

**DEVELOPMENT OF TEA EXTRACT FORTIFIED FRUIT  
(PAPAYA) BAR**

**BY**

**ELLORA CHUTIA**

**FPT09015**

**THESIS SUBMITTED TO THE  
DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY  
TEZPUR UNIVERSITY**

**IN PARTIAL FULFILMENT OF THE REQUIREMENT  
FOR THE AWARD OF THE DEGREE OF**

**MASTER OF TECHNOLOGY**

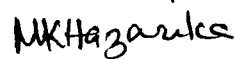
**IN**

**FOOD PROCESSING TECHNOLOGY**

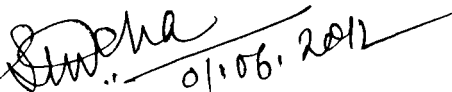
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### **Certificate of the Head of the Department**

This is to certify that Ms. Ellora Chutia a student of the Department of Food Engineering and Technology, Tezpur University, Assam has successfully completed the project work entitled “Development of Tea Extract Fortified Fruit (papaya) Bar” as a partial fulfillment of M. Tech degree in Food Processing Technology under the supervision of Dr. M. K. Hazarika, Associate Professor, Department of Food Engineering and Technology, Tezpur University, Tezpur and Dr. (Mrs.) Sabitri Baruah, Biochemist, Tocklai Experimental Station, Tea Research Association (TRA), Jorhat.

Place: Tezpur University

Date : 15-05-2012

  
(S.C. Deka)



**DEPARTMENT OF FOOD ENGINEERING AND TECHNOLOGY**  
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**CERTIFICATE BY THE SUPERVISOR**

This is to certify that the project entitled “**Development of Tea Extract Fortified Fruit (papaya) Bar**” submitted by Ms. Ellora Chutia, Roll no. FPT09015, to the Department of Food Engineering and Technology, Tezpur University in partial fulfillment of M. Tech. degree is a bona-fide record of the investigation carried out by her jointly under supervision of my and Dr. (Mrs.) Sabitri Baruah, Biochemist, Tocklai Tea Research Association, Jorhat. To the best of my knowledge the report embodies an account of her findings and is valid for the purpose for which it is submitted.

A handwritten signature in black ink, appearing to read 'MK Hazarika'.

(M. K. Hazarika)  
Supervisor

Place: Tezpur University  
Date: 15/05/2012



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Dr. (Mrs.) Sabitri Baruah, M.Sc., Ph.D

Biochemist

Biochemistry Department

**CERTIFICATE**

This is to certify that the thesis entitled "Development of Tea fortified fruit (papaya) bar" which is being submitted by Ms. Ellora Chutia for her M. Tech Major project work is a record of bona-fide Applied Research carried out by her in the Department of Biochemistry, Tocklai Experimental Station of Tea Research Association, Jorhat, Assam under my supervision and guidance. She has fulfilled all the requirements for the submitting the thesis for the completion of her M. Tech degree in Food Processing technology.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or Diploma.

*Sabitri Baruah.*

Date: 08-05-2012

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## DECLARATION

I hereby declare that the Project Work entitled “Development of Tea<sup>Extract</sup> Fortified Fruit (papaya) Bar” was carried out by me at the Department of Food Engineering and Technology, Tezpur University, Tezpur under the guidance of Dr. M. K. Hazarika, Associate Professor, Department of Food Engineering and Technology, Tezpur University, Tezpur and Dr. (Mrs.) Sabitri Baruah, Biochemist, Tocklai Experimental Station, Tea Research Association (TRA), Jorhat.

This Report is being submitted as a Major Project Report for the partial fulfillment of M. Tech. degree in Food Processing Technology by Tezpur University, Tezpur.

I further declare that this Project or any part of it has not been submitted elsewhere for any other degree or diploma to any other University/Institute.

Place: Tezpur

Date : 15-05-2012

Ellora Chutia  
( Ellora Chutia )

Roll No- FPT 09015.

## AKNOWLEDGEMENT

I am overwhelmed to avail this rare opportunity to evince my profound sense of gratitude and regard to my advisor Dr. M. K. Hazarika, Associate Professor, Dept. of Food Engineering and Technology, Tezpur University, Tezpur for his disciplined attitude, inspiring and valuable guidance, authentic suggestions with constructive criticism and soothing affection time throughout the course of investigation and preparation of this manuscript.

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My special thanks to Dr. M. Hazarika, Director, Tocklai Experimental station, Tea Research Association (TRA), Jorhat Assam for giving me the opportunity to carry out a part of my M.Tech. Mini Project from the renowned Organization. It's my immense pleasure to extend my cordial thanks and express my indebtedness to Dr. (Mrs.) Sabitri Baruah, Biochemist, Tocklai Experimental Station, Jorhat for her kind guidance, careful supervision and valuable suggestions throughout the period of study.

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Place: Tezpur

Date: 15-05-2012

*Ellora Chutia*  
(Ellora Chutia)