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Assessment of the Nutritional Parameters of Tomato (*Solanum lycopersicum* L.) Genotypes Under Hedgerow Conditions, preliminary study

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Tomato (*Solanum lycopersicum* L.) is grown worldwide in open fields and greenhouses in a range of climate conditions. Hedgerows or windbreakers could help increase tomato tolerance by directing abiotic and biotic factors.

This study experiment was conducted at the Soroksár Experimental and Research Farm of the Hungarian University of Agriculture and Life Sciences during the 2022 summer session. The aim of the experiment was to investigate the influence of hedgerow technology on tomato plants' nutritional traits such as N, P, K and chlorophyll and carotene levels, as well as to compare the performance of the cultivation system on protected and exposed sides of hedgerows.

The results suggest that potassium and carotene, as well as chlorophyll b levels are less differed among the protected and exposed side, while the others were impacted from a certain extent; nitrogen and chlorophyll content was generally higher on the exposed side regardless of variety, while in the case of phosphorus adverse effects were observed. Distance from the hedge showed similar patterns in the case of all traits. The results of the study will help to better understand the impact of alternate technologies on tomato production related to nutritional parameters in open-field conditions.

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COMPARISON OF THE EFFECT OF ORGANIC ACID MIXTURE ON QUALITY PARAMETERS OF RED DEER AND BEEF

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This study investigates the effect of lactic acid and ascorbic acid mixture on the quality parameters of red deer and beef. In this study, red deer round and beef round were treated with 2% lactic acid and 2% ascorbic acid mixture with spray method. After treatment samples were stored at $4 \pm 1^\circ\text{C}$ for 21 days. The meat quality parameters evaluated were pH, color, and microbiological count in day 1, 7, 14, and 21. The results showed that the pH of the treated samples was slightly higher than the non-treated samples, indicating that the lactic acid and ascorbic acid mixture had a mild acidifying effect on the meat. The color of the treated and non-treated samples did not show any significant difference, suggesting that the mixture did not affect the color of the meat. However, the microbiological count in the treated samples was lower than that of the non-treated samples, indicating that the mixture had a positive effect on reducing the microbial load in the meat. These findings suggest that lactic acid and ascorbic acid mixture could be used as a natural preservative to enhance the microbial safety of red deer and beef meat.

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