

## **Production and Evaluation of Mango Pulp by Using Ohmic Heating Process**

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**Abstract :** The present work aimed to study the use of ohmic heating in the processing of mango pulp comparing to conventional method. Mango pulp was processed by using ohmic heating under the studied suitable conditions. Physical, chemical and microbiological properties of mango pulp were studied. The results showed that processing of mango pulp by using either ohmic heating or conventional method caused a decrease in the contents of TSS, total carbohydrates, total acidity, total sugars (reducing and non-reducing sugar) and an increase in phenol content, ascorbic acid and carotenoids compared to the conventional process. The increase in electric conductivity of mango pulp during ohmic heating was due to the addition of some electrolytes (salts) to increase the ions and enhance the process. The results also indicate that mango pulp processed by ohmic heating contained more phenols, carbohydrates and vitamin C and less HMF compared to that produced by conventional one. Total pectin and its fractions had slightly reduced by ohmic heating compared to conventional method. Enzymatic activities showed a reduction in poly phenoloxidase (PPO) and polygalacturonase (PG) activity in mango pulp processed by conventional method. However, ohmic heating completely inhibited PPO and PG activities.

**Keywords :** ohmic heating, mango pulp, phenolic, sarotenoids

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