

CERTIFICATE

This is to certify that

RINI

Andalas University-INDONESIA

Has orally presented a paper entitled

Nutritional Component of Rendang

At mini-symposium on **Utilization of Bioresources**
Shobara City, Japan - October 24, 2013

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Faculty of Life and Environmental Sciences
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In collaboration with

Faculty of Agricultural Technology, Andalas University
Padang, Indonesia

King Mongkurt University of Technology Thornburi-Thailand
KhongKaen University-Thailand
Kassetsart University-Thailand



Prof. Dr. Kohei Irifune

Dean

Mini-Symposium
「Utilization of Bioresources」

ABSTRACTS

24th, October, 2013
Shobara campus
Prefectural University of Hiroshima
Japan

Organized by
Faculty of Life and Environmental Sciences,
Prefectural University of Hiroshima

13:10~13:25

**ACETONE-BUTANOL-ETHANOL PRODUCTION FROM LIGNOCELLULOSIC
MATERIALS**

Ariyah Terasawat, Ph.D. student

**Department of Microbiology, Faculty of Science,
King Mongkut's University of Technology Thonburi**

13:25~13:40

**Isolation and Characterization of Bacteriocin Produced by Budu, A Traditional
Fermented Fish Product Of West Sumatera**

Yusra¹, Fauzan Azima, Novelina² and Periadnadi³

**¹Graduate Program Andalas University, ²Departemen of Agricultural
Processing Technology, Faculty of Agricultural Technology,**

**³ Department of Biology, Faculty of Matematics and Natural Sciences,
Andalas University, Padang, 25163, Indonesia**

13:40~14:05

NUTRITIONAL COMPONENTS OF RENDANG

Rini*), Fauzan Azima), Kesuma Sayuti **), Novelina**)**

***) Ph.D. Student of Agriculture Technology Faculty**

*****) Lecturer of Agriculture Technology Faculty, Andalas University**

14:05~14:20

Direct Seeding Method using Iron-coated Rice Seeds

Yuuki Chikawa and Tomio Itani,

**Faculty of Life and Environment Sciences, Prefectural
University of Hiroshima, Shobara, 727-0023 Japan,**

NUTRITIONAL COMPONENTS OF RENDANG

Rini), Fauzan Azima**), Kesuma Sayuti **), Novelina**)*

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Abstract

Rendang is a traditional food of Minang Kabau ethnic in Indonesia which is basic ingredients are consist of beef meat, coconut milk and many kind of spices. The cooking process of rendang will take hours (5-7 hours). During the process, all the ingredients should be carefully stirred until all the liquids evaporated and allowing the meat absorb the spicy condiments. Spices used in rendang are known as aromatic component, natural antimicrobial, antioxidant substances and as organic preservatives. The numerous type of spices used make rendang having complex and unique taste. Rendang can last for one week stored in room temperature, even last in about a month if stored in refrigerator, and up to six months if frozen.

The main objective of the research is to evaluate the nutritional values, to characterize the aromatic components in rendang and to study the shelf life of rendang in different condition.

This paper is presenting the preliminary results of the research. The result shown that the nutritional components of rendang are changes, the content of protein, fat, ash and carbohydrate are going up compare to the fresh meat. The findings indicated that the cooked rendang contained oleic acid ($\omega 9$) 6,95%, linoleic acid ($\omega 6$) 1,47%, dokosaheanoat acid ($\omega 3$) 0,18%, free faty acid contents 0,28%, the peroxide number and trans fatty acid are not detected.

Key words: *beef meat, coconut milk, spices, rendang, nutrition.*