

COMPARISON OF FROZEN AND PICKLED STORAGE METHODS FOR EDIBLE GRAPEVINE LEAVES

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Grapevine leaves, which are the main ingredient of the stuffed vine leaves have an important place in traditional Turkish cuisine. In this study, effects of storage methods including traditional pickled leaves and frozen (-18°C) on the physico-chemical, microbiological and sensory features of edible grapevine leaves was investigated. For this purpose, fresh grapevine leaves of *Vitis vinifera* L. variety Yapıncak were boiled in 0.5% citric acid + 1% salt-containing water for 1-2 minutes, cooled then packaged in plastic vacuum bags and stored in deep-freezer at -18°C. Meanwhile in traditional method, grapevine leaves were subjected to fermentation in brine containing 14.5% salt + 1% citric acid at room temperature for 5 weeks. Pickled grapevine leaves stored at room temperature. In order to determine properties of frozen and pickled grapevine leaves, some physico-chemical, microbiological and sensorial analyzes were performed at the end of six months of storage. According to the results of physico-chemical, microbiological and sensorial analysis; frozen samples had significantly lower concentrations of dry matter and crude fiber content however titratable acidity, pH, reducing sugar and L*, a*, b* values were higher as compared with the pickled leaf samples. Total mesophilic aerobic bacteria, total yeast-mold and lactic acid bacteria numbers of pickled leaf samples were measured as 2.78 log₁₀ cfu/g, 2.65 log₁₀ cfu/g and <1 log₁₀ cfu/g respectively. On the other hand, microbial counts for frozen leaf samples were under the limit of detection (<1 log₁₀ cfu/g). Sensorial analysis scores didn't show any difference between frozen and pickled samples.

Keywords: Grapevine leaves, pickled storage methods, Yapıncak

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