

***PREPERATION OF HERBAL BUTTER BY USING
BUFFALO MILK***

by

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Theses submitted in partial fulfillment of the requirements for the Degree of Master of Science (Food Science and Technology) of the Faculty of Applied Science , University of Sri Jayawardenapura , Nugegoda , Sri Lanka.

DECLARATION

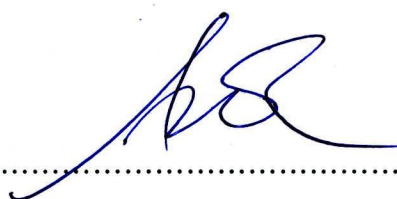
The work describe in this thesis was carried out by me at the university of Sri Jayawardenapura under the supervision of Ptofessor Arther Bamunuarachchi and a report on this has not been submitted to any University for another Degree.

Date: 10 - 03 - 2009



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I Dedicate this thesis to My Parents

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Preparation of herbal butter by using Buffalo milk

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ABSTRACT

Aim of this study is to prepare a herbal product using Buffalo milk.

Different varieties of herbal buffalo milk butter was prepared using raw Gotukola. The method used to prepare the butter followed the same way as cow's milk butter preparation method.

The preparing different butter, raw Gotukola extraction, Oven dried Gotukola fine powder and green coloring were used .

Finished products were chemically, microbiologically and sensory tested to observe whether they tally with S.L.S.I standard and consumer acceptability. Cost of the finish product also calculated.

Chemically tested results of the butter with Gotukola extraction for Moisture 43.2%, fat 44%, salt 0.98%, and Acid 0.2% wile results of butter with Gotukola fine powder for Moisture 35.2%, Fat 48%, Salt 0.41%, Acid 0.21% were obtained. Microbiologically all were negative.

According to the study the products of herbal butter using buffalo milk and gotukola were chemically and microbiologically more or less tallied with the S.L.S.I standards and most of the products were reached the consumer acceptability. Products were cost effective.

Chapter 1

Introduction

Buffalo husbandry has been an important economic activity and an integral component of agriculture in several regions of the world. Buffaloes are now considered an efficient milk animals, and their population is increasing fast.

Buffalo milk is reputed for its richness and creaminess. It has a higher proportion of Fat, Protein, Lactose and minerals as compared to cow milk.

Most of the prevalent processing technologies, apparently originated in the world, where cow milk and milk products predominate. Therefore, the processing strategies were essentially based on the knowledge of the chemistry and functionality of cow milk. With the emergence of Buffaloes as a prominent milk species particularly in countries of Asia, Africa and Latin America, coupled with rapid dairy development, efforts have been made to develop and adopt appropriate technologies for Buffalo milk processing.

In Sri Lanka most of the farmers make curd using Buffalo milk. They are reluctant to prepare any other food from excess Buffalo milk than curd. Although previous researches have done to prepare buffalo milk based products like yoghurt and butter, still farmers are not practicing to prepare butter in their farms. This research is an attempt to fill the gap. In this research Buffalo milk and raw Gotukola was used to prepare a value added herbal

butter to increase the optimum utilization of milk with high nutritional value and by the way to increase the income of farmers.

Then the finished products were chemically and sensory tested to check whether the product satisfy the S. L .S. I requirements and consumer acceptability.