

CONFERENCE PROGRAMME PAPERS ABSTRACTS



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Inclusive Agri-food Energy Production for Community Empowerment in a Changing Climate

ENERGY CONSERVATION AND ITS MANAGEMENT: AN OBSERVATIONAL FROM INDIA

Energy-13	<p>Nirvanjan Sahoo¹ and Ms Sumegna Panda² ¹Department of Rural Management, Xavier Institute of Social Service, Ranchi-834001, India. Email: nirvanjan7722india@gmail.com +91 9431109677 ²Ms Sumegna Panda is an Ex-Student of Rural Management, Xavier Institute of Social Service, Ranchi-834001 India. Email: +91 9114286025 sumegna.panda14@gmail.com</p>
Energy-13	<p>EFFICIENCY OF BKWP SUN TRACKING PHOTOVOLTAIC IN PALEMBANG - INDONESIA Nova Pasaribu¹, Rizdianasar¹, Aida Syarif² ¹Applied Master of Renewable Energy Engineering, Fakultas Teknik Negeri Sriwijaya, Jl. Lingsya Negeri, Palembang 30119, Indonesia Email: nova.pasaribu@pertsarindo.com ²Chemical Engineering Department, Fakultas Teknik Negeri Sriwijaya, Jl. Sekeloa Negara, Palembang, 30139, Indonesia Corresponding author: rizdianasar@pertsarindo.com</p>
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Energy-15	<p>FLAME COMBUSTION PERFORMANCE OF CANNA EDULIS KERR BIOETHANOL FUEL OIL BLEND Muhaji¹ Department of Mechanical Engineering, Universitas Negeri Surabaya, Surabaya, Indonesia. E-mail: muhaji1@unns.ac.id</p>

FOOD FOOD SCIENCE AND TECHNOLOGY

Food-01	<p>THE OXIDATION OF FATS THAT OCCUR DURING STORAGE OF DENDING USING A VARIOUS OF SPICES Rina Yerrina, Gunaril Taili, Mia Fitri Rahmayanti Faculty of Agricultural Technology, Andalas University Padang 25161, Indonesia. Email: yerrinarusdi@yahoo.co.id</p>
Food-02	<p>THE EFFECT OF SORGHUM FLOUR (SORGHUM BIGOLOR L. MOENCH) ADDITION TO CHARACTERISTIC QUALITY OF GOAT MILK SINBIOTIC YOGHURT CANDIDATE Ratih Utami¹, Een Sukarminah¹, Indira Lanti¹ ¹Department of Food Industrial Technology, Universitas Jember, Jl. Bawing-Sumedang km 71 Jatinangor 45162, West Java, Indonesia. Email: een.sukarminah@yahoo.com</p>
Food-03	<p>ADENINE, GUANINE, XANTHINE AND HYPOXANTHINE CONTENT FROM VARIOUS INDONESIAN FOOD Rina Yerrina, Kesuma Sayuti, Cesar Welya Refdi Faculty of Agricultural Technology, Andalas University, INDONESIA yerrinarudi@se.unand.ac.id</p>
Food-04	<p>PRODUCTION OF FUNCTIONAL INSTANT PORRIDGE FROM PUMPKIN AND SOYBEAN FLOURS MIXED WITH CASSIA VERA AND CIPLUKAN EXTRACTS FOR DIABETIC FOOD Fauzan Azima, Kesuma Sayuti, and Dini Novita Sari Department of Agricultural Technology Product, Faculty of Agricultural Technology, Andalas University Padang 25161, West Sumatra, Indonesia. Email: fauzanazima@un.unand.ac.id and dinisari@unand.ac.id</p>
Food-05	<p>CHARACTERISTIC OF MIXED FLOUR BY GINGER ADDITION ON "MOCAF" FLOUR AS MAIN RAW INGREDIENT Kesuma Sayuti, and Novelina Faculty of Agricultural Technology Andalas University, Kampus Unsu Maris, Padang, INDONESIA 25163 Corresponding author: kesuma@unand.ac.id</p>
Food-06	<p>EVALUATION OF QUALITY OF VARIOUS TYPES OF RENDANG (EEL, LOKAN, EGG, REJECTED-CHICKEN AND REJECTED-DUCK) Rini¹, Fauzan Azima¹, Ismed¹, Rizki Eliatia¹ ¹Lecturer of Agricultural Product Technology ²Student of agricultural Product Technology Faculty of Agricultural Technology, Andalas University 25163. Email: rini@unand.ac.id</p>
Food-07	<p>INFLUENCE OF DADIH AND ZINC SUPPLEMENTATION SINCE PREGNANCY ON IMMUNE RESPONSE AND NUTRITIONAL STATUS OF INFANT'S BIRTH Hectriska¹, Surono P. ¹Department of Nutrition, Faculty of Public Health, Andalas University of Padang - 25144, Indonesia. Email: hectriska@gmail.com ²Department of Food Technology, Faculty of Engineering, SINUS Universit - 15143, Indonesia. Email: surono@sinus.edu</p>
Food-08	<p>THE CONTENTS OF DIETARY FIBRE FROM SEVERAL TYPE OF "KARAK KALIANGS" Ermilati¹, Suci Desrianti¹, Guzmilini², Rince Alia Faceri³, Mutia Elida⁴ ¹Department Food Technology, Agricultural Polytechnic of Payakumbuh. Email: ermilati@paysat.ac.id</p>
Food-09	<p>SENSORY EVALUATION ON THE NUGGET BASED ON SURIMI-LIKE MATERIAL OF SPENT LAYING HEN MEAT Mutia, D¹, Amir, Y.S¹, Elida, M¹ ¹Animal Husbandry Program, Payakumbuh Agriculture Polytechnic, Jalan Raya Negara Tanjung Petai Km 7, Kabupaten Lingsopuh, Lingsopuh Kecamatan Marau, West Sumatra, 26271, Indonesia. Email: mutia@paysat.ac.id</p>

FOOD-07 INFLUENCE OF DADIH AND ZINC SUPPLEMENTATION SINCE PREGNANCY ON IMMUNE RESPONSE AND NUTRITIONAL STATUS OF INFANT'S BIRTH

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Abstract— Dadih is an Indonesian traditional fermented buffalo milk produced and consumed by the West Sumatran Minangkabau ethnic group of Indonesia. It's a local food Minangkabau people that have nutrients composition and bacteriology characteristics considered beneficial for human health. The objective of this study was to evaluate the influence of intervention dadih and zinc supplementation during pregnancy on sIgA gastrointestinal level and nutritional status of infant's birth. The design of this study was randomized controlled trial, conducted in Bukittinggi City and Agam Regency, West Sumatera Province. The population in this study were pregnant women at 16-17 weeks of gestation or in the last 2 trimesters of pregnancy which of 118 pregnant mothers randomly assigned three groups. The pregnant mothers on dadih group received a tube dadih (100 gram) six times a week and one packed zinc sulfate tablet weekly and they have to consume 20 mg daily in the morning for six month intervention. After six month, zinc serum, secretory immunoglobulin A (sIgA) and anthropometrics of infants were measure. In this study there was a decrease of sIgA levels in all three groups. In the dadih group, the sIgA level decreased to 1773 ± 1401 (a decrease of 178 ng / ml), in the dadih with zinc group the sIgA level decreased to 2528 ± 1015 (a decrease of 50 ng / ml) and in the control group to $1299 \pm 927 \text{ ng / ml}$ (a decrease of 245 ng / ml). The average birth weight of the baby is 3238 grams , and the average birth length is 49.53 cm . We found that about 60.0 percent of infants in dadih group had birth weight $> 3000 \text{ grams}$ and 45.8 percent of infants in all groups had birth weight $> 3000 \text{ grams}$. Only 4.5 percent of mothers gave birth to babies $< 2500 \text{ grams}$. Most mothers gave birth to a baby with body length of $48-50 \text{ cm}$ and 36.2 percent of infants had a body length greater than 50 cm . The results showed significant differences infant's nutritional status but have strong enough influence in maintaining the total sIgA in the gastrointestinal tract over a longer period of time for both mothers and infants. Dadih should be intake for pregnant mothers as food supplementation and the benefits for the outcomes.

Keywords— Keyword: Dadih, zinc supplementation, immune response, nutritional status, infants, West Sumatera, Indonesia

FOOD-08

THE CONTENTS OF DIETARY FIBRE FROM SEVERAL TYPE OF "KARAK KALIANGS"

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Abstract— The diets rich in fibre such as vegetables have a positive effect on health since their consumption has been related to decreased incidence of several diseases. This study aimed to analyze the quality of several type of "karak kaliangs" based on its dietary fibre (TDF), insoluble dietary fibre (IDF), and soluble dietary fibre (SDF) contents. There were four separated treatment to assess the dietary fibre of karak kaliang. The first was A (50% cassava flour + 50% fresh carrot); the second was B (50% cassava flour + 50% fresh purple sweet potato); the third was C (50% cassava flour + 50% fresh caisin); and the fourth was D (50% cassava flour + 50% fresh red spinach). The results of the study showed that the TDF, IDF, and SDF contents range between 8.74-11.47%, 4.75-6.57%, 3.55-5.55%, respectively. Interestingly, the majority of several type karak kaliangs 40-51% of TDF as SDF. These results indicate that carrot, purple sweet potato, caisin, and red spinach are rich sources of TDF and SDF.

Keywords— karak kaliang; dietary fibre; vegetables; tuber; content

FOOD-09

SENSORY EVALUATION ON THE NUGGET BASED ON SURIMI-LIKE MATERIAL OF SPENT LAYING HEN MEAT

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Abstract— Surimi-like material based on spent laying hen meat is used to processed nugget products. In nuggets processing used ratio of broiler meat (BM) and spent layer hen meat surimi (SLMS): 100% BM, 100% SLMS, 25% BM and 75% SLMS, 50% BM and 50% SLMS, 75% BM and 25% SLMS. Sensory evaluation in this experiment was conducted using more than 100 panels who were divided into different groups such as students, housewife, and employee. Sensory to evaluate the color, odor, texture, taste, and overall acceptability for each formulation. Five-point hedonic scales were used for this sensory (1 = dislike; 2 = dislike slightly; 3 = neither like nor dislike; 4 = like slightly; 5 = like). The result showed that there were no significant different ($P > 0.05$) for color and odor but were significant different ($P < 0.05$) for texture and taste of nuggets. There was no significant different ($P > 0.05$) for overall acceptability with the highest score was 4 on nugget formulation using 50% BM and 50% SLMS.

Keywords— sensory evaluation, nugget, surimi