

Security in food, renewable resources, and natural medicines



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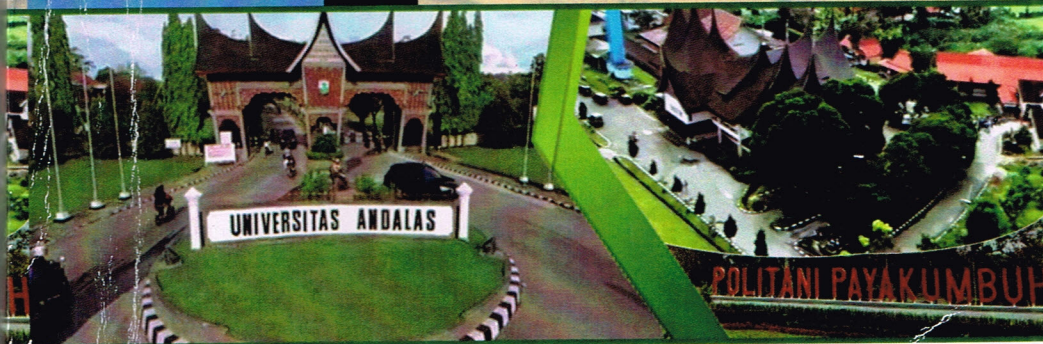
In collaboration with Indonesian Society of Agricultural Engineers

The 2nd International Conference on Security in Food, Renewable resources, and Natural Medicines 2018 (SFRN 2018)



Editor: MUHAMMAD MAKKY

Convention Hall, Universitas Andalas
Padang, West Sumatra, Indonesia
October 25-26, 2018



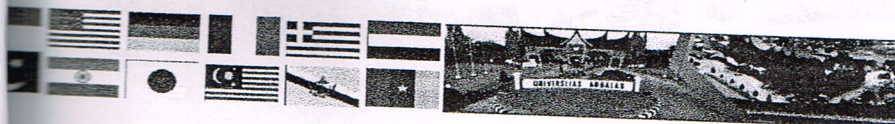
Book of Abstracts & Programme Book

The 2nd International Conference on Security in Food, Renewable resources, and Natural Medicines (SFRN) 2018

OCTOBER 25-26, 2018

CONVENTION HALL, UNIVERSITAS ANDALAS

PADANG, WEST SUMATERA, INDONESIA



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Welcome Message
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R. Sanjay
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Conference Programs

2nd International Conference on Security in Food, Renewable Resources, and Natural Medicines (SFRN) 2018

Day-1

Convention Hall, Universitas Andalas, 25 October 2018

No	Time	Activities
1	07.00-08.00	Registration
	08.00-08.30	Opening Ceremony Venue: Convention Hall, Andalas University MC: TBA
2	08.00-08.15	Recital of the Holy Quran
3		Indonesia Raya (National Anthem)
4		Welcome Dance "Tari Pasambahan"
5	08.15-08.18	Welcome Message from Conference Chair (Dr. Eng. Muhammad Makky)
6	08.18-08.21	Welcome Speech from Head of Institute for Research Community Services Andalas University (Dr. Ing. Uyung Gatot S. Dinata)
7	08.21-08.23	Remarks from the Director of Politani Pertanian N Pajakumbuh (Dr. Elvin Hasman, MP)
8	08.23-08.26	Note from PERTETA-Indonesian Society of Agric. Engineering
9	08.25-08.30	Opening Ceremony by Rector of Andalas University (Prof. Taffil Husni, SE, MBA, Ph.D)
	08.30-08.30	Plenary Session Venue: Convention Hall, Andalas University MC: Yesi Puspita
9	Session Chair: TBA	
	08.30 - 09.00	Prof. Dr. Konstantinos A. Paschalidis Technological Educational Institute of Crete School of Agricultural Technology & Food Technology GREECE "Nitrogen Flow and Polyamines in Plant Abiotic Stress"
	09.00 - 09.30	Prof. Dr. Eiji Morimoto Tottori University

Food, Renew
SFRN) 2018

October 201

University

Research

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Ag. Engineering
University

Technology GREECE
biotic Stress"

No	Time	Activities
		Faculty of Agriculture Laboratory of Bio-systems Engineering, JAPAN "Cyber Physical Techniques to Precision Agriculture in Japan".
	09.30 - 10.00	Dr. -Ing. Uyung Gatot S. Dinata Head, Institute for Research and Community Services Andalas University, INDONESIA "Regional Innovation System For Agricultural Industry In West Sumatra"
	10.00 - 10.30	Dr. M. R. Sanjay Department of Mechanical Engineering, M S Ramaiah Institute of Technology, INDIA "Natural Fibers and its Composites as Perspective Materials"
	10.30 - 10.45	Coffee Break Chorus Performance By UKOS UNAND
	10.45 - 12.15	Parallel Sessions 1 Venue: Convention Hall, Parallel Rooms No. 1-5 Andalas University
		Food Production, Post-Harvest and Agricultural Engineering: Room 1
	10.45 - 10.55	O-714/UA/PLT/IC-SFRN 2018 Simultaneous Removal of Ammonium and Phosphorous from Cow Farm Wastewater by Struvite Precipitation Method
	10.55 - 11.05	O-715/UA/PLT/IC-SFRN 2018 Drying Air Temperature Profile of Independent Hybrid Solar Dryer for Agricultural Products in Respect to Different Energy Supplies (a Research Note)
	11.05 - 11.15	O-716/UA/PLT/IC-SFRN 2018 Observed Performances of the Hybrid Solar-Biomass Dryer for Fish Drying
	11.15 - 11.25	O-717/UA/PLT/IC-SFRN 2018 Fish Bone Gelatine Hydrolysates from Pangasius catfish as Dipeptidyl Peptidase IV (DPP-IV) Inhibitor
	11.25 - 11.35	O-762/UA/PLT/IC-SFRN 2018 Application of field monitoring system (fms) on system of rice intensification (si) methods to support precision agriculture in Indonesia
	11.35 - 11.45	O-763/UA/PLT/IC-SFRN 2018 Development of Cost-Effective Plant Monitoring System to Study the Circadian Rhythmic Behaviour
	11.45 - 11.55	O-764/UA/PLT/IC-SFRN 2018 Shell of Palm Oil For Coating Of Coal Briquete For Initial Burning Easily

Physicochemical and Functional Properties of Red Rice Flour (Orpa Sa...)
Application to Mochi Cake

Fauzan Azima¹, Kesuma Sayuti¹, Anggun Permata Sari²

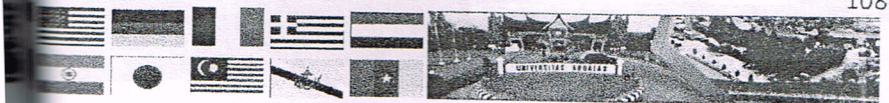
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ABSTRACT

This research was aimed to determine the physicochemical and functional properties of red rice flour from several local cultivar and sensory properties from mochi cake. Red rice flour analyzed were cultivar red rice Padi Ladang Merah, red rice Siarang, red rice Padi Telur, red rice Surian, red rice Sungai Abu. The results of the physical analysis of red rice flour were the shape of granules starch (oval and polygonal) and the color of the red rice (yellow). The results of chemical analysis red rice flour were water content (5.12-6.10%), ash content (0.67-1.56%), fat content (1.15-4.07%), protein content (8.04-8.92%), starch content (58.77-59.60%), amylose content (8.65-13.60%) and antioxidant activities (12.50-17.00% in 104ppm solution). The results of the functional properties analysis of red rice flour were water absorption capacity (1.08-1.55 g/g), oil absorption capacity (1.14-1.67 g/g), Freeze-Thaw Stability (85.45-95.24%), swelling power at 95°C (9.79-11.95 g/g), solubility (2.81-8.75%), the beginning temperature of gelatinization (32.2-76,8°C), maximum viscosity (1289-2733 BU), setback (1181-1651 BU), breakdown (668-1648 BU), the stability (639-(-251) BU). Product made of the starch was mochi cake of red rice flour from South Solok. Red rice flour from South Solok was selected because it has lower amylose content than the other red rice. But need further research on the characteristics of the mochi

Keywords : red rice flour, physicochemical properties, functional properties, mochi cake



Certificate of Participation

This is to certify that

Fauzan Azima

has Presented a paper titled

Physicochemical and Functional Properties of Red Rice Flour (*Oryza sativa*, L) and Its Application to Mochi Cake

at The 2nd International Conference on

Security in Food, Renewable Resources and Natural Medicines 2018 (SFRN 2018)

Held between 25-26 October 2018, at the Convention Hall, Universitas Andalas, Padang West Sumatra, Indonesia

Head,
Institute for Research
& Community Services,
Andalus University

Director,
Agricultural State Polytechnic of
Payakumbuh

Conference Chair
SFRN 2018

(Dr. -ing. Uyung Gatot S. Dinata)

(Ir. Elvin Hasmar, MP)

(Dr. Eng. Muhammad Makky)

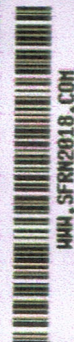
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