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PAPERS ABSTRACTS

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

SAFE NETWORK
Asia Pacific Network for Sustainable Agriculture, Food and Energy

Energy-12	**ENERGY CONSERVATION AND ITS MANAGEMENT: AN OBSERVATIONAL FROM INDIA** Niranjan Sahoo[1] and Ms Sumagna Panda[2] [1]Department of Rural Management, Xavier Institute of Social Service, Ranchi-834001, India +91 9431109077 [2]Ms. Sumagna Panda is an Ex-Student of Rural Management, Xavier Institute of Social Service, Ranchi-834001 India +91 9114386025
Energy-13	**EFFICIENCY OF 8KWP SUN TRACKING PHOTOVOLTAIC IN PALEMBANG - INDONESIA** Nova Pasaribu[1], Rusdianasari[2], Alda Syarif Applied Master of Renewable Energy Engineering, Politeknik Negeri Sriwijaya, Jl. Srijaya Negara, Palembang 30139, Indonesia E-mail: nova.pasaribu@pertamina.com Chemical Engineering Department, Politeknik Negeri Sriwijaya, Jl. Srijaya Negara, Palembang 30139, Indonesia Corresponding author: rusdianasari@polsri.ac.id
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Energy-15	**FLAME COMBUSTION PERFORMANCE OF CANNA EDULIS KERR BIOETHANOL FUEL OIL BLENDS** Muhaji[*] Department of Mechanical Engineering, Universitas Negeri Surabaya, Surabaya, Indonesia, E-mail: muhaji61@unesa.ac.id
FOOD	**FOOD SCIENCE AND TECHNOLOGY**
Food-01	**THE OXIDATION OF FATS THAT OCCUR DURING STORAGE OF DENDENG USING A VARIOUS OF SPICES** Rina Yenrina, Gusarif Taib, Mia Fitri Rahmayanti Faculty of Agricultural Technology, Andalas University, Padang 25163, Indonesia. Email: yenrinarusdi@yahoo.co.id
Food-02	**THE EFFECT OF SORGHUM FLOUR (SORGHUM BICOLOR L. MOENCH) ADDITION TO CHARACTERISTIC QUALITY OF GOAT MILK SINBIOTIC YOGHURT CANDIDATE** Ratih Utami[1], Een Sukarminah[1*], Indira Lanti[1] [1]Departement of Food Industrial Technology, Universitas Padjadjaran, Jl. Bandung-Sumedang km 21 Jatinangor 45363, West Java, Indonesia. [*]E-mail: een.sukarminah@yahoo.com
Food-03	**ADENINE, GUANINE, XANTINE AND HYPOXANTHINE CONTENT FROM VARIOUS INDONESIAN FOOD** Rina Yenrina, Kesuma Sayuti, Cesar Wellya Refdi Faculty of Agricultural Technology, Andalas University, INDONESIA yenrinarusdi@ae.unand.ac.id
Food-04	**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 25163, West Sumatera, Indonesia. Email: fauzanazima@ae.unand.ac.id and fauzandar@yahoo.com
Food-05	**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 Limau Manis, Padang, INDONESIA 25163. Corresponding author: kesuma@ae.unand.ac.id
Food-06	**EVALUATION OF QUALITY OF VARIOUS TYPES OF RENDANG (EEL, LOKAN, EGG, REJECTED-CHICKEN AND REJECTED-DUCK)** Rini[1], Fauzan Azima[1], Ismed[1], Rezi Elistia[2] [1]Lecturer of Agricultural Product Technology [2]Student of agricultural Product Technology Faculty of Agricultural Technology, Andalas University 25163. Email: rinibchar59@yahoo.com
Food-07	**INFLUENCE OF DADIH AND ZINC SUPPLEMENTATION SINCE PREGNANCY ON IMMUNE RESPONSE AND NUTRITIONAL STATUS OF INFANT'S BIRTH** Helmizar[1], Surono I[2], [1]Department of Nutrition, Faculty of Public Health, Andalas University of Padang – 25144, indonesia Email: [2]Departement of Food Technology, Faculty of Engineering, BINUS Universit – 15143, Indonesia Email:
Food-08	**THE CONTENTS OF DIETARY FIBRE FROM SEVERAL TYPE OF "KARAK KALIANGS"** Ermiati [*], Susi Desminarti[*], Gusmalini [**], Rince Alfia Fadri[**], Mutia Elida[***] [*] Department Food Technology, Agricultural Politechnic of Payakumbuh. E-mail:
Food-09	**SENSORY EVALUATION ON THE NUGGET BASED ON SURIMI-LIKE MATERIAL OF SPENT LAYING HEN MEAT** Muthia, D[1], Amir, Y.S[1], Elida, M[1] [1]Animal Husbandry Program, Payakumbuh Agriculture Polytechnic, Jalan Raya Negara Tanjung Pati Km. 7, Kabupaten Limapuluh Kota, Kecamatan Harau, West Sumatera, 26271, Indonesia. E-mail: muthia@yahoo.com

FOOD-10
CHARACTERISTICS OF SMOOTH MANGOSTANA DRINK TYPE FROM VARIOUS STARTER CONCENTRATIONS AND DILUTION LEVEL OF MANGOSTEEN PEEL EXTRACT

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Abstract— This study aims to determine the best concentration of starter and the best dilution level of skin powder extract in the processing of smooth mangostana drink type from mangosteen peel extract, the concentration of starter used was 2%, 4%, 6% and 8 dan, 10% with the dilution level of mangosteen peel extract 1:30; 1:40; 1: 50. Smooth mangostana drink type that produced will be analyzed for ph, total lactic acid, total phenol, and antioxidant activity. From the results of the study showed differences in starter concentration and dilution level of mangosteen peel extractand the interaction of both gave a significantly different effect on pH, total lactic acid, total phenol, and antioxidant activity of smooth mangostana drink type. The best concentration of starter in making drink type from mangosteen peel powder is 6% with a dilution level of 1:30 with a pH of 4,2, total lactic acid bacteria at 10^8 dilution levels could not be calculated , total phenol 17 mgGAE/g and antioxidant activity (% inhibition of 1000 ppm to 50 µM DPPH) 68.39%

Keywords—smooth mangostana, drink type and antioxidant

FOOD-11
SENSORY EVALUATION OF SMOOTHIE MANGOSTANA DRINK FROM MANGOSTEEN PEEL EXTRACT WITH CURD STARTER

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Abstract— This study aims to determine the best dilution level of peel powder extract and the best concentration of curd starter in processing of smoothy mangostana drink from mangosteen peel extract. This research used factorial completely randomized design with 2 factors: Factor (A) Concentration of curd starter 2%, 4%, 6%, 8%, and 10% and factor (B) dilution level of mangosteen peel extract 1; 30; 1; 40; and 1; 50. With three repeated treatments. The results was analyzed with ANOVA followed by DNMRT (Duncan's New Multiple Range Test) with 5% significant level of the SPSS system. The resulting smoothymangostana drink is evaluated for its sensor properties, namely color, taste, aroma, texture, and appearance. From the results of the study showed differences in the concentration of curd starter, and the dilution level of mangosteen peel extract and the interaction of both gave a significant effect on the color, taste, aroma, texture, and appearance of smooth mangostana drink. The best concentration of curd starter in making Smoothymangostana drink from mangosteen peel powder is 6% with a dilution level of 1: 30 with a color value of 3.55 (kinda like), flavor 4.23 (kinda like), aroma 4.63 (like), texture 4.50 (like) and appearance 3.50 (kinda like)

Keywords—smoothy mangostana drink, sensory evaluation, mangosteen

FOOD-12
THE ANTIOXIDANT ACTIVITY FROM SEVERAL TYPE OF "KARAK KALIANGS"

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Abstract— *Karak-kaliang* is one of West Sunatera's traditional foods which is made from cassava flour. This study aimed to analyze the quality of *several type of "karak kaliangs"* based on nutrient content and antioxidant activity . There were four separated treatments to assess the quality 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 moisture, ash, protein, fat, carbohydrate; and antioxidant activity of A, B, C dan D were 1.98 % - 2.83 %; 1.58 % - 2.72 %; 0.52 % - 1.04 %; 21.46 % %; 69.00 % - 73.85 %; and 454.90 ppm, 515.48 ppm, 178.00 ppm, 825.25 ppm, respectively.

Keywords—karak kaliang, , nutrient content, antioxidant activity