

Design Application Details

Application Number:

367141-001

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Design Application Status

Application Status:

Application Under Process(wating for Technical Examination)

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Design Application Details

Application Number:

368877-001

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204600

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Design Application Status

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Design Application Details

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362825-001

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Micro filtration of *Moringa Oleifera* juice using hallow fibre membrane technology for clarification

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Abstract---Moringa Oleifera plant is growing many countries including tropical and sub tropical region. It contain numerous nutrition due to vitamins and proteins. The plant leaf extract having phenolics and flavanoids such as gallic acids, chlorogenic acid, ferulic acid, kaempferol, ellagic acid, vanillin and quercetin. The juice is convenient to herbal health drinks combination of different medicinal juices, read to use and serve beverages etc. Moringa Oleifera leave juice has been extracted by grinder then juice were treated with enzyme and centrifuged. The treated juice were clarified by using hallow fibre micro membrane for cold pasteurization. The turbidity, total soluble solid, pH, refractive index, viscosity colour and clarity were analysed on different treatment. It was concluded that best results were obtained in terms of Clarity (47.62%T), Turbidity (5.333 NTU), TSS (5.933°B), pH (5.2725%), Viscosity (1.136667 mPa) for micro filtered juice. The optimum values for the operating condition of micro filtration were 98.0665 kpa pressures with 0.45 µm pore size.

Keywords---Micro filtration, *Moringa Oleifera*, hallow fibre.

Introduction

Moringa Oleifera is a native tree plant from Asia and Africa. It is mostly grown in India, Africa, South America, Mexico and Philippines (Paul & Didia 2012). Now days the Moringa is used as a rich source of food and food products due to its considerable inherent nutritional, antioxidant and phytochemical benefits; as well as its ability to survive in diverse climatic conditions. It has multi-functional utilities in agriculture, medicine, live stock, human and other biological systems (Falowo et al 2018, Ndubuaku et al 2015). The trees many parts such as leaf,