

## Summary

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The subject of the doctoral dissertation: „Selected factors influencing the quality of ciders”

Cider can be various types of products, from those made from 100% apple juice to mixtures with the addition of juices and sugars. According to the Act of December 2, 2021 on wine products (Dz. U. 2022 poz. 24), cider is a beverage with an actual alcohol content exceeding 1.2%, but not exceeding 8.5% by volume, obtained as a result of alcoholic fermentation of cider mash. In the European Union, we do not have uniform regulations regarding the definition of cider, these inconsistencies can lead to unfair competition, because not all consumers can distinguish authentic ciders within the meaning of Polish legislation, which is why it seems crucial to learn about the factors that shape their quality.

Therefore, the main premise for undertaking the research presented in this paper was the thesis that ciders available on the Tri-City market (Polish and foreign) differ significantly in composition and antioxidant properties, and ciders produced in Poland have varied quality, not always corresponding to the definition of this drink. The work constitutes a multidimensional approach to the study of the quality of ciders. In addition to the literature review on quality assessment complex empirical studies were also carried out.

The scope of the research carried out included the following stages: literature research (analysis of the cider market in the Tri-City, research conducted using secondary data); physicochemical tests (marking the color of ciders, marking the total acidity, pH measurement, marking the vitamin C content, spectrophotometric method, marking the total phenolic content using the Folin-Ciocalteau method, marking the total antioxidant potential using the DPPH reagent, testing the total extract content, measuring electrical conductivity, marking the density, marking the soluble oxalic acid content, chromatographic measurement of the sugar and ethyl alcohol content). In the next part of the research, the sensory quality of ciders was assessed by a trained sensory panel. The team's task was to identify and define the determinants of the sensory assessment quality of ciders and to determine their intensity, the last stage of the research was a statistical analysis of the obtained results of our research.

The obtained research results made it possible to verify the quality ciders available on the Tri-City market, and the selected determinants constituted the basis for a comprehensive assessment of their quality. As a result, the main research goal of this work has been achieved.

Keywords: cider, quality, authenticity