Modification of the organoleptic properties of beverages

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\textbf{ABSTRACT}

The quality of agricultural products used for the manufacture of beverages varies from year to year depending on weather conditions and at the same time according to their areas of origin. The aim of the beverage industry, however, is a product with the same properties in all seasons and in different years. Our aim was to verify the possibility of modification of the organoleptic properties of beverages, particularly the proportion of sweet and sour taste. We examined the possibility of adjusting the pH up or down of wine, wine must and apple cider by electrodialysis with bipolar membranes. This was followed by sensory evaluation of original and modified samples. The process and operating properties were also evaluated. For our samples the most suitable value to move the pH up was showed, the change of 0.5 units. At pH shift down, we observed fouling with precipitated calcium hydroxide in some samples. Therefore, in this respect is not yet possible with industrial application without further research.

\textit{Keywords:} \textit{pH adjustment; EDBM (electrodialysis processes with bipolar membranes); Bipolar membrane; Beverages; Wine; Cider; Wine must; Apple juice; Acidification; Deacidification}

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