermediate products have received a satisfactory evaluation. The best flavor characteristics of the samples were allocated on the basis of apple juice "Nash sik", but the smell of the yeast reduced the overall impression. After quality control, semi-finished products were filtered, bottled in containers for carbonization stage. Thus, the results of the study will be used in the development of composition and technology of fermented apple cider drink.